Treatment Intersection of Autism and Mental Health

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Treatment Intersection of Autism and Mental Health!

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Objectives

For those patients diagnosed with Autism spectrum disorders (ASD) and mental health conditions presenting to the ER, participants will learn:

- About the scope of the problem and the most common presenting symptoms.
- About effective diagnostic approaches and ways to identify key target symptoms for medication intervention.
- About various safety considerations for patients, families and staff involved.
- About systemic challenges and gaps in services.
- About potential solutions.
Basics of Autism Spectrum Disorder (ASD)

- Neurodevelopmental disorder
- Lifelong difficulties with social communication and restricted interests
- Spectrum $\rightarrow$ range of symptom severity and impairment
- **1 in 59** (1 in 42 boys, 1 in 169 girls, CDC data 2018)
- 4 -5 males to 1 female
Always
Unique
Totally
Interesting
Sometimes
Mysterious
Basics of Autism Spectrum Disorder (ASD)

- Social differences: reduced eye contact, reduced gestures, trouble relating.
- Behavioral differences: repetitive behaviors, toe walking, hand flapping, spinning.
- Sensory differences: sensitivity to sounds, smells, textures.

Autism – Lancet 2014, UpToDate, Diagnosis of ASD -- Pediatric Annals 2011

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DSM-IV → DSM-5

DSM-IV:
- Social Interaction Deficits
- Stereotyped Interests
- Communication Deficits

DSM-5:
- Social and Communication Deficits
- Fixated Interests and Repetitive Behaviors
Transition in Terminology

• Those with well established DSM-IV diagnoses of autistic disorder, Asperger disorder, or PDD NOS should be given diagnosis of ASD.

• Individuals with deficits in social communication but not meeting criteria for ASD to be evaluated for social (pragmatic) communication disorder.
Co-morbid disorders the norm (>70%)

- Intellectual disability (45%)
- Sleep disturbance (50-80%)
- Tic disorders (14-38%)
- ADHD (28-44%)
- ODD (16-28%)
- Anxiety (44-55%, more so with age and higher IQ)
- Depression (12-70%, more so in adults)
- Psychosis (12-17% in adults)
- Self-injury/aggression (50-60%)

*Autism – Lancet 2014, UpToDate, Diagnosis of ASD – Pediatric Annals 2011*

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Predictors of Severity

- Predictors of worse outcomes
  - IQ < 50
  - Lack of useful speech by age 5
  - Poor adaptive functioning
  - More severe symptoms
  - Later diagnosis and treatment

- > 50% of individuals: fair to poor long-term outcomes
Scope of the Problem

- Key findings per a recent systematic review indicate that those with ASD compared to those without are (Clin Psychiatry 79:3, May/June 2018)
  - 21.1% more likely to have ER visits.
  - Greater than 5 times likely to have inpatient hospitalizations.
  - More likely to have higher ED costs (30% higher).
  - More likely to have non urgent visits.
Key findings per a recent systematic review indicate that those with ASD compared to those without are (Clin Psychiatry 79:3, May/June 2018)

- 12.2% of ED visits were for psychiatric problems compared to 1.75% for those w/o ASD.
- More likely for externalizing problems (42.1% versus 22.4%).
- More likely for psychosis (7.8% versus 4.4%).
- 7.6 times more likely for self injurious behaviors and suicide attempts.
- Less likely for internalizing problems.
Scope of the Problem

- Key findings per a review of the Nationwide Emergency Department Database (J Clin Psychiatry 79:3, May/June 2018)
  - For ASD youth aged 12-15 years, self injurious behaviors and aggression: most common presenting complaints to the ED.
  - For ASD youth 6-18, psychiatric disorders, and epilepsy were the most common presenting reasons.
Scope of the Problem

• In a recent study looking at types of services provided in the ED for youth with ASD (Cohen et al, 2001)
  ❖ In those with ASD, 25% visits were repeat visits
  ❖ Those with ASD, **10.32 times** more likely to be admitted to a psychiatric unit.
  ❖ Those with ASD, more likely to be **medically boarded** in the ED.
  ❖ Those with ASD had longer average length of stay.
The longer a child with autism goes without help, the harder they are to reach.
Most Common Presenting Symptoms

- Aggression
- Self injury
- Depression and suicidality
- Impulsivity
- Severe anxiety
- Repetitive behaviors and rigidity
- Irritability and mood lability
Disruptive Behaviors

• Includes aggression, explosive outbursts (tantrums), and self-injury
• Aggression is not a diagnosis – look for etiology
• May be due to anxiety, frustration, mood disorders or impulse control problems
• Target the etiology
• Utilize functional behavioral analysis
Disruptive Behaviors

- Irritability in ASD
- Impulse control Disorder, ADHD
- Depression
- Anxiety
- Medical Causes

Disruptive Behavior Disorders
Disruptive Behaviors: Medication Options

- Atypical antipsychotics
- Typical antipsychotics
- SSRIs
- Anti-epileptics
- Alpha 2 agonists
- Mood stabilizers
Disruptive Behaviors: Considerations for Treatment Team

- Safety is a priority
- Minimize wait times if possible
- Potential triggers in the ER: sounds, transitions, shift changes, too many people in the room
- History from caregivers: about prior aggression (severity), triggers, what helps
- Look for cues for escalation at all times
- Minimize overcrowding in the exam room
An 8 year old child with ASD presents to the ER. Parents have had to call cops multiple times in the last few months due to episodes of severe aggression in all settings. He has been suspended multiple times. At home, he has been aggressive towards the younger sibling and parents are constantly having to supervise. Extensive services are in place. He is currently on no medications.

