Going Beyond the Basics:

Integrating Medical and Dual Diagnosis in Primary Care

This is Our Experience...
Presenter:

James Williamson, PA-C

B.S. Information Services - University of Phoenix
M.S. Physician Assistant - University of Detroit, Mercy

Family Practice Physician Assistant
Golden Valley Health Centers
Corner of Hope
2010 to present
Presenter:

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BA (Psychology) - University of California, Irvine
B.S (Biology) - University of California, Irvine
M.D - University of California, Davis
Residency in Family Practice – Doctors Medical Center, Modesto, CA

Family Doctor
Golden Valley Health Centers
Corner of Hope
2006-2009 and 2011-present
Our Backgrounds

“How did two family practice providers end up doing a job like this?”

Just sheer need in the community with ongoing cut backs in county mental health and substance abuse treatment programs

An interest in mental health treatment and neuropharmacology

No special training besides Medical and PA school

Snookered!!!

Learn as we go…what choice is there?
Corner of Hope
Modesto, CA

- Rural
  - Population 300,000
  - Unemployment rate 15.5%
  - 90% economy based on agriculture
  - Amongst top ten U.S. foreclosure rate
Corner of Hope Homeless Clinic

Homeless Program Established:

- First Location was under a bridge
- Second location at a local run down motel
- Since 2003 we have been located in our brick and mortar clinic 150 feet from the “mother” clinic
- Grant funding 50%
- Balance of funds from larger FQHC Center’s revenue, namely for pharmaceutical and lab costs
- With a 36 hour clinic week and the equivalent of one full time provider, we see 300 patients a month
Corner of Hope Homeless Clinic
(Patient Base)

Very limited county based indigent care services...we serve more mental health patients than the already over burdened county mental health system

Realignment of prisons leading to earlier discharge of medically and psychiatrically ill inmates

The majority of acute psychiatric hospital discharged patients are released after 72 hours with multiple mental health meds and told to follow-up with us to get their prescriptions filled
Corner of Hope Homeless Clinic
(Patient Demographics)

- 60% of patients have serious mental illness (SMI)
- 70% with active dependence or addiction/diversion issues
- 75% of patients completely uninsured
- 70% of patients have no where else to turn for medical or mental health care
Corner of Hope Homeless Clinic
(Growth of Services)

✧ Started - Basic Medical Services
✧ Currently - Full Service Family Practice Medical Home

- Advanced Diabetes
- COPD
- Heart Disease
- Skin Abscesses
- Trauma
- Immunizations
- Cyst Removal
- Joint Injections
- Chronic Pain
- Infectious & STD Screening
- Women’s Health
- Mental Health (Cognitive & Meds)
- Advocacy Oriented Support Staff
- Licensed Clinical Social Workers
- Social Services/Case Management
- “Change Groups” One Day a Week
Corner of Hope Homeless Clinic
(Patient Assistance Services)

- Basic pharmaceutical formulary
- Help with applying for Medicaid and SSI
- Referral services to other county services, if still available
Corner of Hope Homeless Clinic

- We don’t shy away from chronic pain treatment
- We manage our own pharmaceutical budget
- We rely heavily on sample meds and patient assistance programs
- Program qualification is only 3-6 months for patients; i.e., to stabilize them before transition to other funding sources
Typical Day

✧ Our Modus Operandi “Organized Chaos”

✧ 20-30 patients a day  
  (half scheduled and half walk-in patients)

✧ 15-20 minutes a patient

✧ New patient assessment  
  Urgent or  
  Emergent Physical and Mental Health

✧ PCP’s job is to be the quarterback of the treatment team, but everyone plays a very important part!
Typical Day

- Co-managing patients with our behavioral clinicians.
- Identify frank drug abusers and diverters, but continue other medical treatment(s)
- One third medical
- One third musculoskeletal and chronic pain
- One half mental health
Our Discussion

Designed around the mutual sharing of all our experiences.

All of us in this room are experts in our communities.

