Title: Competency-Based Mental Health Curriculum for Internal Medicine Residents: addressing challenges and building skills

Submitted in Collaboration with the SGIM Mental Health Interest Group

Workshop Faculty:
Session Coordinator:
    Danielle Loeb, MD, University of Colorado
Presenters:
    Megan Gerber, MD, MPH, VA Boston Healthcare System
    Ian Kronish, MD, MPH, Columbia University
    Amy Weil, MD, FACP, University of North Carolina at Chapel Hill

Session Summary:
This workshop will teach internists principles necessary to design a competency-based general internal medicine mental health curriculum for internal medicine residents. The session will be organized around core ACGME competencies: clinical knowledge, patient care, and interpersonal and communication skills. Participants will learn to develop curricula that address these competencies through small group break-out discussions of four different successful approaches to Internal Medicine resident training in mental illness. Participants will have the opportunity to explore ideas for designing curricula at their institutions and will be provided with a teaching materials toolkit including problem-based cases, algorithms for prescribing antidepressants, and specific training curricula. Presenters and co-participants will problem-solve for potential barriers to implementing their curricular ideas.

Background: Mental illness is pervasive in the United States (US), with one quarter of the US population suffering from some form of mental illness and up to one-third of primary care patients suffering from depression. Mental illness adversely affects health outcomes in patients with chronic medical illnesses and is known to increase costs and utilization.

Significance: Mental illness is commonly treated in primary care with 43-60% in primary care and 17-20% in specialty mental health care. However, many general internists receive minimal training in the evaluation and management of behavioral health conditions.

Measurable Learning Objectives:
At the end of the session, participants will:
- Recognize the importance of skills based training in the treatment of common primary care mental illness for general internists
- Expand their scope of knowledge in management of mental illness necessary for general internists
Be able to cite one example of a successful curricular method they could develop at their home institution in the areas of clinical knowledge, patient care or communication and interpersonal skills.

Identify an opportunity for residents to gain clinical experience in the management of mental illness at their institution.

Understand how to incorporate video-taped patient encounters to teach professionalism and physician-patient communication skills.

**Session Outline, including method of teaching (lecture, small group, video) and time distribution: Character Count Limit: 4,000, including spaces.**

**Introduction (20 minutes): Danielle Loeb**
Dr. Loeb will review the importance of training general internist in diagnosis and management of mental illnesses common in primary care. She will address types of mental illness and depth of knowledge necessary for general internists, when to treat and when to refer. She will then offer an overview of curricular approaches to training in mental health.

**Small group break-out groups (50 minutes): All Presenters**
Each presenter will lead a break-out session. Participants will choose to participate in 2 of 4 break-out sessions. Each breakout session will last 20 minutes, with 5 minutes to transition between groups. Each session will involve:

1) (10 minutes) Presenter description of development and implementation of a curricular innovation addressing a specific ACGME competency.

2) (10 minutes) Participants will brainstorm their own mental illness curricular ideas regarding methods of addressing this ACGME competency at their home institution in breakouts 1-3. Co-participants and presenters will help discuss ideas and address potential barriers to implementation. In breakout group 4 participants will have the opportunity to role play feedback to a learner.

**Breakout 1 - Clinical Knowledge - Depression: Amy Weil**
Dr. Weil will discuss the development of didactics to improve residents’ clinical knowledge of mental illness. She will then discuss the development of case based modules in depression and suicide screening for internal medicine residents which integrate disease management strategies that have been successful in the care of other medical problems in UNC’s Internal Medicine Clinic.

**Breakout 2 - Clinical Knowledge - Trauma: Megan Gerber**
In this group we will discuss how to approach trauma exposed patients in resident clinic settings and cover materials for teaching about military sexual trauma and PTSD.
This group will review and critique a resident-patient scenario in order to actively develop trauma-informed precepting skills.
Breakout 3 - Patient Care: Ian Kronish
Dr. Kronish will present methods of creating opportunities for residents to gain clinical experience in the treatment of mental illness in the primary care setting. He will discuss the development and implementation of a patient-based general internal medicine mental health curriculum for internal medicine residents at Mount Sinai, the General Internal Medicine Mental Health Clinic (GIMMHC) at Mount Sinai.

Breakout 4 - Interpersonal Skills and Communication: Danielle Loeb
Dr. Loeb will address common communication issues involving residents and the treatment of patients with mental illness and unique challenges in teaching interpersonal skills. She will describe the development a program in which primary care residents and a psychologist review a video-taped encounter with a challenging patient to teach interpersonal skills and communication.

Small Group Report-back (15 min):
The workshop will conclude with participants sharing ideas for curricula at their home institutions and barriers they may face in implementing these ideas. Potential barriers will be addressed by co-participants and facilitators.

Evaluation (5 minutes)
GOALS & OBJECTIVES
IMA Primary Care Mental Health Curriculum:
Management of Depression and Anxiety Disorders
Ian Kronish, MD, MPH

Goals
- teach 2nd year internal medicine residents how to diagnose common primary care mental health disorders including depression and anxiety
- teach residents to manage depression, generalized anxiety disorder, and panic disorder in the outpatient setting
- improve the cultural competency of residents with respect to managing mental health problems

Objectives
- residents will be more likely to diagnose and treat common mental disorders in the primary care setting
- residents will know how to manage psychotherapeutics for depressed and anxious patients
- residents will know the data on effectiveness of different mental health treatment strategies
- residents will be better informed on how to help their patients access specialty mental health care
- residents will be able to identify serious psychiatric disorders that would benefit from referral to specialty psychiatric care
- residents will improve their ability to communicate with psychiatrists who co-manage many of their patients

Structure
Second year internal medicine residents participate in the IMA psychiatric evaluation clinic during one of their outpatient blocks. The clinic takes place on Wednesday afternoons for a total of three 4 hour sessions. During the first 30 minutes of each session, residents take part in an interactive didactic session in which the following topics are discussed: 1) how to perform a psychiatric evaluation in the outpatient/primary care setting; 2) how to screen for and diagnose depressive disorders; 3) how to prescribe medications for depressive disorders; and 4) how to diagnose and manage anxiety disorders. In addition, residents are taught when to prioritize referral for specialist care and how to access such care. Residents learn about systemic barriers to receiving mental health care and discuss ways race/ethnicity and insurance status can affect care.

Residents subsequently interview patients who have been referred to the clinic by fellow residents and faculty members. With the assistance of the preceptor, the residents then determine an assessment for each patient. This assessment will include a diagnosis, follow-up plan, and a discussion of medication management when appropriate. Key teaching points are emphasized as they pertain to patients being evaluated by residents. Residents have the opportunity to follow some patients during their 4 week rotation.
TEACHING CASES - FACULTY GUIDE

CASE 1: Juan Cruz [SCREENING AND DIAGNOSING DEPRESSION IN PRIMARY CARE]

Juan Cruz is a 39 yo Panamanian movie star who comes for his “physical”. He has a past history of genital herpes and asthma. He smokes and drinks at parties to overcome his shyness.

- When should you screen patients for depression?

According to the US Preventive Task Force, all adults should be screened for depression so long as there is a system in place to assure accurate diagnosis, effective treatment, and follow-up in cases where there is a positive screen (Level B recommendation). No guidance is given as to the frequency of screening.


- What screening questions could you ask?

2 questions:
- “Over the past 2 weeks, have you felt down, depressed, or hopeless”
- “Over the past 2 weeks, have you felt little interest or pleasure in doing things”
Sensitivity 96%, Specificity 57%, Negative Likelihood Ratio=0.07
Note that the 2 questions represent the two symptoms of which at least one must be present to qualify as major depression according to the Diagnostic and Statistical Manual (DSM) IV criteria.


You decide to screen Juan for depression. He gets upset when you use the word “depressed” but he admits that he has been feeling more down of late and he hasn’t been enjoying spending time with his wife Katerina or at his Church.

- What other questions should you ask Tom?

Given the fact that Juan has screened positive for depression, one should go on to ask about the other 7 symptoms of depression. SIGECAPS

Consider using the PHQ-9 or other diagnostic instrument to assist with the diagnosis of depression and to create a baseline depression score on which to evaluate treatment effectiveness on subsequent visits.

- What else is in your differential diagnosis for depression?

- hypothyroidism and apathetic hyperthyroidism in elderly
- alcohol, substance abuse
- dementia, delirium
2012 Society of General Internal Medicine National Meeting, Orlando, FL

- hypercalcemia
- Parkinson’s disease
- stroke, seizure disorder
- major medical illness
- medications: H2 blockers, CNS antihypertensives, steroids, beta blockers (unlikely)

Reference: Ko DT; Hebert PR; Coffey CS; Sedrakyan A; Curtis JP; Krumholz HM: B-blocker therapy and symptoms of depression, fatigue, and sexual dysfunction. JAMA 2002; 288:351—357

Juan tells you that over the last few weeks, he’s been having trouble falling asleep, he’s been feeling horrible for what happened to his previous wife’s career, he can’t memorize his lines anymore, and he’s lost his appetite. He’s had episodes like this in the past, but never so severe. He denies wanting to kill or hurt himself. He has always refused medications due to his religion but now is so desperate, he will give anything a try.

- How common is depression?
  - lifetime incidence: 15% (21%F, 13%M)
  - 3-5% prevalence in general population, >10% at primary care clinic
  - 2nd most common medical condition (HTN is #1)
  - 4th leading cause of worldwide disease causing more disability than CAD or CVD; depression will be the 2nd leading cause of disability worldwide according to the World Health Organization
  - 50% of primary care patients go undiagnosed
  - only 1 in 8 individuals who recover from an episode of depression will remain depression-free and 3/5ths of their time will be spent with significant depressive symptoms over the long-term

- What are depression risk factors?
  - female gender, age < 50 years
  - adverse childhood experiences
  - recent stress
  - prior h/o depression (50% risk of recurrence after single episode of major depression)
  - family history
  - chronic pain, multiple physical symptoms
  - high frequency utilizer of medical care
  - “difficult visit”
  - chronic illnesses including DM, CAD, obesity

You diagnose Juan with major depression.