How will you approach this case?
Disruptive behaviors: Case Example 1

On completion of a brief functional behavioral analysis, there is no evidence of any triggers. Review of systems for ADHD is unremarkable.

What treatment options will you consider?
Disruptive behaviors: Antipsychotics

- When is it appropriate to use antipsychotic?
- May be beneficial if symptoms are not related to other conditions, e.g. Anxiety.
- Evaluate the underlying cause—other classes may be more appropriate.
- Risk benefit analysis and informed consent.
- Start low, go slow.
### Antipsychotics: Dosing and Titration

<table>
<thead>
<tr>
<th>Medication</th>
<th>Usual Starting Dose</th>
<th>Increase Increment</th>
<th>Max dose</th>
<th>RCT benefit</th>
<th>FDA approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risperidone (Risperidal)</td>
<td>0.25 mg QHS</td>
<td>&lt;20 kg: 0.5 x2 weeks Increase by 0.25 mg &gt;2 wks (upto 3 mg) &gt;20 kg: 1 mg x2 weeks Increase by 0.5 mg &gt;2 wks (upto 3 mg)</td>
<td>6-12 yrs: 4 mg 13-17 yrs: 8 mg</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Aripiprazole (Abilify)</td>
<td>2 mg QD</td>
<td>Increase by 5 mg Q7 days.</td>
<td>6-12 yrs: 20 mg 13-18 yrs: 30 mg</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Quetiapine (Seroquel)</td>
<td>25 mg BID</td>
<td>Increase by 25 mg every 4 weeks or so.</td>
<td>6-12 yrs: 300 mg 13-17 yrs: 600 mg</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Ziprasidone (Geodon)</td>
<td>20 mg BID</td>
<td>Increase by 20 mg every 4 weeks or so.</td>
<td>6-12 yrs: 80 mg 13-17 yrs: 160 mg</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Olanzapine (Zyprexa)</td>
<td>2.5 mg QHS</td>
<td>Increase by 2.5 mg every 4 weeks or so.</td>
<td>6-12 yrs: 10 mg 13-17 yrs: 20 mg</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
Which Antipsychotic to Choose

- Past history of response
- Family history of response
- Current evidence
- Compliance, agitation
- Past h/o side effects
## Risperidone

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
</table>
| • QD-BID dosing (T½ = 20 hours)  
• FDA for mania > 10 y/o, irritability/aggression in ASD  
• Multiple forms (liquid, dissolving tab, tabs, depot)  
• Low doses (<2 mg) for non-specific aggression  
• TD incidence reported less than 0.5% | • Weight gain and sedation common  
• Hyperprolactinemia risk  
• Relatively high rates of dystonic reactions/EPS |
Aripiprazole (Abilify)

<table>
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<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• QD-BID dosing (T½=75 hrs) but kids may do better w/ BID</td>
<td>• Limited dosage forms</td>
</tr>
<tr>
<td>• FDA for mania (&gt;10 yrs) and limited RCT support</td>
<td>• Misperception of less weight gain/metabolic SE</td>
</tr>
<tr>
<td>• Mixed agonist/antagonist (less dystonia/EPS)</td>
<td>• Agitation/activation not uncommon</td>
</tr>
<tr>
<td>• Often less sedation</td>
<td>• Higher rates of akathisia</td>
</tr>
<tr>
<td></td>
<td>• Long T ½ -may take longer to see impact of changes</td>
</tr>
</tbody>
</table>
**Olanzapine (Zyprexa)**

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• QD-BID dosing ($T_{1/2} = 30$ hours)</td>
<td>• Weight gain (dose related)</td>
</tr>
<tr>
<td>• Multiple dosage forms (tablets, oral disintegrating, IM)</td>
<td>• High rates of metabolic side effects</td>
</tr>
<tr>
<td>• Very effective for acute stabilization of mania and psychosis</td>
<td>• Sedation common</td>
</tr>
<tr>
<td>• IM forms available for severe agitation</td>
<td>• Combine with caution with benzodiazepines</td>
</tr>
</tbody>
</table>

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Other Antipsychotics

- Clozapine: rarely used in kids
- Iloperidone (Fanapt): low rate of EPS and akathisia, orthostasis and weight gain +
- Asenapine (Saphris): sublingual, twice a day dosing, low metabolic side effects
- Lurasidone (Latuda): some akathisia,
- Typical antipsychotics: Haloperidol, Chlorpromazine
# Antipsychotics: Adverse Effects