We encourage participation and questions after we deliver our synopsis.
New Patient Assessments

- In-house Utox for new patients
- LCSW assessment within one week (same day for suicidal or manic patients)
New Patient Rapid Screening Tools

- Opioid Risk Tool
- PHQ-9
- Mood Disorder
- GAD-7
- CAGE-Aid
## Opioid Risk Tool

<table>
<thead>
<tr>
<th>MARK EACH BOX THAT APPLIES:</th>
<th>FEMALE</th>
<th>MALE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Family history of substance abuse</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Illegal drugs</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Prescription drugs</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>2. Personal history of substance abuse</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Illegal drugs</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Prescription drugs</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>3. Age</strong> (mark box if between 16 and 45 years)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>4. History of preadolescent sexual abuse</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><strong>5. Psychological disease</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADD, OCD, bipolar disorder, schizophrenia</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Depression</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**SCORING TOTALS:**

<table>
<thead>
<tr>
<th>ADMINISTRATION</th>
<th>SCORING</th>
</tr>
</thead>
<tbody>
<tr>
<td>On initial visit</td>
<td>0-3: low risk (6%)</td>
</tr>
<tr>
<td>Prior to opioid therapy</td>
<td>4-7: moderate risk (28%)</td>
</tr>
<tr>
<td></td>
<td>&gt;R: high risk (&gt;90%)</td>
</tr>
</tbody>
</table>
Opioid Risk Tool

Stratify Risk

Low Risk
- No past/current history of substance abuse
- Noncontributory family history of substance abuse
- No major or untreated psychological disorder

Moderate Risk
- History of treated substance abuse
- Significant family history of substance abuse
- Past/comorbid psychological disorder

High Risk
- Active substance abuse
- Active addiction
- Major untreated psychological disorder
- Significant risk to self and practitioner
The Patient Health Questionnaire (PHQ-9)

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>State or Age</th>
</tr>
</thead>
</table>

Over the past 2 weeks, how often have you been bothered by any of the following problems?

<table>
<thead>
<tr>
<th></th>
<th>Not At All</th>
<th>Several Days</th>
<th>More Than Half The Days</th>
<th>Nearly Every Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Little interest or pleasure in doing things</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>Feeling down, depressed or hopeless</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Trouble falling asleep, staying asleep, or sleeping too much</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4.</td>
<td>Feeling tired or having little energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5.</td>
<td>Poor appetite or overeating</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6.</td>
<td>Feeling bad about yourself - or that you're a failure or have let yourself or your family down</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7.</td>
<td>Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8.</td>
<td>Moving or speaking so slowly that other people could have noticed, or the opposite - being so fidgety or restless that you have been moving around a lot more than usual</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9.</td>
<td>Thoughts that you would be better off dead or of hurting yourself in some way</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Column Totals: 1 + 9 + 3
Add Totals Together: 13

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

☐ Not difficult at all  ☐ Somewhat difficult  ☑ Very difficult  ☐ Extremely difficult
**Mood Disorder Questionnaire**

**Instructions:** Please answer each question as best you can.

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

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

3. How much of a problem did any of these cause you - like being able to work; having family, money or legal troubles; getting into arguments or fights?
   - No problem
   - Minor problem
   - Moderate problem
   - Serious problem

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

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

The GAD-7 Anxiety Scale

<table>
<thead>
<tr>
<th>Problem</th>
<th>Not at all sure</th>
<th>Several days</th>
<th>Over half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling nervous, anxious, or on edge</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Not being able to stop or control worrying</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Worrying too much about different things</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Trouble relaxing</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Being so restless that it's hard to sit still</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Becoming easily annoyed or irritable</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Feeling afraid as if something awful might happen</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Add the score for each column

Total Score (add your column scores)

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

Not difficult at all ___
Somewhat difficult ___
Very difficult ___
Extremely difficult X
CAGE Questionnaire

Patient Label

Golden Valley Health Centers

Have you ever:

1. Tried to cut down or change your pattern of drinking or drug use?
   - Yes
   - No

2. Been annoyed or angry by others’ concern about your drinking or drug use?
   - Yes
   - No

3. Felt guilty about the consequences of your drinking or drug use?
   - Yes
   - No

4. Had a drink or used a drug in the morning to decrease hangover or withdrawal symptoms?
   - Yes
   - No

5. Tried to quit smoking?
   - Yes
   - No

6. Been unable to control the amount of food you ate?
   - Yes
   - No

7. Had guilt or remorse after overeating?
   - Yes
   - No

8. Thought you had a problem with gambling?
   - Yes
   - No
Complexities and Safety
Comorbid Substance Abuse and Mental Health Treatment

- Why mood stabilizers?
- Why antipsychotics?
- Care with antidepressants
Neurotransmitter Receptor (Before Drug Abuse)

Receptors in the reward centers of the brain

Basic and simplified example of changes in neurotransmission pathways
Neurotransmitter Receptor (Drug Altered)
Neurotransmitter Receptor
(Drug Abuse)
Neurotransmitters