- What should you discuss with your patient after diagnosing them with depression?
  1) Educate about diagnosis
  2) Educate about treatment choices: therapy and/or antidepressant medications
  3) Discuss patient treatment preferences
4) Consider availability of referral for psychological treatments or specialist care when determining recommended treatment type.

In general, a majority of patients prefer counseling over antidepressant medications. Counseling, however, is not always accessible due to financial, insurance, and time availability issues.

You decide together to start escitalopram (Lexapro). Juan misses his 1 week follow-up appointment. A few days later, you get a frantic call from Katerina who says that Juan has been acting “crazy” ever since the new medication was started, barely sleeping, spending millions of dollars, and has been going on TV talk shows declaring his intentions to run for president.

- What is Juan’s likely diagnosis?

Juan has likely become manic after starting the antidepressant.

Mania is characterized by:
1) A distinct period of elevated, expansive, irritable mood for more than one week.
2) Associated symptoms (3 or more)
   - inflated self esteem or grandiosity
   - decreased need for sleep
   - pressured speech
   - flight of ideas or racing thoughts
   - distractibility (attention drawn to external stimuli)
   - increase in goal directed activity
   - excessive involvement in pleasurable activities that have a high potential for painful consequences
3) Unlikely hypomania, the symptoms are severe enough to cause marked impairment in social and/or occupational functioning and may be severe enough to necessitate hospitalization to prevent harm to self or others, or include psychotic features.

Combined lifetime prevalence of bipolar I (includes mania) and bipolar II (includes hypomania) is 2.6%.

Up to 10% of patients in an urban general medicine clinic screen positive for history of mania or hypomania. Primary care physicians almost always mislabel bipolar disorder as unipolar depression.

All patients with a diagnosis of depression should be screened for mania prior to initiating antidepressant medications. Consider using the Mood Disorder Questionnaire to carefully screen for a history of mania.

References:


- What are some reasons to refer patients with depression to a specialist?
- patient desire for psychological therapy
- active suicidal ideations
- mania (bipolar)
- psychosis (thought disorder)
- dual diagnosis with substance abuse or other psychiatric disorder
- treatment resistant depression
CASE 2: JP [Treatment OPTIONS FOR MOOD DISORDERS]

JP is a 29 year old internal medicine resident who comes for a check-up. He says he thinks he has seasonal affective disorder but it’s the middle of the summer. He describes trouble sleeping, poor appetite, and low mood on some days, but still enjoys his time with his girlfriend and drinking margaritas.

- What are some other types of mood disorders?

1) Dysthymic disorder: Depressed mood on most days for >2 years and not meeting full criteria for major depression but still causing clinically significant distress.

2) Adjustment disorder: Development of emotional or behavioral symptoms within 3 months of an identifiable stressor (eg: loss of job, new medical disability). If depression symptoms persist greater than 6 months, the diagnosis gets reclassified as major depression.

3) Bereavement: Similar to adjustment disorder except that the stressor involves the death of a loved one.

4) Seasonal affective disorder: Depression that occurs during season of low light exposure and resolves when the amount of light increases.

Despite having 4/9 SIGECAPS, On further questioning, you determine that there are times when JP still enjoys himself and others and he is managing to keep his performance up at work. JP asks you if he should start taking a medication or buy a lightbox.

- When you should start an antidepressant?

The decision to start an antidepressant should always involve thinking about the relative risks and benefits of the drug. With dysthymia, antidepressants have lower efficacy (less benefit) and hence one must more carefully consider if starting the drug is worth the risk (side-effects, allergic reactions, interactions with other medications, inducing mania, etc…). Accordingly, one might encourage non-pharmaceutical interventions as first-line. Alternatively, one could consider a trial of antidepressant medications with clear goals as to what the medication is hoping to achieve and with a decision to stop the medication if no benefit is achieved after a reasonable length of time on the medication.

- What are some types of non-pharmacologic treatments for depression?

1. Counseling
Cognitive Behavioral Therapy (CBT): therapy is aimed at educating patients about the presence of distorted “automatic” thoughts that provoke depression and teaches patients to respond differently to these perceptions. Patients are asked to do “homework.” One of the most evidence-based psychological approaches.
Interpersonal Therapy (IPT): Based on premise that depression occurs in social and interpersonal context; focuses on present relationships rather than past ones.
Problem Solving Therapy (PST): cognitive-behavioral approach in which the main goals are to alter the problematic nature of current situation and to teach patients problem solving skills to cope with life stresses.

Psychodynamic Psychotherapy: fewer evidence based studies of its effectiveness

2. Electroconvulsive Therapy (ECT): 60-80% response even though often used in refractory patients, 6-12 treatments over 3-4 weeks

3. Transcranial Magnetic Stimulation (TMS): experimental approach for refractory depression

4. Phototherapy (lightbox) for seasonal affective disorder; new research suggests it may be beneficial for a broader range of mood disorders.
Case 3: Dr. T [PHARMACOLOGIC TREATMENT FOR DEPRESSION]

Dr. T is a 62 year old professor with a history of stroke, myocardial infarction, and diabetes. His daughter comes with him to his visit and comments that her father has been acting more irritable of late, has been complaining of trouble sleeping, has been spending most of the day in bed, and has been barely eating. Twelve months before his stroke, he had a small MI and seemed to go “downhill” after that. Dr. T says he’s pretty sure he’s depressed and wants to start an antidepressant. Given his weight loss, difficulty sleeping, and multiple medications, you decide to start him on mirtazepine (Remeron). He says he sometimes wonders what’s the point of living, but denies having any specific plans to hurt himself.

- How should you choose a first-line antidepressant?

All anti-depressants have approximately equal efficacy. Therefore, choose antidepressant based on:
1. side-effect profile (see attached Table summarizing anti-depressant side-effect profile)
2. re-utilize drug if it had prior history of success in patient or family member
3. minimize drug interactions, especially with respect to cytochrome P-450 inhibition

Note: Don’t use the following drugs as first-line:
1. MAOIs: serious side effects, strict diet required, multiple drug interactions
2. TCAs: same efficacy as SSRIs, but dangerous side effects; doses for pain are inadequate for anti-depressant effect
3. Trazodone: ineffective antidepressant, risk of priapism, but useful adjunct for insomnia

- How soon should you schedule a follow-up visit for a patient newly started on treatment for depression and what should you discuss at the follow-up visit?

Bring the patient back, or call them, within one week to assess for:

1) mania

2) medication side-effects: Side-effects are reported in approximately 60% of patients; the most common side-effects include sexual dysfunction, weight gain, and drowsiness. Start at lower doses in older or more frail patients, and titrate doses more slowly.

3) adherence to medications: The most common reasons for non-adherence are side-effects followed by forgetting to take the drug. Discussing the possibility of side-effects reduces the rate of unanticipated discontinuation by half! (Ref: Bull SA, Hu XH, Hotopf M, Hunkeler EM et al. Discontinuation of use and switching of antidepressants: influence of patient-physician communication. JAMA 2002;288:1403-09.)

Note that 42% of depressed patients discontinue their antidepressant treatment during the first 30 days, and 72% stop them by 3 months. Partial non-adherence occurs in 75% of depressed individuals such that antidepressant medications are taken on only 40% of days on average. Of those who discontinue drugs in primary care, the majority (~60%) do not inform their doctors by 3 months.
4) suicidal ideations: Jick *et al* (JAMA 2004) found a non-significant increased risk of suicide using SSRI vs non-SSRI antidepressant medications (RR 1.29 vs 1.16). Fatal suicide is 38 times more likely to occur within the 1st week of treatment as compared to the 3rd month of treatment. This is believed to be a result of the fact that energy and motivation often improve before the depressed mood and suicidal ideation dissipate and patients can become activated enough to act out on their suicidal ideations during the beginning of any form of treatment.

- What questions should you ask when assessing someone’s risk for committing suicide when they are having suicidal ideations?

  - Do they have a plan? How feasible is the plan? How detailed is the plan? Do they have the medications or necessary tools to act out on their plan? Do they have access to firearms?
  - Do they intend to act on the plan? (Eg: They have written a suicide note and have given away personal belongings)
  - Have they made previous attempts: when, how, what type of treatment did they receive?
  - Are they at risk for acting impulsively (eg: They are actively using drugs)

*At his 1 week follow-up phone call, Dr. T reports some mild GI upset but is otherwise tolerating the medicine. You ask him about his mood and he says he’s still been feeling very down but denies any suicidal ideations.*

- When should you next follow-up with Dr. T and what should you do with his medication dose?

  - follow-up every 2 weeks during initiation phase
  - monitor for improvement in symptoms using PHQ-9 or similar standardized instrument
  - if minimal response by 2-4 weeks, increase dose; change to new medication if limited by side-effects
  - if no response by 4 weeks, start new SSRI or different class (thus far, no evidence to suggest that switching to a different class will increase efficacy then picking 2nd drug in same class); up to 50% of patients may respond to a 2nd -antidepressant trial (Ref: Rush et al. Bupropion-SR, sertraline, or venlafaxine-XR after failure of SSRIs for depression. N Engl J Med. 2006;354:1231-42.)
  - treatment resistant patients should be assessed for adherence, alternative diagnoses, stressors that would benefit from counseling

*At Dr. T’s 3 week visit, he says that while his mood is still very low, his GI upset has resolved and his sleep and appetite are improving. His PHQ-9 score has decreased from 15 -> 11. He denies any SI or manic symptoms.*

- What would you do with his dose and when would you see him again?