<table>
<thead>
<tr>
<th>Common Side Effects</th>
<th>Less Common Side Effects</th>
<th>Notable Rare Reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(&gt;10%)</td>
<td>(≤2%)</td>
<td></td>
</tr>
<tr>
<td>Weight gain</td>
<td>Tremors</td>
<td>Tardive Dyskinesia</td>
</tr>
<tr>
<td>Muscle rigidity</td>
<td>Nausea or abdominal pain</td>
<td>Neuroleptic Malignant</td>
</tr>
<tr>
<td>Parkinsonism</td>
<td>Akathisia</td>
<td>Syndrome</td>
</tr>
<tr>
<td>Constipation</td>
<td>(restlessness)</td>
<td>Lowered blood cell</td>
</tr>
<tr>
<td>Dry mouth</td>
<td>Headache</td>
<td>counts</td>
</tr>
<tr>
<td>Dizziness</td>
<td>Agitation</td>
<td>Elevated liver enzymes</td>
</tr>
<tr>
<td>Somnolence/fatigue</td>
<td>Orthostasis</td>
<td>Prolonged QT interval</td>
</tr>
<tr>
<td></td>
<td>Elevated glucose</td>
<td>Tachycardia</td>
</tr>
<tr>
<td></td>
<td>Elevated cholesterol/</td>
<td></td>
</tr>
<tr>
<td></td>
<td>triglycerides</td>
<td></td>
</tr>
<tr>
<td>Monitoring recommendation</td>
<td>Frequency Suggestion</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Height and weight</td>
<td>At baseline and at each follow-up (at least every 6 months)</td>
<td></td>
</tr>
<tr>
<td>Fasting blood sugar</td>
<td>At least every 6 months</td>
<td></td>
</tr>
<tr>
<td>Fasting triglyceride/cholesterol</td>
<td>At least every 6 months</td>
<td></td>
</tr>
<tr>
<td>Screen for movement disorder or tardive dyskinesia</td>
<td>At least every 6 months</td>
<td></td>
</tr>
<tr>
<td>CBC with Diff</td>
<td>Once to catch if any suppression, a few months after initiation</td>
<td></td>
</tr>
<tr>
<td>BP/Pulse</td>
<td>At least once after starting medication</td>
<td></td>
</tr>
<tr>
<td>Cardiac history</td>
<td>At baseline, get EKG if in doubt about risk from a mild QT increase</td>
<td></td>
</tr>
<tr>
<td>Determine if treatment response</td>
<td>Repeat disorder specific rating scale(s) until remission is achieved. Increase at 4-6 week intervals if insufficient benefit.</td>
<td></td>
</tr>
</tbody>
</table>
Disruptive behaviors: Clinical Pearls

- Safety of patient, families and staff are of utmost importance.
- Contact Consultation Liaison Psychiatry for stat consultation.
- In case of discharge, referral to appropriate level of care.
## Levels of Care

<table>
<thead>
<tr>
<th>Level of Risk</th>
<th>Criteria</th>
<th>Recommendations</th>
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| Low           | • With or w/o SI or HI  
• No specific plans or intent  
• No h/o prior suicidal behavior | • Outpatient follow up  
• Referral to therapy and/or psychiatry |
| Medium        | • Recent SI with plan, no intent or HI  
• Denying active SI now or HI  
• No behavior | • Urgent referral to a psychiatrist  
• Consider higher level of care: PHP/IOP  
• Safety plan  
• CPP  
• Resources |
| High          | • Active SI with plan and/or intent or HI  
• Prominent agitation, impulsivity, psychosis, or a recent suicide attempt | • Inpatient psychiatric admission |
Disruptive behaviors: Clinical Pearls

• If a medication is started, follow up appointment must be in place with behavioral pediatrician and/or Child Psychiatrist.
• Connect patient to the regional center for potential wraparound services and respite.
• Behavioral interventions need to be maximized.
Case Example 2

16 year old non-verbal male previously diagnosed with ASD currently on Risperidone 1 mg PO BID presents to the ED for worsening aggression. Parents report that Risperidone was started for aggression and was helpful initially and has stopped helping. There has been a 40 pounds weight gain in the last 6 months. Family especially Dad are now avoiding leaving home to prevent outbursts from happening.
Case Example 2

1. How will you approach this case?
2. What is the diagnosis?
3. What are the treatment options to consider?
Anxiety

- Accurate diagnoses is key.
- Both parent and child reports.
- Functional behavioral analysis, understand triggers.
- If minimal information from child, use rating scales.
- Always evaluate for changes in the environment, stressors.
- Evaluate for trauma history.
Case Example 3

A 16 year old non verbal adolescent diagnosed with ASD presents to ER for severe episodes of aggression mostly in outdoor settings. Family have discontinued outings as a result due to inability to manage behaviors outside of home. On functional behavioral analysis, triggers include going to stores where he gets fixated on diapers or whenever is taken to a lake. The family finds that he spends hours looking at pictures of a lake on his iPad and has outbursts if not taken to a lake or not allowed to buy and collect diapers. He has been trailed on antipsychotics including Seroquel, Abilify, Risperidone with minimal response.