Dopamine
Seroptonin
Norepinephrine
Neurotransmitters

Dopamine

- Most closely associated with reward behavior in the nucleus accumbens
  - Including changes prompted by all drugs of abuse
  - Efficacy studies of anti-dopaminergic meds on sobriety are inconclusive
    - Co-managing bipolar mania in the drug rehab phase of addiction
      - We have been having good success with newer generation anti-psychotics
Neurotransmitters

Serotonin

- Usually we think of serotonin in antidepressants such as SSRI’s
  - Prozac, Zoloft, Lexapro, Celexa
  - Can and does cause rapid cycling of bipolar

- Latest generation antipsychotics
  - Bind to serotonin presynaptic receptors
  - Not seen kindling of bipolar mania unlike the SSRI’s
Neurotransmitters

Norepinephrine

✧ NSRI’s (non-serotoninc reuptake inhibitors) such as Effexor
  ✧ Have to be careful

✧ Use of indirect norepinephrine agents such as Strattera for ADHD
  ✧ Not without risk – ADHD/Bipolar spectrum
Mood Disorders Chart

“Bipolar Spectrum Disorder”

Unipolar  BP NOS  Bipolar II  Bipolar I

No mania/hypomania
Multiple non-manic bipolar markers

Mood Disorders Chart

A = mania
B = dysphoric mania
C = manic stupor
D = agitated depression
E = melancholic depression
Antipsychotics

Differences in two classes of antipsychotics

The pines (Seroquel, Zyprexa)
- Insomnia
- Lipid and weight gain
- Watch for diabetes

The dones (Latuda, Risperdone, Abilify)
- Less sedating
- Less weight gain, etc.
- Watch for Akisthesia and EPS

See patient back within 1-2 weeks
Bipolar Case Study

✓ Patient treated with a mood stabilizer vs. anti-depressant

  Patient turned out to be bipolar

✓ Patient with bipolar depression not improving on low dose Depakote and Seroquel XR (low dose due to excessive sedation)

  Action:

    Curb side consultation with psychiatrist
    Bupropion was added

  Result:

    Patient began to cycle within two weeks
Often patients with bipolar need multiple drug therapy…

Mood Stabilizer
Antipsychotic

Don’t be too afraid to combine!
Safety Practices

- Maximizing Safety
- Patient care agreement
- Single Point of Contact for Prescriptions
Safety Processes

- If we can do only one thing do the Opioid Risk Tool first
- State databases for controlled drugs
- In house urine drug screens
- Mental health screening tools
- Clinical social work appointment
- Present, review and acquire signature of the pain management agreement
- Random Utoxes
- Pill counts
- Close working relationship with pharmacist
- Limits on numbers of Opioids dispensed on the free pharmacy program per month
Safety Practices

• Mistakes to avoid with suicidal patients not acute enough to be hospitalized
  • Need closer follow-up
  • Integrated visits
  • Safety agreements
  • Family member holds meds
Rates of suicide in patients with Comorbid SMI and alcoholism are the highest of any other groups.

Even substance abuse induced depression that you expect to be short lasting (2 weeks) is dangerous.
Safety Practices (Continued)

• Growing epidemic of overdoses
  – Overdoses from Opioid drugs has risen nearly 7 fold since 1990
  – Approximately 27,000 deaths in 2007, one death every 19 minutes

• Avoiding overdose on sedatives
• Family Involvement
“Kick” Meds Are Not For Everyone!

The Alcoholic with History of Withdrawal Seizures and Delirium Tremens, Now Tachycardic, Hypertensive, Sweating and Tremulous

Hypotensive Intravenous Drug Abusers

Dehydrated Patients with Nausea and Vomiting
In-house Urine Drug Screens

• Urine Tests Before Prescribing Meds
  ➢ Safety Issue
  ➢ Street Value

• Common False Positives:
  ➢ Codeine Metabolized to Morphine
  ➢ Hydrocodone
More on Urine Drug Screening
(Common False Positives)

- Codeine metabolized to morphine and even hydrocodone
- Heroin metabolized to morphine
- Codeine can be a by-product of morphine synthesis
- Promethazine cough syrup and Venlafaxine (Effexor) can show up as methamphetamines
- Seroquel can show up as methadone
- OTC cough and cold medicine and even weight loss meds can show up as methamphetamines
- Poppy seeds show up as morphine
Urine Drug Screening

- Predictors of abuse
- Up to 1/3 of controlled meds abused and another 1/3 diverted
- Number of drug overdoses rising to epidemic levels
- The value of continued state databases of all controlled meds dispensed
- The threat of losing funding & decline in available mental health dollars
Let's Get To Work...
Case Studies