With the help of the PHQ-9, one could interpret this scenario as an indication that Dr. T’s depression is improving overall even though his mood feels unchanged. One would likely continue the current dose and have Dr. T return in 2 weeks. One arguably could have been more aggressive and increased the dose slightly at the 3 week visit.
At 5 week visit, he notices his mood improved. He asks if he’ll need to take Remeron “for ever.”

- When can you recommend discontinuing antidepressants?

- approximately 1/3 of patients successfully treated for depression in primary care will relapse within 1 year after stopping therapy and 2/3 will relapse by 10 years
- continue medications for at least 6-12 months after resolution of first major depressive episode to decrease the risk of relapse
- consider lifelong treatment if 2 or more relapses within 5 years, age>50, or hard-to-treat depressive episode
- taper dose over 2-4 weeks (25% reduction per week) if deciding to stop or change to new medication in order to avoid “discontinuation syndrome”; this is less important for antidepressant medications with long half lives such as fluoxetine (Prozac) but essential for medications with short half-lives such as paroxetine (Paxil)
- note that a majority of patients self discontinue their medications even if they are not feeling better, but that the rate of discontinuation is 60% less if patients are told about the benefits of maintaining the medication after remission.

Dr. T continues to do well over the coming weeks, but then out of the blue, you get a call from his daughter who says her father has been suddenly acting strange. He’s been more irritable and she’s noticed he’s been soaking his sheets with sweat. You tell her to bring him to your office for evaluation right away. On exam, his BP is 190/90. Pulse 104. Temp 38.1. He is diaphoretic. His lungs are clear. He has hyperactive bowel sounds. His reflexes are 4+ throughout. On MSE, Dr. T is oriented but more irritable and with decreased concentration. You ask him if he’s taken any overdoses or started any new medications. His daughter shows you a bottle of “vitamins” with German writing on the side.

- What is Dr. T’s diagnosis?

The diagnosis is serotonin syndrome which occurs as a result of a dose-dependent excess of serotonergic drugs, usually caused by the interaction of SSRIs and other serotonin enhancers (eg: MAOIs). The symptoms are a manifestation of an exaggeration of SSRI side-effects including abdominal pain, diarrhea, sweating, fever, tachycardia, high blood pressure, delirium, and irritability. Treatment is primarily supportive. Cyproheptadine is one potential antidote. Benzodiazepines can also be used for irritability and anxiety. In this case, the bottle with German writing may have been St. John’s Wort which is a commonly prescribed “herbal” antidepressant in Germany and in combination with SSRIs, may precipitate serotonin syndrome.

- What are some “alternative” treatments for depression?

-“herbal”: St John’s wort (hypericin): data from RCTs suggest benefit for mild-moderate depression but not severe depression. This data presumes the drug comes from a safe source. Beware of serotonin syndrome if St. John’s wort is combined with other serotonergic antidepressants.
-“herbal”: omega-3 fatty acids, still experimental. Depressed patients may have a relative deficiency of omega-three fatty acids
- anxiolytics: low dose ativan or clonazapam if lots of anxiety symptoms in early weeks to help lower dropouts from medication therapy.
Clinical Vignettes: [UNDERSTANDING SIDE-EFFECT PROFILES OF ANTI-DEPRESSANTS]

Instructions: Write down the most appropriate first-line antidepressant(s) for each scenario

1) 36 yo with depression, diabetes, and obesity. She is very concerned by the possibility that the antidepressant will cause weight gain.

Answer: bupropion (Wellbutrin). Least associated with weight gain and possibly associated with mild weight loss. Beware that it can lower the seizure threshold and should be avoided in patients with bulimia.

2) 81 yo with depression notable for poor appetite, weight loss, and difficulty sleeping at night.

Answer: mirtazapine (Remeron). Advantages for this elderly male include the drug’s low p450 inhibition, appetite stimulant side effect causing weight gain, and its sedating properties to help with insomnia.

3) 52 yo smoker with depression who previously discontinued Lexapro after concern of impotence.

Answer: bupropion (Wellbutrin). Advantage is that this antidepressant has been shown to assist with smoking cessation. In addition, it is the antidepressant with the lowest association with sexual dysfunction and has even been used for the treatment of sexual dysfunction in non-depressed individuals.

4) 47 yo with multiple medical problems including depression that started after his first myocardial infarction, asthma, osteoarthritis, and diabetes.

Answer: Any of the medications with low cytochrome p450 inhibition: escitalopram (Celexa), citalopram (Lexapro), sertraline (Zoloft), venlafaxine (Effexor), or mirtazepine (Remeron).

5) 28 yo with depression and marked restlessness and difficulty falling asleep.

Answer: Many antidepressants could be acceptable in this individual, yet paroxetine (Paxil) has the advantage of being an SSRI with more sedating properties and is typically taken in the evening. The other SSRIs might initially exacerbate the restlessness and worsen the insomnia.

6) What is the number-needed-to-treat (NNT) to produce a remission or greater than 50% reduction in depression symptoms for SSRIs as compared to placebo?

Answer: NNT=4. (~65% patients have greater than 50% improvement in symptoms or remission with 1st medication as compared to ~40% with placebo)
(Meta-analysis of 18 studies involving primary care, medically ill patients. Cochrane database 2000.)

7) What is the NNT for TCAs?
Answer: Trick question: Tricyclics have about equal efficacy when compared to SSRIs. Hence, their NNT is also equaled to 4. The main reason tricyclics are not first line is their less favorable side-effect profile.
Case 4: Donnie O [DIAGNOSING AND TREATING PANIC DISORDER]

Visit 1

Donnie O, yet another 34 year old NY actor/waiter, was seen in the ER 3 weeks ago after presenting with sudden onset of chest pain, palpitations, and sweating while taking the subway to the theater for rehearsal of his new play. He says he “felt like I was going to die.” He had a normal ECG, negative urine toxicology, and negative cardiac enzymes. In the ER, he was told “Don’t worry, it was just anxiety.” He is now following up with you. He missed his scheduled appointment last week because he was afraid to leave his apartment.

- Does Donnie O have panic attack or panic disorder? What’s the difference?

Panic Attack: Definition
A discrete period of intense fear or discomfort involving 4 or more of following symptoms:

1. Palpitations or fast heart rate
2. Sweating
3. Trembling or shaking
4. Sensations of SOB or smothering
5. Feeling of choking
6. Chest pain or discomfort
7. Nausea or abdominal distress
8. Feeling dizzy, unsteady
9. Derealization/ depersonalization
10. Fear of losing control
11. Fear of dying
12. Paresthesias
13. Chills or hot flashes

Panic Disorder: Definition
- Recurrent, unexpected Panic Attacks
- Persistent concern about having additional attack
- Symptoms are impairing the patient’s life (eg: agoraphobia)
- Symptoms not due to recreational drugs or medical disorder

- Donny likely has panic disorder as he had a panic attack and the ensuing anxiety about subsequent attacks is now impacting the rest of his life to the point that he is afraid to leave his home
- Panic disorder has ~5% prevalence in primary care

- Should you order additional tests to make your diagnosis? If so, which ones?

There is no single algorithm for working up panic disorder. One must judiciously use medical tests to rule-out physical causes of the symptoms according to the risk factors of the patient. In young patients with minimal risk factors for organic disease, one should perform limited testing and use the negative test results to reassure panic disorder patients that they do not have a life-threatening disease.

Visit 1, continued

You find out that ever since high school, Donnie gets extremely nervous just before performances, but recently he has been having “anxiety attacks” without any obvious triggers and is staying home more and more, avoiding subways and trains. You diagnose Donnie with panic disorder complicated by agoraphobia.
What is the difference between performance anxiety, social anxiety disorder, and panic disorder?

Social Anxiety Disorder: Definition
- Excessive anticipatory fear accompanying social or performance situations
- Social or performance situations are avoided or endured with intense anxiety
- Interferes significantly with person's normal functioning
- May be categorized as Generalized Social Anxiety Disorder if fears include most social situations

Performance anxiety refers to anxiety that is limited to performance situations such as public speaking whereas social anxiety disorder which involves anxiety in multiple social situations. With social anxiety disorder, these social situations are often endured with intense fear of embarrassment and the anxiety significantly interferes with a person's ability to function normally either at work or with friends. Panic disorder, in contrast, typically presents “out of the blue” and does not necessarily occur in response to an anxiety provoking situation. Of course, patients with panic disorder may have underlying psychosocial stressors but they do not typically directly connect these stressors to their panic attacks when the panic attacks first present.

What should you counsel Donnie about his panic disorder?

Just as primary care physicians should educate their patients about the meaning of other new medical diagnoses, these physicians should similarly discuss the meaning of the diagnosis of panic disorder with their patients. This is known as psychoeducation and is a key component of the treatment of any psychiatric diagnosis. With regard to panic disorder, one might discuss how it is a manifestation of neurochemical imbalance in the nervous system that leads to real physical symptoms. Also, one should emphasize that the problem is quite common and is very responsive to treatment in a majority of patients. One could then enter into a discussion of the different types of treatment options.

What will be your first line recommended therapies?

- Cognitive behavioral therapy (CBT) and/or antidepressant medications are first line.
- In terms of antidepressants, there is no consistent evidence to support one particular drug over another.
- CBT teaches patients to recognize and correct cognitive distortions (eg: palpitations associated with anxiety represent a heart attack.) Patients learn to detect stimuli that trigger anxiety and associated symptoms. Patients learn techniques to decrease the resultant physical sensations (eg: breathing exercises, relaxation training). Insurance plans do not typically cover the full cost of CBT.
Donnie doesn't have the time or the money to attend weekly CBT classes, so you prescribe Zoloft (sertraline) at 50 mg po qd. You tell him to start with a half tablet and increase to a full tablet a few days later.