How will you approach this case and what class of medication may be indicated?
Anxiety

- Multimodal approach:
  - Referral Individual therapy, e.g., CBT
  - Behavioral interventions/incentives, ABA
  - Special education services
  - Accommodations to address sensory sensitivities
  - Pharmacology
- Anxiety may contribute to aggressive, explosive, or self-injurious behavior
## Anxiety Medications

**AACAP: Practice Parameter for assessment and treatment of children and adolescents with anxiety disorders, JAACAP; 46(2); 267-283**

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Dosage Form</th>
<th>Usual starting dose</th>
<th>Increase increment (after 4 weeks)</th>
<th>RCT anxiety treatment benefit in kids</th>
<th>FDA anxiety approval for children</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fluoxetine</strong> (Prozac)</td>
<td>10,20,30,40 mg 20 mg/5 ml</td>
<td>5-10 mg per day (60 mg max)</td>
<td>10-20 mg</td>
<td>Yes</td>
<td>Yes (For OCD&gt;7 years)</td>
<td>Long half life</td>
</tr>
<tr>
<td><strong>Sertraline</strong> (Zoloft)</td>
<td>25, 50, 100 mg 20 mg/ml</td>
<td>25 mg/day (200 mg max)</td>
<td>25-50 mg</td>
<td>Yes</td>
<td>Yes (For OCD&gt;6 years)</td>
<td>Prone to side effects from wearing off</td>
</tr>
<tr>
<td><strong>Fluvoxamine</strong> (Luvox)</td>
<td>25, 50, 100 mg</td>
<td>25 mg/day (300 mg max)</td>
<td>50 mg</td>
<td>Yes</td>
<td>Yes (for OCD&gt;8 yrs)</td>
<td>More side effects than other SSRIs</td>
</tr>
<tr>
<td><strong>Paroxetine</strong> (Paxil)</td>
<td>10,20, 30, 40 mg 10 mg/5 ml 12.5, 25, 37.5 mg CR forms</td>
<td>5-10 mg/day (60 mg max)</td>
<td>10-20 mg</td>
<td>Yes</td>
<td>No</td>
<td>Not preferred, short t1/2</td>
</tr>
<tr>
<td><strong>Citalopram</strong> (Celexa)</td>
<td>10,20, 40 mg 10 mg/5 ml</td>
<td>5-10 mg (40 mg max)</td>
<td>10-20 mg</td>
<td>Yes</td>
<td>No</td>
<td>Few drug interactions</td>
</tr>
<tr>
<td><strong>Escitalopram</strong> (Lexapro)</td>
<td>5,10, 20 mg 5 mg/5 ml</td>
<td>2.5-5 mg/day (20 mg max)</td>
<td>5-10 mg</td>
<td>No</td>
<td>No</td>
<td>Active isomer of Citalopram</td>
</tr>
</tbody>
</table>

Sertraline and Fluoxetine are both first line medications for child anxiety disorders, per the evidence base.

Fluoxetine is preferred for OCD as it is approved for kids starting at age 7 and has demonstrated efficacy. Sertraline and Citalopram are also effective but less preferred due to side effects and drug interactions.

Paroxetine is not preferred due to its short half-life and frequent drug interactions. Escitalopram is the active isomer of Citalopram and is considered for adults but less preferred for children due to few data in the pediatric population.

For OCD, selective serotonin reuptake inhibitors (SSRIs) are typically the first line treatment. Other medications like benzodiazepines are sometimes used, especially in cases of severe anxiety or when SSRIs are not effective. The choice of medication should be guided by symptom severity, past medical history, and potential interactions with other medications the child may be taking.
A 17 year old non verbal female with ASD is brought to the ER for severe self injurious behaviors including tongue biting (requiring oral surgery), head hitting. She has helmets and mits but is not compliant with wearing them. Parent reports that she is having verbal outbursts several times a day culminating in severe self injury. They have used bite blocks and other techniques to no avail. Review of previous treatment trials indicate trials of multiple antipsychotics and an inadequate trial of Sertraline.

How will you approach this case?
Evidence for Treatment of Repetitive Behaviors & Rigidity in ASD

- **SSRIs**
  - **Fluoxetine** – most evidence, Hollander et al: randomized placebo controlled crossover study with 44 kids
  - **Fluvoxamine** – limited efficacy and was poorly tolerated
  - **Sertraline** – open label studies in adults have shown some improvements, no trials in children
  - **Citalopram** – King et al: not effective
  - **Escitalopram** – Owley et al: open label study with some improvements in stereotypies
  - Side effects: sedation, anorexia, agitation, headaches, activation, GI upset
Evidence for Treatment of Repetitive Behaviors & Rigidity in ASD

- **Risperidone** – McDougle et al: secondary analysis of RUPP placebo controlled trial showed greater decrease in CY-BOCS after 8 weeks

- **Valproate** – Hollander et al: small blinded randomized controlled trial
Other Treatment Considerations

- Environmental modifications.
- Intramuscular medication options for severe agitation in the ED: Benzodiazepines.
- If discharged to home, may prescribe a short term oral benzodiazepine as needed.
- Referral to appropriate level of care.
- Referral to regional center.
- Maximize behavioral interventions.
Case Example 5

A 10 year old boy previously diagnosed with ASD presents to the ED for worsening aggression. He has extensive services in place both at home and school. Parent reports that he was doing okay until few months ago when he started having significant aggressive outbursts. These outbursts tend to happen mostly at school and homework time.