• Case Study 1 - John Doe 1
• Case Study 2 - Jane Doe 1
• Case Study 3 - Jane Doe 2
• Case Study 4 - John Doe 3
• Case Study 5 - John Doe 4
Case Study 1 – John Doe 1

• 55 year old ex-intravenous drug abuser
• Grandfather with child rearing responsibilities
• Did not lend very accurate history of alcohol abuse before pain agreement was signed
• Severe post surgical failure for MRI proven sciatica. On Methadone even while in prison
• Two Utox screens sent to lab were positive for alcohol, even though he has been counseled about his very high LFT’s and his ongoing active hepatitis C. He has stated multiple times he quit.
  • In severe pain that is visible to all in the clinic - no doubters even amongst our most skeptical staff
  • Utox always has the appropriate morphine (he is on Kadian) and is positive for alcohol
  • He is a regular at the group sobriety meetings unless he has started drinking again
  • His Utox is positive for alcohol again (the second time)

What would YOU do?
Case Study 2 - Jane Doe 1

- 34 year old female
- Hurt her back in her late teens
- Was prescribed 350 Norco 10/325 from one provider and an additional 200 from another provider on a monthly basis
- She needed to still purchase more on the street to support taking 30-40 per day
- She was working the entire time, used her good credit and took out loans to support.
- Once she was unable to get the Norcos, she became addicted to Heroin and eventually lost her home and became homeless
- Patient with high anxiety and periods of depression
- Patient started on SSRI, only to become agitated and even higher levels of anxiety
- Patient was started on Methadone for her chronic pain, using twice daily dosing and moving to three times per day dosing for better control. Patient is attending 2-3 Narcotics Anonymous meetings daily.
- Patient relapsed using Heroine for 1 day, violating her Patient Care Agreement

What would YOU do?
Case Study 3 - Jane Doe 2

- Mother of two, lost her kids, long time heroin by IVDA
- Wants to quit - three meetings a week
- On 120 mg of Methadone a day, but lost access to methadone maintenance clinic when lost her Medicaid (CPS case)
- Begging for just 20 mg twice a day for “pain”
  
  What would YOU do?

- She was denied this due to legal reasons
- Ends up 2 weeks later at in-patient hospital with suicidal plans and in extreme physical distress from Opioid withdrawal
- She still has no access to Methadone, only Heroin off the streets

  What would YOU do?
• 55 year old male, 35 plus years of intravenous drug abuse (mostly heroin), positive hep c, no cirrhosis, not a drinker
• Initially patient wanted to detox; given “kick meds” to ease Opioid withdrawal
• Came back 3 weeks later using heroin iv again, no abscess
• Pleased and cried for “kick meds” one more time
• He has absolutely no insurance, and no money for a Methadone Replacement Program / out-patient / in-patient treatment. He has no family support. He has no parole officer. He is living on the streets.

What would YOU do?
Case Study 5 - John Doe 3

- 44 year old ex-methamphetamine abuser with a history of incarceration for possession, CPS involvement, and homelessness for the last 2 years. He states the only time he could read blueprints and get his job assignments done on time is when he would smoke Meth before work.
- He states when he used Meth, his mind would become clear and he could organize his thoughts.
- Currently he has trouble even filling out job applications.
- He is dysphoric and hopeless that he will ever get off the streets. His urine is clear.
- His mom comes in on the second visit with him. She relates that he and his older brother always had lots of trouble in school until their school principal almost insisted that they both get on Ritalin. They both did much better in school. They then moved to a different county to get away from their abusive father. Nobody at the new school made much of a fuss about them; and, so they never got back on Ritalin. He flunked out of school in his junior year.

You try the patient on Strattera for ADHD, but it just does not work.

Would you prescribe him Ritalin or Adderall?

What if he comes back positive for ecstasy, but is keeping down a job?

What would YOU do?
Future

- Increasing shortage of psychiatrist willing to treat this population
- Who will fill in?
- More combo FP/Psychiatry/Residencies
Possible Solutions

• Train more primary care clinicians

• Is family practice and psychiatry dual residencies one of the answers?

• Ensure mid-level training programs are providing exposure/awareness to this field

• More addiction treatment training for the primary care clinician while in school or residency
The ACA is Coming...

Potential positive outcomes of ACA

- Increased funding for training of MD’s and PA’s
- Insurance for increased number of consumers
References

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- http://www.jfponline.com/images/Supplements/Feb07/supplJFP0207_pain_4-fig1.jpg
References

Questions & Comments…