- What side-effects of Zoloft should you warn Donnie about?

Antidepressants can initially worsen anxiety symptoms through their activating effect. As a result, particularly with anxiety disorders, it is essential to start antidepressants at very low doses (1/2 pill of lowest dose) and titrate-up slowly, monitoring side-effects every 1-2 weeks in the initiation phase of medication treatment. It is important to warn patients about this side-effect as well as to warn them about the other common potential side-effects of antidepressants including weight gain, sexual dysfunction, and drowsiness. There is a difficult balance between warning your patient about the side-effects and scaring them away from taking the medication.

- How soon should you schedule a follow-up visit or phone-call?

- Follow-up in 1-2 weeks
- At the follow-up visit, you should: 1) Assess for medication side-effects; 2) assess for medication adherence; and 3) assess for mania that can be triggered by SSRI even if no prior history of depression or mania

- What other general lifestyle recommendations can you tell him?

- Avoid caffeine, excess alcohol, and nicotine
- Exercise moderately to relieve tension and improve sleep. Try to exercise during the first half of the day.
- Beware of over-the-counter medications and “herbal” products that may be stimulating (ex: pseudoephedrine, green tea)

Visit 2 (week 1-2)
You see Donnie 10 days later and he tells you that he’s been taking the Zoloft but that it’s making him feel worse. While he hasn’t had a full blown panic attack, he feels more anxious and has been having difficulty sleeping. He also notes a dry mouth. He asks if he can try another medication.

What should you do with Donnie’s medication regimen?

With panic disorder, symptom worsening can occur before improvement when antidepressants are used as first-line treatment. One can augment treatment with a long-acting benzodiazepine. Especially for panic disorder, long-acting benzodiazepine may be needed during initiation phase of antidepressant. Goal would be to taper the benzodiazepine dose once panic attack symptoms abate on combination therapy. Despite their addictive potential, benzodiazepines are often under-prescribed. Ativan 0.5 mg q 6 hours prn anxiety or Klonopin 0.25mg BID are reasonable starting doses.
Buspirone (Buspar) is a serotonin agonist that can be used in place of benzodiazepines but is generally not used as first-line agent, especially if patient previously required benzodiazepine for anxiety. Some advantages of Buspar are that it is non-addicting, causes little cognitive impairment and minimal sexual side effects, and there is no discontinuation syndrome. Disadvantages are that in most patients, it provides minimal anxiolytic effect.

Visit 3 (week 3-4)
After ensuring that Donnie has no history of substance abuse, you add clonazepam 0.25 mg bid to his Zoloft (sertraline). Donnie comes back 2 weeks later. He says that his general anxiousness is improved and that he is going out of his apartment now, but he still had one panic attack on the train to work and several near attacks.

- What should you do with his medication regimen?

One could either continue the current dose to determine if further benefit could be obtained at the lowest dose possible, or one could increase the dose to try to get a bigger benefit since the panic disorder is not yet remitted. In general, as compared to antidepressants in depression treatment, higher doses and longer lengths of treatment of antidepressants are required with anxiety disorders before improvement occurs. Wait up to 8-12 weeks of no or minimal improvement before determining a medication failure (vs 4-6 weeks with depression treatment).

Visit 4 (week 8-12)
You decided to increase his Zoloft (sertraline) to 100 mg daily and continue his clonazapam. He follows-up 1 month later saying that his panic attacks and anxiety have almost completely resolved. He asks if he will need to stay on the anxiety pills forever.

- When can you recommend discontinuing his benzodiazepine? What about his SSRI?

Once one achieves a therapeutic level of the antidepressant medication, one could try to slowly taper the benzodiazepine.

Once the patient achieves full remission of panic disorder, one should continue the antidepressant treat for 9-12 months to decrease the risk of relapse and then one should slowly taper off the medications.
Case 5: Attaque de Chiquita [DIAGNOSING AND TREATING GENERALIZED ANXIETY DISORDER]

Visit 1
Chiquita is a 39 yo woman with a history of diabetes who has been coming for lots of walk-in visits with complaints of stomach pain, back pain, leg pain, or in other words: “total body dolor.” You also find out that she often feels her “nervios” and has difficulty sleeping.

Does this patient have generalized anxiety disorder? What are the criteria?

GAD: Definition
- Excessive worry about multiple things (school, work, money) occurring on most days for at least 6 mo
- Impairing function
- Associated with 3 or more of the following:
  1. Restlessness or feeling on edge
  2. Easily fatigued
  3. Difficulty concentrating or mind going blank
  4. Irritability
  5. Muscle tension
  6. Sleep disturbance

This patient likely has generalized anxiety disorder (GAD). GAD is less common than panic disorder with a lifetime prevalence of 5% and a point prevalence of 2%. Symptoms usually begin before age 25. GAD is twice as common in women as compared to men. Untreated, the typical course of GAD is chronic with a low rate of remission. It is often co-morbid with depression, substance abuse, and panic disorder.

Visit 1, continued
You find out that she has lots of worrying every day about many aspects of her life and she often feels restless and has difficulty concentrating. On further questioning, you find out that she was raped several times as a teenager. You wonder whether Chiquita has PTSD in addition to generalized anxiety disorder.

What questions could you ask to assess for PTSD?

PTSD: Definition
- The person experienced, witnessed, or was confronted with an event that involved actual or threatened death or threat to the physical integrity of themself or others. The person’s response involved intense fear, helplessness, or horror.
- This event is followed by 3 clusters of symptoms (2/3 clusters are required to make diagnosis)
  A. Re-experiencing the event
  B. Avoidance and numbing
  C. Hyperarousal

When assessing patients who have experienced traumatic events, it is important to determine if they have symptoms that fit into the clusters of symptoms of PTSD. Overall, the lifetime prevalence of PTSD is 5-10% and it occurs more frequently in women.
There is a high correlation between perception of the level of danger due to a traumatic event and the subsequent risk of developing PTSD. Overall, 2/3 of people exposed to a traumatic experience will have a normal acute response and will not develop PTSD, but a history of depressive or anxiety disorders increases likelihood of PTSD after a trauma.

PTSD is relatively challenging to treat, strongly associated with suicidal behavior, and in general, PTSD should be managed by a mental health specialist.

Visit 1, cont’d
Chiquita denies any lasting concerns about her past history of sexual abuse and says she just wishes she could feel calm and focused. She denies feeling depressed or suicidal. You diagnose her with GAD.

- What therapies for GAD should you recommend?

Treatment for GAD is similar to that for panic disorder. Antidepressants (with or without long-acting benzodiazepines) are the first-line medication therapies. Referral for counseling is also appropriate if patients prefer this mode of treatment.

- When should Chiquita next follow-up with you?

During the initiation phase of treatment, GAD patients should be followed-up every 1-2 weeks to assess for medication side-effects, adherence, and onset of mania if started on antidepressants. Doses should be titrated up slowly, and patients should be made aware that worsening of anxiety symptoms can occur when antidepressants are started. In general, as compared to depression, medications take longer to cause remission of symptoms with GAD.

Visit 2 and beyond
You initially prescribed Chiquita Paxil (paroxetine), but at her 1 week follow-up she said she felt even more anxious so you added clonazepam 0.5 mg bid to her regimen. Over subsequent weeks, you titrated up the clonazepam to 1 mg tid. On repeat visits, Chiquita’s behavior becomes increasingly erratic. She has missed some appointments and shown up as a walk-in at others. Today, even though she denies the use of other recreational drugs, you tell her you are going to perform a urine toxicology screen. Two days later, the labs come back positive for opioids and there are no benzodiazepines in her urine.

- When is it appropriate to refer patients with anxiety disorders?

While benzodiazepines can be used safely, they do have abuse potential and patients should be monitored for signs of substance abuse behavior while taking these medications.

Patients appropriate for referral to specialists include those with:
- comorbid psychiatric disorders such as severe depression and psychotic disorder
- active substance abuse
- PTSD, obsessive compulsive disorder
Poor response to therapy in primary care setting
- Preference for counseling

Other References:
Primary Care Mental Health Consultation Clinic
Initial Evaluation Template

Reason for referral
History of present illness
Past psychiatric history
- previous psychiatric symptoms and/or diagnoses
- first psychiatric contact, including psychiatric hospitalizations
- pharmacologic treatments
- non-pharmacologic treatments
- suicide attempts/ideations

Substance abuse history
- abuse and/or dependence
- contribution to current symptoms

Current psychiatric medications
Past medical history, current non-psychiatric medications
- consider possible relationship with current psych symptoms

Family psychiatric history

Social history
- living circumstances
- employment
- exposure to violence including domestic abuse
- bereavement
- legal history
- level of education
- psychosocial stressors

Psych Review of Systems
- SIGECAPS (Sleep, Interest, Guilt, Energy, Concentration, Appetite, Psychomotor, Suicidal thoughts)
- mania
- anxiety
- psychotic symptoms: delusions, hallucinations

Mental status exam
- appearance, behavior, speech
- mood/affect
- thought process/thought content
- abnormal perceptions
- insight, judgment
- cognitive exam (e.g., MMSE) if appropriate

Consider neurological exam if appropriate

Assessment/Plan
- specify diagnoses
- treatment: pharmacologic, non-pharmacologic
- follow-up: return to PMD, return to mental health consult clinic, referral to mental health specialist
Primary Care Mental Health Consultation Clinic
Screening and Diagnostic Tool References

The Brief Patient Health Questionnaire: Includes two sets of questions: 1) a 9-item tool to screen and diagnose patients with depression (also known as the PHQ-9) and 2) a 5-item tool to screen patients for panic disorder.