How will you approach this case?
Case Example 5

On further questioning and obtaining data from parents, history is suggestive of difficulties sustaining attention as well as hyperactivity.

What is the next best step?

What treatment options will you consider?
Hyperactivity, impulsivity, inattention

- May be driven by ADHD vs overarousal/anxiety
  - Stimulants
  - Alpha agonists
  - Atomoxetine
  - Risperidone
  - Antiepileptics
Hyperactivity, impulsivity, inattention

- **Stimulants**
  - Less effective in treatment of ADHD than with typically developing population and adverse effects more common
  - Methylphenidate
  - Dextroamphetamine studies lacking, commonly used in practice
  - Common side effects: sleep disturbance, decreased appetite, irritability, tics, sadness, dullness, social withdrawal

Hyperactivity, impulsivity, inattention

- **Non- Stimulants**

  **Clonidine**
  - 2 cross over studies (Fankhauser and Jaselkis): suggest decreased irritability, stereotypy, hyperactivity
  - Side effects: hypotension and sedation

  **Guanfacine**
  - Posey: Retrospective analysis of 80 PDD kids treated with open label guanfacine showed improvement in hyperactivity, inattention, insomnia and tics
  - Side effects: sedation, constipation, irritability, aggression
Depression and Suicidality

• Medications may be indicated if depressive symptoms persist despite counseling and psychosocial interventions

• SSRIs/SNRIs – clear symptoms of depression (e.g. terminal insomnia, psychomotor disturbance, anorexia, changes in mood from baseline, etc.)

• Start low and go slow

• May respond to low doses

• Increased incidence of SSRI-induced activation (impulsivity, silliness, agitation, disinhibition)
Depression and Suicidality

- Depression more common in adults with ASD
- Cassidy et al: 2014 study found 10x greater rate of SI in adults with Asperger’s (on top of risk factors for secondary depression due to social isolation and unemployment)
## Levels of Care

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| Medium        | • Recent SI with plan, no intent or HI  
• Denying active SI now or HI  
• No behavior | • Urgent referral to a psychiatrist  
• Consider higher level of care: PHP/IOP  
• Safety plan  
• CPP  
• Resources |
| High          | • Active SI with plan and/or intent or HI  
• Prominent agitation, impulsivity, psychosis, or a recent suicide attempt | • Inpatient psychiatric admission |
Evaluation for a Hold

- Designated individuals (Psychiatrists, psychologist, RN)
- Residents get special waiver for placing patients on hold
- Law enforcement or CAT team
- Criteria
  - Danger to self
  - Danger to others
  - Gravely disabled
- 72 hour hold versus 14 day hold
- Not amenable for voluntary admission
A parent brings his 13 year old son to the ED. Patient has been increasingly depressed and unable to function. Parent is having to supervise him at all times. He has had several suicide attempts in the last few months but does not answer when asked about suicidality at this time.

How will you proceed?
Case Study

• Suicide risk assessment
• Current SI, plan, intent
• Access to means
• Comfort level of parent
• Access to mental health treatment
• If clear SI, with plan and unable to contract for safety-inpatient psychiatric admission
Formulating a plan

- Disposition/level of care: inpatient versus outpatient versus PHP/IOP
- Access to means-restrict
- Safety planning
- Referral to psychiatrist and therapist
Safety Planning

- Lock up serious pills
- Lock up potentially hazardous materials
- Access to guns/firearms
- Increase family and peer supervision and support
- Random room checks
- Engage in treatment with easy access to providers
- Emergency Plan: know when to call 911 or come to the emergency for an urgent evaluation
Precipitating Factors

- Relationship problems
- Recent crises
- Mental health problems
- Intimate partner violence
- School problems 25% of decedents
- 30.3% drop in grades
- 12.4% bullying relate
# Depression Medications

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<td>10-20 mg **</td>
<td>Yes</td>
<td>Yes (over age 8)</td>
<td>Long half life</td>
</tr>
<tr>
<td>Sertraline (Zoloft)</td>
<td>25, 50, 100 mg 20 mg/ml</td>
<td>25 mg /day (200 mg max)</td>
<td>25-50 mg**</td>
<td>Yes</td>
<td>No</td>
<td>Prone to side effects from wearing off</td>
</tr>
<tr>
<td>Citalopram (Celexa)</td>
<td>10,20, 40 mg 10 mg/5 ml</td>
<td>10 mg (40 mg max)</td>
<td>10-20 mg**</td>
<td>Yes</td>
<td>No</td>
<td>Few drug interactions</td>
</tr>
<tr>
<td>Escitalopram (Lexapro)</td>
<td>5,10, 20 mg 5 mg/5 ml</td>
<td>5 mg/day (20 mg max)</td>
<td>5-10 mg**</td>
<td>Yes</td>
<td>Yes</td>
<td>Active isomer of Citalopram</td>
</tr>
</tbody>
</table>
Unmet Needs in the Community