Forms for the PHQ-9 can be obtained at the following website: MacArthur Foundation Depression in Primary Care Initiative http://www.depression-primarycare.org.

The Mood Disorder Questionnaire: A 13-item tool to screen patients for bipolar disorder.


The Mini-International Neuropsychiatric Interview: A set of core screening questions that can be used to identify patients with psychiatric disorders in the primary care setting. Disorders that are screened for include depression, suicidality, panic disorder, social anxiety disorder, post-traumatic stress disorder, alcohol abuse, generalized anxiety disorder, dysthymia, bipolar disorder, and obsessive compulsive disorder. Although the tool was designed for research purposes, it can applied to primary care clinical settings as well.

Depression: Screening, Diagnosis, and Treatment

UNC General Internal Medicine

Niyati Mukherjee, MD, Derek Seib, MD, Matthew Volk, MD and Amy Weil, MD

Educational Objectives:
1. Know the current recommendations regarding screening adults for depression
2. Identify the diagnostic criteria for major depression and be familiar with the PHQ-9 screening tool
3. Recognize the importance of identifying and addressing depression with patients
4. Learn the screening process for identifying depression in our clinic patients
5. Be able to identify treatments for patients with severe depression
6. Learn about the Internal Medicine Counseling Program and discern who will be an appropriate candidate for referral.

Attention Upper levels: Please Share Our Successes:
Our Depression Care Program has been effective in helping patients to feel and function better.

Two examples:
- A 40 year old woman screened positive for moderate depression. She had a history of prior mild depressive symptoms, mixed headaches and anxiety. She was given education about depression. Patient was interested in and was started on paroxetine. When she returned to clinic for scheduled 3 month follow up, she reported improved mood, reduced anxiety, decreased frequency of headaches and had become motivated to exercise.

- A man in his late 50s experienced depression, PHQ9 of 15, post stroke and was resistant to taking an antidepressant because of experiencing previous psychotic side effects. After 3 visits with on-site counselor his PHQ9 was a 7. In addition to self-report of improved mood and satisfaction, he reported having a better handle on managing his new life circumstances, and improved self-care. He had identified areas where he still had competence and could even be a help to others.

The first year of our clinic’s standardized depression treatment statistics indicate benefit for patients. Providers’ care resulted in clinically significant improvement for 36% of depressed patients in a one quarter period. Among severely depressed patients referred for on-site counseling over the last year, 42% of patients showed some improvement, and 25% experienced clinically significant improvement.

Attendings feel free to share a motivating tale of a patient you know who got better.
Questions:

1. How common is depression? Should he be screened for depression? If so why?

Major depressive disorders (MDD) affect 5-10% of patients in the primary care setting. The disability associated with depression is similar to that associated with other chronic medical conditions. Depression is currently the fourth leading contributor to the global burden of disease and will move into second place by 2020. Effective treatment of depression reduces symptoms and improves quality of life; thus, depression screening is an extremely important part of primary care practice.

Yes, he should be screened for depression. People with diabetes, coronary artery disease, stroke, obesity, and HIV have a 2-fold risk of depression compared to the general population. Untreated depression is a barrier to effective treatment of diabetes and cardiovascular disease. Screening for depression in our patients who have diabetes, heart disease or a history of depression is an important part of care at our clinic.

In addition, the U.S. Preventive Services Task Force (USPSTF) recommends screening adults for depression in clinical practices that have systems in place to assure accurate diagnosis, effective treatment, and follow-up. The USPSTF recommends screening adults for depression when staff-assisted depression care supports are in place to assure accurate diagnosis, effective treatment, and follow-up. Our Internal Medicine Counseling Program represents a staff-assisted support that provides mental health assessment, diagnosis and short-term depression counseling.

2. How do you interpret the score? (Refer to the front of the visit planner).

Simple questions about depressed mood and anhedonia detect a majority of depressed patients. A score of 3 or more indicates that further assessment (the full PHQ-9) is needed in order to determine whether the patient is depressed and the level of severity.

The provider should complete the prompts on the front of the planner indicating they reviewed the results. All patients previously diagnosed with depression should be asked the complete PHQ9 at the appropriate interval for their prior level of severity (every visit for severe and every 12 weeks for moderate).
3. How does the PHQ-9 compare to the DSM-IV criteria for Major Depressive Disorder? How do you score the PHQ-9? (Refer to the PHQ-9 on the back of the visit planner.)

The PHQ-9* consists of the following questions, to which the patient may respond “not at all,” “several days,” “more than half the days,” or “nearly every day”:

Over the last 2 weeks, how often have you been bothered by any of the following problems?
1. Little interest or pleasure in doing things
2. Feeling down, depressed, or hopeless
3. Trouble falling asleep, staying asleep, or sleeping too much
4. Feeling tired or having little energy
5. Poor appetite or overeating
6. Feeling bad about yourself, feeling that you are a failure, or feeling that you have let yourself or your family down
7. Trouble concentrating on things such as reading the newspaper or watching television
8. Moving or speaking so slowly that other people could have noticed. Or being so fidgety or restless that you have been moving around a lot more than usual
9. Thinking that you would be better off dead or that you want to hurt yourself in some way.

Assign a score to each response on the PHQ-9 as follows:
Not at all = 0
Several days = 1
More than half the days = 2
Nearly every day = 3

Scoring continued: Add up the total score for questions 1 – 9 and enter the score on the back of the visit planner.

*Note these questions correspond directly to DSM-IV diagnostic criteria for MDD, which states that a patient has to have at least 5/9 positive symptoms for at least two weeks, one of which must be 1) depressed mood or 2) loss of interest in nearly all activities. The other symptoms which contribute to the diagnosis include: 3) sleep disturbance, 4) appetite or weight change, 5) decreased energy, 6) increased or decreased psychomotor activity, 7) decreased concentration, 8) guilt or feelings of worthlessness, and 9) suicidal
ideation. The constellation of symptoms must be associated with clinically significant distress and/or difficulty with social, occupational, or other functioning.

4. What will you do if he scores*:
   a. 8
   b. 13
   c. 19

*Note: if <9 = no action. Beginning shortly providers will need to fill out all options for both moderate 10-14 and severe ≥15.

<table>
<thead>
<tr>
<th>PROVIDER RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Add up the score for all 9 questions of the PHQ-9. Enter the TOTAL SCORE:</td>
</tr>
<tr>
<td>2. Indicate Treatment(s) below based on PHQ-9 Score and Depression Treatment Algorithm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>0-9 (no to mild) No action required</th>
<th>Y</th>
<th>N</th>
<th>Reason</th>
</tr>
</thead>
</table>

| 10-14 (Moderate): Answer ALL of the following: (Decision Aid and follow up recommended for all) | Y | N |
| Prescribe Depression Decision Aid (on Clinic Support website) | If not, A=already viewed, D=Declined |
| Refer/Recommend adding counseling | If not, O=Other Treatment, D=Declined |
| Start, titrate, or adjust medication | If not, O=Other Treatment, D=Declined |

| ≥ 15 (Severe): Answer ALL of the following: | |
| Start, titrate, or adjust medication | D=Declined |
| Refer for psychiatric evaluation and medication review | If not, N=N/A, A=already receiving, D=Declined |
| Recommend adding counseling | If not, N=N/A, A=already receiving, D=Declined |
| Prescribe Depression Decision Aid (on Clinic Support website) | If not, A=already viewed, D=Declined |
| PCP follow-up appointment in 4 weeks (request on encounter form) |
| Advise patient they will receive follow-up call in 2 weeks from Depression Care Program |

Revised 8/30/11

CASE ONE (Continued):

After totaling the nine questions you find that Mr. Capps has scored 14 on his questionnaire. You tell him that this score corresponds with moderate depression. He comments, “Well that’s too bad… guess I’m just a head case then, right?”

5. What is the first step of treatment in moderate and severe depression?
It is important to provide education: helping the patient understand what depression is, how it can impact chronic disease, and that there are treatments that can help. We have an excellent Decision Aid that can be given or e-prescribed to patients in clinic or mailed to them.

Sadly, some patients (and doctors) still view depression as carrying a stigma and even as a moral weakness or shortcoming. Therefore, it is helpful to stress the evidence of genetic predisposition and biological mechanisms. Further, you can emphasize that making a diagnosis of depression is not akin to saying that the patient’s symptoms (physical or psychological) are all “in their head,” and thus not to be taken seriously. In fact, by giving the symptomatology a diagnosis and offering a “biological treatment,” you reaffirm your belief in his signs and symptoms and normalize your persistence in treating the problem until numbers improve, just as we do for hypertension or diabetes.

Because depression is often misunderstood in the general public, it is important to emphasize the frequency and severity of the disease (including the impact on other medical conditions. Patients need to know that depression can get better and is as responsive to treatment as other chronic conditions. Education, counseling and medication per our Selected Antidepressant algorithm are all reasonable treatments at this level of severity. Follow up for Mr. Capps’ moderate depression should be in 12 weeks.

CASE TWO:
Ms. Ivanna Di is a 24 year-old G1P1 female with no past medical history except for a c-section 4 months ago. She presents for worsening sleep, appetite, and irritability. The symptoms began two weeks after the birth of her first and only child. She now presents for help at the insistence of her fiancé (the baby's father), who appears to be at his wit’s end. He asks, "So what on earth is wrong with her? We have this kid, and now she just wants nothing to do with him."

Fortunately for you she was screened for depression at check-in, found to be positive, and handed a PHQ-9 to complete. You tally her score to be 22 and talk to the two of them about post-partum depression. You explain that her depression is in the "severe" category and that she needs to start treatment for it immediately.

6. What is your choice of pharmacotherapy in this patient? What barriers to treatment do you anticipate, and how can you overcome them? Any special considerations?

Antidepressants (AD) are defined by mode of action. However, it has been found that no class of agents or specific agent has been shown to be more efficacious than another (Kroenke K, 2002). Therefore, in selecting a particular agent, you can take into account
the variables of cost, side effect profile, drug-drug interactions, and/or family/personal history of response to an AD.

That being said, SSRIs are the current initial drug of choice, and in keeping with the STAR D protocol. Citalopram (Celexa) is the starting SSRI of choice as it has a low side effect profile. Please refer to medication algorithm (next page).

Residents may wonder if it is safe to offer this new mother antidepressants at all. The most recent look at the literature reveals a small chance of septal heart defects in babies born to women taking paroxetine in pregnancy (there is some concern that this effect is overemphasized due to the number of echocardiograms done on the babies in this group). Sertraline and paroxetine are thought to be safer than fluoxetine and citalopram in the nursing mother. Nortriptyline is also thought to be safer in lactation than bupropion or other newer antidepressants. Remember that postpartum depression can be severe and life threatening, so cost and benefit must be carefully weighed. In addition, pregnant and lactating women may be particularly reluctant to take relatively unstudied medications into their bodies for fear of harming their baby. UNC has a new postpartum depression inpatient unit where we can also send appropriate patients.

In terms of efficacy, ADs produce full remission, defined as PHQ-9<5, in 30% of patients with MDD and partial response (a 50% reduction in PHQ-9 score) in 60%. Within approximately 6 weeks, half of persons receiving ADs have at least 50% reduction in symptoms.

Appropriate initial choice of therapy:
**Selected Antidepressant Medications**

**General Thoughts on Medication Decisions:**
- SSRIs and SNRIs are the agents of first choice due to ease of use, tolerability, and safety in overdose (Citalopram and Sertraline most tolerable in meta-analysis)
- "Start Low and Go Slow"
- Be sure to rule out history of manic episodes and possible bipolar and refer if detected
- Use what has worked in the past
- Consider side effect profile in determining initial agent
- Many side effects (nausea, dry mouth, diarrhea/constipation, sexual dysfunction, dizziness) will resolve with time or can be modified by changing time of administration (sedation, activation)
- Can address sexual dysfunction in women on SSRIs by switch/augment w/ bupropion/add sildenafil

**Selected Antidepressant Medications (Table 1)**

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dose Range</th>
<th>Starting Dose</th>
<th>Advantages</th>
<th>Disadvantages</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Selective Serotonin Reuptake Inhibitors (SSRIs)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citalopram®</td>
<td>10-40mg/day</td>
<td>10-20mg</td>
<td>Low drug interactions, fewer GI side effects, safe in elderly, good initial choice</td>
<td>20% renal excretion, doses higher than 40 mg may be associated with long QT</td>
<td>Generic available 4$ list</td>
</tr>
<tr>
<td>Sertraline®</td>
<td>25-200mg/day</td>
<td>25-50mg</td>
<td>Low drug interactions and safe after MI, can be activating, safer during pregnancy</td>
<td>Sexual dysfunction</td>
<td>Generic available</td>
</tr>
<tr>
<td>Fluoxetine®</td>
<td>10-80mg/day</td>
<td>10-20mg</td>
<td>Nonadherent or forgetful patient can be dosed weekly, more initial nervousness and arousal than others - 5HT inhibition</td>
<td>More initial nervousness and arousal than others - 5HT inhibition</td>
<td>Generic available 4$ list</td>
</tr>
<tr>
<td>Paroxetine®</td>
<td>10-50mg/day</td>
<td>10-20mg</td>
<td>Effective for anxiety, causes sedation</td>
<td>Weight gain - 5HT inhibition - Anti-cholinergic activity - Avoid during pregnancy</td>
<td>Generic available 4$ list</td>
</tr>
</tbody>
</table>

| **Serotonin–Norepinephrine Reuptake Inhibitors (SNRIs)**      |             |               |                                                                             |                                                                               |          |
| Venlafaxine® (Effexor XR) | 75-225mg/day | 37.5-75mg     | Effective for anxiety, low drug interactions, 3% have increased BP           |                                                                               | Generic available |
| Duloxetine®       | 30-60mg/day | 30-60mg       | Also indicated in diabetic neuropathic pain                                  | Nausea common and 5HT inhibition, more expensive                              | 555      |

| **Dopamine/NE/Serotonin Reuptake Medications**                |             |               |                                                                             |                                                                               |          |
| Bupropion®       | 200-450mg/day | 100mg QAM     | Stimulating, less sexual dysfunction, least weight gain                    | Contraindicated with h/o seizure or eating disorder                           | Generic available |
| Buspirone®       | 10-30mg/day  | 7.5mg BID     | Effective for anxiety, less sedating                                        | Possible agitation, dizziness, and insomnia                                   | Generic available |

| **Others**                                                   |             |               |                                                                             |                                                                               |          |
| Mirtazapine® (Remeron) | 15-45mg/day  | 15mg QHS      | Less sexual dysfunction, appetite stimulating, mildly sedating             | Sedation at low doses and weight gain                                          | Generic available |
| Nortriptyline® (Pamelor) | 25-150mg/day | 25mg          | Causes sedation, can measure level for adherence                           | Cardiac toxicity in overdose, more anticholinergic effects                     | Generic available 4$ list |

*Recommended by Consumer Reports Best Buy Drugs, 2005. Developed by Dr. Grant R. Williams & Dr. Amy Well

Revised 9/09/11
The first two weeks of drug therapy are often the most challenging for patients as pessimism, hopelessness that is intrinsic to depression, cultural and attitudinal factors, and relatively rapid onset of adverse effects can lead to nonadherence: 28% of depressed patients stopped taking their medication during the initial month of treatment, and 44% stopped within 3 months. We have implemented a program whereby we have a Care Assistant (CA) calling the patient to check in at the 2 week mark (see VP algorithm) to review medication tolerance, changes in functioning and to confirm next visit.

Common Adverse Effects to Antidepressants:

<table>
<thead>
<tr>
<th>Fluoxetine</th>
<th>Citalopram</th>
<th>Bupropion</th>
<th>Nortriptyline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea</td>
<td>Nausea</td>
<td>Dry Mouth</td>
<td>Sedation</td>
</tr>
<tr>
<td>Anorexia</td>
<td>Dry Mouth</td>
<td>Nausea</td>
<td>Dry Mouth</td>
</tr>
<tr>
<td>Tremor</td>
<td>Somnolence</td>
<td>Insomnia</td>
<td>Blurred Vision</td>
</tr>
<tr>
<td>Insomnia</td>
<td>Diarrhea</td>
<td>Constipation</td>
<td>Urinary Retention</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Tremor</td>
<td>Agitation</td>
<td>Constipation</td>
</tr>
</tbody>
</table>

Patients who receive the following educational messages are more likely to comply with therapy during the first month:

1) Take the medication daily;
2) side effects generally go away in 2-3 weeks
3) Antidepressants must be taken for 2-4 weeks for a noticeable effect
4) Continue to take the medication even if feeling better
5) Depression has a life-cycle of about a year – once the effective medication or combination is determined treatment needs to continue for 9-12 months
6) Do not stop taking antidepressant medication without checking with your physician
7) Resolve questions regarding antidepressants and potential side effects with your physician

More ADs are prescribed by primary care physicians than by psychiatrists. However, in cases complicated by suicidal plans or persistent thoughts, substance abuse (including alcohol), bipolar disorder, psychosis, complex psychiatric comorbidity, and cases refractory to treatment, referral should be made to a psychiatrist. If the patient prefers psychotherapy, referral to a therapist is appropriate; however with severe depression pharmacotherapy may be required for remission. In addition, if ECT is a consideration, referral to a psychiatrist is important.

7. What other treatments should be discussed with the patient?

Psychotherapy alone is as effective as pharmacotherapy in patients with mild to moderate depression. Moderate to severe depression may require a combination of both
2012 Society of General Internal Medicine National Meeting, Orlando, FL

medication and psychotherapy. Patients with no response to psychotherapy in 6 weeks or only a partial response in 12 weeks should be reassessed for antidepressant therapy.

Initiating treatment with a combination of psychotherapy and antidepressant should be considered if patients have a history of partial response to previous trials of medication and therapy, a history of two or more episodes of major depression with poor interval functioning, a depressive episode of 2 or more years or psychosocial difficulties that interfere with treatment adherence.

Patients in Internal Medicine have an option for in-clinic Problem Solving Treatment through the Internal Medicine Counseling Program. Diane Dolan-Soto, LCSW provides diagnostic assessment and if appropriate provides this care. Internal Medicine Counseling Program(IMCP) referrals require preauthorization of mental health insurance. To refer, circle counseling option on the Encounter Form. Depending on volume of referrals, there may be a waitlist.

The focus of Problem Solving Treatment is to counteract the downward spiral of depression. Patients are given information and tools to reactivate and/or strengthen their ability to focus on and effectively work through problems. With education and planned progressive techniques, and as indicated in combination with pharmacotherapy, treatment will help patients make the link between their behaviors and symptoms of depression. Problem Solving Treatment emphasizes the need to begin, or re-engage in, physical activity, social interaction, and participation in pleasurable activities.

For this woman there is also the new Postpartum Depression Unit at UNC as an option.

8. When will you see her back? How will you communicate your plan with the Depression Care Program? (Refer to back of visit planner). How will you refer to Internal Medicine Counseling Program? (Refer to Encounter Form)

The patient should return to clinic in 4 weeks in the initial stages of AD treatment to reinforce adherence, assess response to drug not only for benefits but also for possible side effects (see Algorithm). Patients can see one of the mid-level providers if the PCP does not have availability.