- Limited options for Intensive Outpatient or Partial Hospitalization services for ASD.
- Lack of consistent protocols about referrals to support/services.
Discharge Planning

- If a medication is started, follow up appointment must be in place with behavioral pediatrician and/or Child Psychiatrist.
- Refer to therapy.
- Connect patient to the regional center for potential wraparound services and respite.
- Behavioral interventions need to be maximized.
Unmet Needs in the Community

- Parent surveys of patients with ASD in the outpatient settings indicate
  - Need for more info on resources
  - Need for guidance on interventions needed to handle challenging behaviors
  - Continuity of support
  - 30% parents report child needs are unmet
  - Need to use ER to manage crisis
Unmet Needs in the Community

- Access to mental health services.
- Lack of information about critical outpatient services.
- Availability of beds on inpatient psychiatric units resulting in ED boarding.
- Limited placement options.
Potential Solutions

• Addressing Systematic Factors That Lead to Psychiatric Boarding
  ❖ Identifying gaps & inefficiencies in continuity of care.
  ❖ Improving access to vital treatment services (outpatient): connecting to necessary resources.
  ❖ Improving utilization of higher levels of care: intensive outpatient and partial hospitalization.
Potential Solutions

• Addressing Systematic Factors That Lead to Psychiatric Boarding
  ❖ Minimizing wait for transfers by standardizing requirements across facilities.
  ❖ Utilizing data about psychiatric boarding as a measure of bed need.
Potential Solutions

- In the ED:
  - Utilizing Telepsychiatry services for patient evaluations.
  - Referral to appropriate level of care.
  - Developing standard protocols providing information for resources/services in the community.
Potential Solutions

• Legal Considerations:
  - Defining minimum clinical standards for stabilizing and treatment of patients in the ED.
  - Improving greater federal, state, local oversight of adherence to EMTALA to prevent inappropriate ED boarding due to fear of violations or inappropriate discharges.
Did you know?

Between 2001-2018, 20% of EMTALA violations resulting in monetary penalties were due to psychiatric emergencies, with psychiatric emergency violations requiring the largest monetary payouts.
Potential Solutions

- Addressing shortage of mental health providers by
  - Developing programs to train/teach Primary care providers.
  - Embedding Telepsychiatry within Primary Care Clinics and ED.
### Child Guidance Center
- **525 N. Cabrillo Park, Drive, Suite 300**  
  Santa Ana, CA 92701  
  Tel: (714) 953-4455
- **6301 Beach Blvd, Suite 245**  
  Buena Park, CA 90621  
  Tel: (714) 736-0231
- **680 Langsdorf Drive, Suite 200**  
  Fullerton, CA 92831  
  Tel: (714) 871-9264
- **3551 Camino Mira Costa, Suite T**  
  San Clemente, CA 92672  
  Tel: (949) 272-4444

### Western Youth Services
- **505 N. Euclid Ave. Suite 300**  
  Anaheim, CA 92801  
  (714) 871-5646
- **26137 La Paz Rd. Suite 230**  
  Mission Viejo, CA 92691  
  (949) 995-8610
- **200 W. Santa Ana Blvd., Suite 801**  
  Santa Ana, CA 92701  
  (714) 704-5900
- **18350 Mt. Langley St. Suite 220**  
  Fountain Valley, CA 92708  
  (714) 378-2620

### Family Resource Center Western Youth Services Locations
- Family Oasis Family Resource Center (714) 517-7107  
  131 W. Midway Dr. **Anaheim**, CA 92805
- Anaheim Harbor Family Resource Center (714) 399-0590  
  50 S. Anaheim Blvd. #241 **Anaheim**, CA 92805
- La Habra Family Resource Center (714) 447-3460  
  301 W. Las Lomas Dr. **La Habra**, CA 90631
- Oak View Family Resource Center (714) 842-4002  
  17261 Oak Ln. **Huntington Beach**, CA 92647
- Friendly Center Family Resource Center (714) 769-8660  
  900 S. Meirost St. **Placentia**, CA 92870
- Friendly Center Family Resource Center (714) 771-5300  
  147 W. Rose St. **Orange**, CA 92866
- Stanton Family Resource Center (714) 379-0129  
  11822 Santa Paula St. **Stanton**, CA 90680
- Westminster Family Resource Center (714) 903-1331  
  7200 Plaza St. **Westminster**, CA 92683

### Olive Crest
- **2130 E. 4th St., Ste 107, Santa Ana, 92705**  
  (714) 361-4386
- **275 Victoria St., Ste 2M, Costa Mesa, 92627**  
  (714) 361-4386

### South Coast Children's Society
- **2124 Main St., Ste. 165**  
  Huntington Beach, CA 92648  
  (714) 536-0077
Seneca—all appts call (714) 383-9401
- 233 S. Quintana Dr., Anaheim, CA 92807
- 22978 El Toro Rd., Lake Forest, CA 92630
- 1801 Park Court Place, #H, Santa Ana 92701

Pathways Community Services
- 711 E. Ball Rd., Ste. 201, Anaheim, CA 92805 (714) 254-8473
- 1633 E. 4th St., Ste. 120, Santa Ana, 92701 (714) 565-2830
- 12966 Euclid St., # 280, Garden Grove, 92840 (714) 823-4770
- 1503 South Coast Dr.#202, Costa Mesa 92626 (949) 515-5440

Children & Youth Services Behavioral Health Outpatient Clinics (County Clinics)
- Brea—120 S. State College Blvd., Ste. 150, Brea, CA 92821 (714) 577-5400
- Laguna Beach—21632 Wesley Dr., Laguna Beach, CA 92651 (949) 499-5346
- Dana Point—24242 La Cresta (RH Dana), Dana Point, CA 92629 (949) 248-2228
- Aliso Viejo—5 Mareblu, Aliso Viejo, CA 92656 (949) 643-6900
- Santa Ana—1200 N. Main St., Ste. 500, Santa Ana, CA 92701 (714) 480-6800
- Westminster—14140 Beach Blvd., Ste.155, Westminster, CA 92683 (714) 885-7556
- Costa Mesa—3115 Redhill Ave., Costa Mesa, CA 92626 (714) 850-8408

CalOptima Behavioral Health
- 1-855-877-3885

Additional Mental Health service connection assistance
- Call OCLinks at (855) OC-LINKS, or (855) 625-4657
Intensive Outpatient Programs & Partial Hospitalization Programs

Regular psychiatric follow-up (as directed by your outpatient provider) and weekly individual therapy are highly recommended for achieving and maintaining mental health stability. However, there may be times when a higher level of care than outpatient (clinic) psychiatry would be beneficial.

Intensive Outpatient Program (IOP) — is a kind of treatment service and support program used primarily to treat eating disorders, depression, self-harm and chemical dependency that does not rely on detoxification. It provides a therapeutic setting multiple days per week, typically 3 days a week in the afternoon after school hours. These programs typically offer a family component.

Partial Hospitalization Program (PHP) — is a nonresidential treatment program that is hospital-based. The program provides diagnostic and treatment services on a level of intensity similar to an inpatient program, but on less than a 24-hour basis. PHP offers a structured day program (typically 5 days/week during school hours). This can be beneficial if your child’s symptoms impair his/her ability to attend school regularly.

Inpatient Hospitalization — is the highest level of care and would be indicated if there is a concern that your child is in immediate danger of harm to him/herself or others where a 24 hours/day controlled environment is necessary.

Discuss with your provider what option is best for your circumstance and age.

***Please verify insurance coverage when you call for more information***

This is a list of several IOP and PHP in Orange County, Los Angeles, and Inland Empire. This list does not get updated frequently and there may be additional programs that are not listed. It is important to contact your insurance to find out what programs are contracted/covered by your insurance.

Orange County

ASPIRE® at CHOC Children’s- IOP
1120 W. La Veta Ave., Ste. 400
Orange, CA 92868
Phone: 714-509-8481