The PHQ-9 should be administered at the follow-up visit in order to quantitatively measure any change in symptoms. Patients with severe depression will be prompted to re-test depression severity each visit until they score ≤ 14. Patients with moderate depression will be prompted for a re-test in 3 months. A reduction in PHQ-9 score by 50% or more may be regarded as a partial response. A repeat PHQ-9 score <5 indicates resolution of the depressive episode.
2012 Society of General Internal Medicine National Meeting, Orlando, FL

**Remember:** Depression has a life-cycle of about a year – once the effective medication or combination is determined treatment *needs* to continue for 9-12 months. Discontinuing medication earlier may lead to relapse or to resistance to the treating medication.

*Referral criteria for short term depression counseling through Internal Medicine Counseling Program (IMCP):*
- Patients with severe depression who refuse medication but are willing to go for counseling
- Patients with moderate depression who are willing to go for counseling
- Patients with severe depression who are taking medication and are willing to go for counseling

*Please consult with Diane Dolan-Soto, LCSW if you are seeking assessment services only, or for patients you think may be in need of external services (psychiatry, substance abuse, etc.), or where presentation suggests short term counseling may improve patient’s self-care.*

---

**CASE THREE:**
Mr. Abe Itoff is a 25 year-old man with depression but otherwise no medical history who presents with his brother for a new patient appointment today. Per the brother, his depressed mood started after his mother died unexpectedly almost a year ago. Since then he has been tearful with poor appetite and fitful sleep. He previously worked for a computer company but “got absolutely no joy out of that anymore,” so he quit. Of note, the brother does recall a two week period a few months ago when “he just went totally crazy, working on his computer all night on some new project, talking out of his head, and even buying a new car with his last bit of savings,” but nothing else out of the ordinary.

On exam the patient has stable vital signs but is disheveled in appearance. He appears unwilling to answer most questions. PHQ-9 scored a 25, severe depression. The brother says, “Well, I think he’s finally ready to give one of those antidepressants a try.”

9. What most likely is this patient’s psychiatric diagnosis? How can we diagnose this quickly and accurately? How does this affect our medication choice?

_This patient most likely has bipolar disorder. He has a history of depression and currently has several signs of mania, including increased goal-directed activity and decreased need for sleep. He is currently irritable with some bizarre and psychotic thoughts, all signs of a mixed depressive-manic episode triggered by the one year anniversary of his mother’s death. It is important to remember to screen for bipolar_
disorder among depressed patients. A simple screening question for mania is the following: "Have you had periods of feeling so happy or energetic that your friends told you were talking too fast or that you were too hyper?" Symptoms of mania along with depression can be summarized as below:

<table>
<thead>
<tr>
<th>Mania – DIGFAST</th>
<th>Depression – SIGECAPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distractability</td>
<td>Sleep disorder</td>
</tr>
<tr>
<td>Indiscretion (Pleasurable Activities)</td>
<td>Interest Deficit (anhedonia)</td>
</tr>
<tr>
<td>Grandiosity</td>
<td>Guilt</td>
</tr>
<tr>
<td>Flight of Ideas</td>
<td>Energy Deficit</td>
</tr>
<tr>
<td>Activity Increased</td>
<td>Concentration Deficit</td>
</tr>
<tr>
<td>Sleep Decreased</td>
<td>Appetite Disorder</td>
</tr>
<tr>
<td>Talkativeness (Pressured Speech)</td>
<td>Psychomotor Agitation/Retardation</td>
</tr>
<tr>
<td></td>
<td>Suicidality</td>
</tr>
</tbody>
</table>

**Primary Reference**


UNC Depression Care Program Updated Screening and Treatment Algorithms.

**Additional References**


This document is a revision and combination of two prior preclinic conferences:

1. “Depression: Diagnosis (Week 321)” by Melissa Pradhan, MD
2. “Depression: Treatment (Week 322)” by William Rifkin, MD
Suicidal Ideation
UNC General Internal Medicine
Matthew Volk MD and Amy Weil MD

Educational Objectives:
1. Define the key elements of suicidal ideation, including thoughts vs plans, intent, means, history of attempts, and preventive factors.
2. Learn to assess for safe discharge home and what resources to provide for patients with suicidal ideation.
3. Be familiar with the proper way to document discussions about suicidal ideation.

Success stories (feel free to share a personal success story in place of these):

A man in his late 40s had not been able to sleep in over a week. He had sat with a gun and pulled the trigger, but the gun wasn’t loaded. He came to the clinic after a long hiatus from care. He was accompanied by his wife and infant step-granddaughter. His wife had removed the gun from the home and both he and his wife were concerned that he might hurt himself. His provider expressed his concerns to the patient and recommended he be seen by a psychiatrist. The patient wanted his wife with him. Clinic staff called the ER and confirmed that he could have family with him. The patient was told that an Involuntary Commitment would be needed if he changed his mind. He agreed to go to ER and clinic staff were available for escort. The ER and on-call psychiatry staff were notified of the reason the patient was coming over. An introduction was made for the patient at ER desk. Patient was seen by his provider a couple of weeks later. He reported no current suicidal ideation and said he was feeling better.

A woman in her late 50s admitted taking pills the weekend before her clinic visit. It was unclear how many and what pills she’d taken. She refused to go to the ER voluntarily. In the process of preparing Involuntary Commitment papers, she began to experience a racing heart and a spike in temperature. Clinic staff helped facilitate emergency services to transport her to ER. She was kept for several days and was initially upset with the clinic choosing to commit her. Provider and counselor reinforced their care and concern for her safety. After several follow up doctor and counselor visits patient was seen in clinic laughing. She reports no further suicidal ideation and is problem solving with her husband to move from her current stressful living situation. She has returned to working a couple days a week doing in-home care. She is listening nearly daily and sometimes singing to gospel music. She is beginning to feel hopeful that things will get better.
Questions:

1. How many lives are lost to suicide each year in the United States and in the world? What demographic has the highest rate of completed suicide? Why is it important to screen for suicide?

Approximately 30,000 lives are lost to suicide each year in the United States. There are about 1 million suicides each year worldwide. This is a rate of 10-16/100,000 people. The highest rate of successful suicides is in elderly men. Rates begin to rise at age 70 and climb as high as 65/100,000 among men older than age 85. Women have a higher rate of suicide attempts than men, but they are less likely to result in death.

2. Name the most common diagnoses that predispose an individual towards suicidal ideation. Why is it important for the primary care physician to screen for suicide in patients with depression?

Over 90 percent of individuals who commit suicide have some predisposing psychiatric diagnosis. Of these depression is far and away the most common, and it is in fact the leading risk factor for suicide. Other conditions conferring suicide risk include anxiety disorders such as post traumatic stress disorder, bipolar disorder, impulse control disorders, and substance use disorders.

Waiting to screen only patients with a previous attempt is unwise; 2/3 of suicides are successful on the first attempt. This is not limited only to psychiatrists; 2-3% of primary care patients report suicidal ideation in the last month. Of note, most patients who commit suicide saw a physician in the last month of life.

Depressed patients often have passive suicidal ideation (“It would be better if I were just to die in my sleep”). You will NOT put the idea in their head just by asking about it. Most patients will be grateful for the opportunity to discuss any thoughts they have had about the matter.
3. What important factors should be assessed to determine if the patient above is in imminent danger of a suicide attempt?

A patient expressing (1) active intent to die with (2) a specific plan and (3) a means to accomplish that plan is at highest risk for suicide within the next 48 hours. (4) Prior suicide attempts imply that the patient has a temperament (impulsivity, mood, and/or personality) that makes future attempts more likely. Substance use makes attempts more likely. Vague or bizarre plans are also indicative of a high-risk individual. Preventive factors, such as family, faith, hope for the future, and fear of failure decrease the risk of an attempt. A simple way to help organize assessment of a potentially suicidal patient can be summarized as “4 P’s and 4 F’s” as listed below:

<table>
<thead>
<tr>
<th>4 P’s – Evaluation of Suicidal Ideation</th>
<th>4 F’s – Preventive Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability (Intent)</td>
<td>Family</td>
</tr>
<tr>
<td>Plan and Means to Accomplish</td>
<td>Faith</td>
</tr>
<tr>
<td>Past Attempts</td>
<td>Future (Hope)</td>
</tr>
<tr>
<td>Preventive Factors</td>
<td>Fear of Failure</td>
</tr>
</tbody>
</table>

CASE ONE (Continued):
You determine that Mr. Capps has suicidal ideation from his positive response to PHQ9 question 9. You then administer the clinic’s Suicidality Assessment Form to further characterize his risk. He says that he has indeed had thoughts of wanting to hurt himself in the past but that he has never made any specific plans and that he doesn’t think he could actually ever do such a thing. “I just can’t imagine not getting a chance to see my three great grandchildren grow older.” He denies any prior attempts to harm himself.

4. How would you characterize this patient’s risk of imminent suicide? (Refer to Suicidality Assessment and Management Algorithm) Does he have any preventive factors? How would you document this in a clinic note?

This patient has had thoughts of suicide but has no active plan or intent. Furthermore, he has clear preventive factors that make his denial of any intent believable – he has plenty of new family members he is quite involved with. You do not need to complete the Suicidality Assessment Form and Management Algorithm
Looking at the reverse side of our form Mr. Capps falls into the “minimal risk” category and most likely can be discharged home from the clinic with follow-up in 4 weeks for his severe depression. He should be provided with the National Suicide Hotline number (1-800-233-6834), and his depression treatment should be maximized (per Visit Planner algorithm). The encounter should be documented as follows: “The patient endorsed prior thoughts of hurting himself but currently denies any plan or intent.” Documenting or performing a ‘contract for safety’ is not recommended. The main responsibility of the provider is to assure that given the patient’s statements at the current moment, he does not need inpatient observation to assure his safety.

Despite this patient’s “minimal risk” status, it is important for the provider to remember that elderly men living alone who are depressed and have weapons at home are the most likely suicide completer group, so paying attention and assessing, treating, and following up with this patient is crucial.

CASE TWO:
Ms. Ivanna Di is a 24 year-old G1P1 female who has suffered from severe post-partum depression since the birth of her first child 10 months ago. She has been followed closely in medicine clinic, but has scored in the mid 20s on her PHQ-9 despite titration of citalopram to maximal dosing. Today she appears more tearful than normal and endorses thoughts of hurting herself “more than half the days.” – a 2 on question 9. She states “I just don’t see how things will ever get better.” On further assessment, she has had thoughts of hurting herself for “a few weeks now.” She endorses a plan to take “a whole lot of Tylenol” and motions to a bottle she keeps in her purse to treat frequent headaches. She seems uncertain as to whether or not she would actually go through with this plan but cannot cite any preventive factors. She has had one prior suicide attempt – an ibuprofen overdose after breaking up with an old boyfriend back in college.

5. What are some additional risk factors to consider in patients with higher risk of suicide? Our assessment form can help you to remember them. (See Suicidality Response Outline for Additional Information)

Among patients at more than minimal risk of suicide it is important to consider additional risk factors that have been shown to be associated with suicide attempts. Lack of social support is a significant risk factor, as a patient’s friends and family provide a critical safety net in times of need. A recent life stressor or marital/relationship distress can provide impetus for a suicide attempt. A history of impulsive behavior makes unplanned suicide more likely; substance or alcohol abuse often can lead to such impulsive
behavior. Other important risk factors include recent psychotic symptoms, family history of suicide attempts, and comorbid medical illness.

Risk factors as listed on our form:

In higher risk patients consider the following additional risk factors:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Current or recent alcohol abuse?</td>
<td>☐ YES ☐ NO</td>
</tr>
<tr>
<td>7. Current or recent substance abuse?</td>
<td>☐ YES ☐ NO</td>
</tr>
<tr>
<td>8. Recent severe life stressors, such as a recent loss?</td>
<td>☐ YES ☐ NO</td>
</tr>
<tr>
<td>9. Family history of suicide?</td>
<td>☐ YES ☐ NO</td>
</tr>
<tr>
<td>10. Recent impulsive or aggressive behavior?</td>
<td>☐ YES ☐ NO</td>
</tr>
<tr>
<td>11. Current psychotic symptoms, such as auditory hallucinations or bizarre statements?</td>
<td>☐ YES ☐ NO</td>
</tr>
<tr>
<td>12. Serious comorbid physical illness?</td>
<td>☐ YES ☐ NO</td>
</tr>
<tr>
<td>13. Relationship distress?</td>
<td>☐ YES ☐ NO</td>
</tr>
<tr>
<td>14. Lack of social support?</td>
<td>☐ YES ☐ NO</td>
</tr>
<tr>
<td>15. Concurrent diagnosis of major depression, bipolar or anxiety disorder?</td>
<td>☐ YES ☐ NO</td>
</tr>
</tbody>
</table>

CASE TWO (Continued):
Upon inquiry about her social situation, Ms. Di states that she is not married. Her fiancé, the baby's father, was initially involved but left her about three months ago when her depression worsened. She currently lives alone with her baby and does not talk with her family because of a long standing dispute. She occasionally binge on alcohol when she can find a sitter, but denies any other substance use.

6. How would you characterize this patient’s risk of imminent suicide? How would you document this in a clinic note?

This patient has thoughts of suicide with vague intent. She has a plan and a means of carrying out that plan. Furthermore she has multiple additional risk factors for suicide, including a history of suicide attempt, poor social support, and occasional substance abuse. She clearly fits into the “highest risk” category. She should be separated from her Tylenol and involuntary commitment papers should be completed. If possible share your concern that she is at risk and needs more structured care. She should be sent to the emergency room via campus police for a full psychiatric evaluation. All the elements of risk assessment, including her plan, intent, means, and additional risk factors should be documented in a note for immediate review by inpatient personnel. Residents may have to do an additional phone or generic note for information to be immediately accessible. See reverse side of assessment form for details to assist you with helping this patient (insert that portion below?)

An important note: in a case such as this it is important to make allowances for any children for which the patient is responsible. The provider should verify that there is a responsible adult who can care for the child while the patient is evaluated. If this cannot
7. Among patients known to have suicidal ideation, what psychiatric conditions have the highest association with an actual attempt?

*Depression is known to be one of the best predictors of both suicidal ideation and suicide attempts in a general population. However, among a population of ideators, suicide attempts are disproportionately more common in patients with severe anxiety disorders, impulse control disorders, substance use disorders, and bipolar disorder. Of note, it is quite possible for an individual to be suicidal without any symptoms of depression.*

8. How would you characterize this patient’s risk of imminent suicide?

*This patient has vague or positive intent but appears to have intent and a plan that would be difficult to accomplish, especially since his brother has taken away his transportation. He would fall into the “higher risk” category. The case should be discussed with another provider in the clinic and additional risk factors should be considered to help come to a clinical judgment about home safety (see algorithm). In the end this patient’s severe life stressors, diagnosis of bipolar disorder, and overtly psychotic symptoms may lead to the conclusion that inpatient observation is necessary to assure both his safety and his stabilization in a timely fashion -- in that case he should be transported to the emergency room under Involuntary Commitment.*
If available, an alternative approach for complex patients may be to contact UNC psychiatry to further discuss the case – they can provide further advice regarding need for hospitalization and urgent evaluation. The ED psychiatric consult resident should be paged at 216-3832 for these questions. If response is not prompt, and there is any doubt about a patient’s safety then Involuntary Commitment is necessary. Psychiatry also has a walk-in clinic on the first floor of the Neurosciences hospital for patients who are somewhat more stable (i.e. can stay unattended in a waiting room for several hours). The Psychiatry clinic should be consulted at 966-5217 to see if they recommend sending patient over. If recommended, psychiatrist on call for Walk-In should be notified at 216-0595 in advance of the patient’s arrival.

Primary References


3. UNC Suicidality Assessment and Management Form (and algorithm)

Additional References


2. Nock, MK. Mental disorders, comorbidity and suicidal behavior: Results from the National Comorbidity Survey Replication. Molecular Psychiatry. 31 March 2009; doi:10.1038/mp.2009.29
Background: Resident-patient interactions are central to the Accreditation Council for Graduate Medical Education (ACGME) core competencies of Interpersonal Skills and Communication and Professionalism.¹ Physician communication skills have been linked to patient satisfaction as well as patient compliance with follow-up appointments.² Video-taping resident-patient interactions allows for both direct observation of these interactions by supervisors and self-reflection by the residents. Review of video-taped interactions can be used in teaching specific clinical skills, such as physical exam skills, as well as more elusive communication skills. For over two decades, family practice and Internal Medicine residencies have successfully employed review of video-taped patient interactions to teach patient-centered communication skills in routine as well as challenging patient interactions.³⁷

Protocol (based on published curriculum for resident-patient video-taped encounters³⁵⁻⁸)

1. An explanation of the project will be sent to the primary care residents by Dr. Loeb and to all other residents by Dr. Nikels.
2. Primary Care Residents will video-tape one patient interaction in clinic per academic year. All other residents will have the option to video-tape one patient interaction in clinic per academic year. Please note that Primary Care Residents with continuity clinic at Lowry will video-tape their patient encounter at Anschutz. They will only see the one patient they are video-taping the day they are video-taped.
3. Resident to choose patient interaction to be video-taped. Residents will be encouraged to choose increasingly complex patient interactions each year of their residency.
4. Residents will call the patient they plan to video-tape prior to the encounter. They will briefly discuss the project in advance. This conversation will not be a formal consent process but should give the resident an understanding if the patient is interested in participating. If not, they will choose a different patient.
5. After discussing with the patient, the resident will notify Dwanika or David and ask them to schedule the patient for a 90 minute visit.
6. Only one resident-patient encounter will be video-taped per session.
7. The resident will inform the MA in charge of storage and set-up of the video equipment that they have a visit that will be video-taped that day.
8. Two MA’s in the clinic will be trained in setting up the portable video equipment.
9. On a day that the interaction will be video-taped, the resident will have a reduced schedule. They will have 90 minutes allotted for the visit to be video-taped, including a half-hour for patient consent and video set-up prior to the visit.
10. The resident will explain the project and obtain consent from the patient.
11. The visit will be digitally recorded and password protected.
12. The recording devise will be stored in a locked cabinet in the clinic.
13. The MA will store the Video equipment after the visit.
14. The resident will have the opportunity to review their video in clinic during the week following their video-taped interaction.
15. The resident will review their video-taped interaction with a psychologist (Dr. Lynn Haley or KC Lomonaco) trained in review of resident-patient video-taped interactions. The resident and psychologist will agree at the beginning of the review session on important goals for the session. The resident may suggest specific sections of the video requiring attention.

16. At the end of the session the psychologist and resident will agree on one teaching point from the interactions. A brief section of the video (2-5 minutes) that illustrates that teaching point will be saved and the rest of the video will be erased at that time. This brief section will be saved on a password-protected device which will be stored by Dr. Danielle Loeb in a locked cabinet in her office at the University of Colorado Anschutz Medical Campus.

17. Residents will participate in group reviews of the brief video clips with peers from their resident class. Resident will share their video clip and their teaching point. This group review will be moderated by Dr. Loeb. All video clips will be erased after this group review. This group review will take place within 2 to 9 months after the original patient encounter.

References