CHOC Psychiatric Unit- Inpatient Hospitalization
1120 W. La Veta Ave., Ste. 400
Orange, CA 92868
Phone: 714-997-3000
<table>
<thead>
<tr>
<th><strong>UC Irvine--PHP</strong></th>
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</tr>
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<tbody>
<tr>
<td>101 The City Drive South</td>
<td></td>
</tr>
<tr>
<td>Orange, CA 92868</td>
<td></td>
</tr>
<tr>
<td>Phone: 714-436-2924</td>
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<table>
<thead>
<tr>
<th><strong>UC Irvine--IOP</strong></th>
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<tbody>
<tr>
<td>101 The City Drive South</td>
<td></td>
</tr>
<tr>
<td>Orange, CA 92868</td>
<td></td>
</tr>
<tr>
<td>Phone: 714-456-3007</td>
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<table>
<thead>
<tr>
<th><strong>Advances and Breakthroughs in Mental Health-- PHP and IOP</strong></th>
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<tbody>
<tr>
<td>5199 E. Pacific Coast Hwy., Suite 300N</td>
<td></td>
</tr>
<tr>
<td>Long Beach, CA 90804</td>
<td></td>
</tr>
<tr>
<td>Phone: 568-365-2020</td>
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<table>
<thead>
<tr>
<th><strong>Alternative Options Counseling Center--PHP and IOP</strong></th>
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<tbody>
<tr>
<td>19900 Beach Blvd, Suite H</td>
<td></td>
</tr>
<tr>
<td>Huntington Beach, California 92648</td>
<td></td>
</tr>
<tr>
<td>Phone: 562-741-5917</td>
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<table>
<thead>
<tr>
<th><strong>Breakaway Health Corporation--PHP and IOP</strong></th>
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<tbody>
<tr>
<td>3151 Airway Ave, Suite D-1</td>
<td></td>
</tr>
<tr>
<td>Costa Mesa, CA 92626</td>
<td></td>
</tr>
<tr>
<td>Phone: 714-847-7583</td>
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<table>
<thead>
<tr>
<th><strong>417 Recovery--IOP</strong> for chemical dependency/dual diagnosis and mental health track</th>
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<tbody>
<tr>
<td>2601 Acero, Suite 200</td>
<td></td>
</tr>
<tr>
<td>Mission Viejo, CA 92691</td>
<td></td>
</tr>
<tr>
<td>Phone: 844-417-2417</td>
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<thead>
<tr>
<th><strong>College Hospital--PHP (Adults &amp; Adolescents)</strong></th>
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<tbody>
<tr>
<td>Costa Mesa, PHP</td>
<td></td>
</tr>
<tr>
<td>301 Victoria Street</td>
<td></td>
</tr>
<tr>
<td>Costa Mesa, CA 90806</td>
<td></td>
</tr>
<tr>
<td>Phone: 949-374-3300</td>
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<table>
<thead>
<tr>
<th><strong>Cerritos PHP</strong></th>
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<tbody>
<tr>
<td>10950 Collage Place</td>
<td></td>
</tr>
<tr>
<td>Cerritos, CA 90703</td>
<td></td>
</tr>
<tr>
<td>Phone: 562-924-9581</td>
<td></td>
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<table>
<thead>
<tr>
<th><strong>Signal Hill PHP</strong></th>
<th></th>
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<tbody>
<tr>
<td>707 Walton Ave</td>
<td></td>
</tr>
<tr>
<td>Signal Hill, CA 90755</td>
<td></td>
</tr>
<tr>
<td>Phone: 562-290-0456</td>
<td></td>
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<table>
<thead>
<tr>
<th><strong>College medical Center PHP</strong></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1740 Pacific Avenue</td>
<td></td>
</tr>
<tr>
<td>Long Beach, CA 90813</td>
<td></td>
</tr>
<tr>
<td>Phone: 562-997-2577</td>
<td></td>
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<table>
<thead>
<tr>
<th><strong>Anaheim PHP</strong></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1488 E. Lincoln Ave</td>
<td></td>
</tr>
<tr>
<td>Anaheim, CA 92805</td>
<td></td>
</tr>
<tr>
<td>Phone: 714-776-2500</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Santa Ana PHP</strong></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1634 W. 15th Street</td>
<td></td>
</tr>
<tr>
<td>Santa Ana, CA 92705</td>
<td></td>
</tr>
<tr>
<td>Phone: 714-479-0102</td>
<td></td>
</tr>
</tbody>
</table>
Orange County Health and Psychology Associates- IOP
62 Discovery Suite, 100
Irvine, Ca 92618
Phone: 949-551-4272

Newport Bay Hospital (Adults & Older Adults)
1501 East 16th Street
Newport Beach, CA 92663
Intake Department: 949-499-7500

Newport Academy- IOP for mental health/dual diagnosis
811 N Ranch Wood Trl 31872 Coast Hwy
Orange, CA 92869 Laguna Beach, CA 92651
Phone: 714-288-0872 Phone: 949-499-8861

Stepping Forward Counseling Center- IOP and Partial Care Program
15375 Barranca Parkway, Suite B-101
Irvine, CA 92618
Phone: 949-280-9254

Mission Hospital- Adolescent PHP and IOP for Adolescents and Adults
31872 Coast Hwy
Laguna Beach, CA 92651
Phone: 949-499-8661

Los Angeles County

UCLA ABC Child Program- IOP and PHP
UCLA Semel Institute
760 Westwood Plaza, Rm 78251
Los Angeles, CA 90095
Information: 310-825-0415 / 310-825-0210

UCLA Adolescent- PHP
150 UCLA Medical Plaza in 300 Building
Suite 1400 A
Los Angeles, CA 90095
Main Phone: 310-983-3271
Intake at 310-983-3279

UCLA Child & Adolescent OCD, Anxiety, and Tic Disorders program - IOP
This is an intensive treatment program designed for families looking for more rigorous treatment.
Phone: 310-794-7305
The Whole Child- IOP
10155 Colima Rd
Whittier CA 90603
Age Groups 0-5, 6-12, 13-18
Phone: 562-692-0383

Adolescent Growth- PHP & IOP - Young adult program 18+
Three locations in Sherman Oaks, CA, Commerce, CA and Lombard, IL
300 North Lake St
Pasadena, CA 91101
Admissions Department: 888-948-9998

Inland Empire

Canyon Ridge Hospital- IOP and PHP
5353 G Street
Chino, CA 91710
Phone: 909-590-3700

Loma Linda University Behavioral Medicine Center- PHP and IOP
1710 Barton Road
Redlands, CA 92373
Phone: 800-752-5999 or 909-558-9275
Thank You

Nisha Warikoo, MD
nwarikoo@hs.uci.edu
Questions?

Raise your hand or submit a question at www.menti.com and enter code 95 34 60