This month we will look at different Behavioral Disorders in the Pre-Hospital Setting. Most patient treatments deal with collecting physical information (Vitals, GCS, ECG, etc.) to determine a clear course of action. Behavioral Disorders deal more collecting information (history of event, patient’s overall history) and emotional reassurances and support – Compassion. These patients can be hard to communicate with and may not always give the full history of what is going on. Always be ready to adjust your treatments as symptoms are presented or information is changed.

**Behavioral Emergencies**

“Behavior is a person’s observable conduct and activity. A behavioral emergency is a situation in which a patient’s behavior becomes so unusual, bizarre, threatening, or dangerous that it alarms the patient or another person such as a family member or bystander and requires the intervention of emergency service and/or mental health personnel.”

The word “normal” is not used in the definition because, “normal” is subjective. Generally, “normal” is a behavior that is considered socially acceptable. When EMS gets involved with a behavioral issue, it is when the behavior poses a threat to the patient; those around the patient or is considered significantly deviate from social expectations.

There are three core reasons for behaviors that are considered changes from socially acceptable:

**Biological, Psychosocial and Sociocultural**

**Biological** refers to the patient that has a physical reason for the change in their behavior. This can include infections, tumors or structural changes to the brain brought on by alcohol or medication abuse. There can also be changes due to trauma or chemical imbalances (i.e. diabetics).

**Psychosocial** conditions are related to the patient’s ability to resolve issues based on their earlier development. Things like crisis management methods and unresolved issues can influence how a patient will react to a particular situation.

**Sociocultural** causes of behavioral disorders are related to the patient’s action and interaction within society. Factors set up by society, socioeconomic status, social habits, social skills and values may limit how the person can react. Traumatic events (assault, rape, death of a loved one) can cause profound changes in the individual.

**Specific Psychiatric Disorders**

There are many different types of behavioral disorders that can be encountered in the pre-hospital setting. Knowing a specific diagnosis of a patient may not change your treatment of the patient, but it may give you an idea of how to interact with the patient. No matter what your personal opinion about the patient is, or the events surrounding why you were called, it is very real to the patient.

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Cognitive Disorders are disorders that have an organic cause to them. This can include brain injury (TBI/Stroke), infections, endocrine issues (hypoglycemia), degenerative neurologic diseases (Dementia) and cardiovascular disease. Chronic drug and/or alcohol abuse can also cause this type of behavioral disorders. Delirium and Dementia are two of the more common cognitive disorders. Delirium is a fairly rapid onset and is characterized by disorganized thoughts and possible hallucinations. Delirium may be reversible. Onset may be due to a medical condition, intoxication and substance withdrawal. Dementia is a chronic issue that includes Alzheimer’s disease, vascular disease, AIDS, Parkinson’s disease and long term substance abuse. Presentation can include memory impairment, cognitive disturbances and changes to abstract thinking and judgment. The dementia patient may be able to talk and carry on a normal conversation, but there may be no clear train of thought or the ability to remember previous events.

Schizophrenia is a mental health issue that affects around 1% of the population. The patient will present with a loss of contact with reality and uncommon behaviors. Behaviors can include hallucinations, delusions, depression and catatonia (disorganized behaviors). Most schizophrenic patients are diagnosed in early adulthood and can be helped with medications. When dealing with these patients, consider that all of the things they see and feel are real to them. They cannot be talked out of what they consider to be real. When a patient stops taking their medications, they will revert back to non-medicated behaviors.

Anxiety disorders can be categorized into 3 distinct classifications. Panic Attacks are characterized by recurrent periods of extreme anxiety that can result in extreme emotional distress. The onset can be unprovoked and peak in around 10 minutes and resolve in less than one hour. Panic attacks can present as a cardiac or respiratory event. The only indication that this may be a panic attack is if the patient has a history of them. Complaints still need to be treated and evaluated. Remember, hypoxia can also cause anxiety. PTSD (or Post Traumatic Stress Disorder) is a patient’s reaction to a life threatening stressor. The disorder can show itself by sleep disturbances, depression, intrusive thoughts and increased arousal. Phobias are an anxiety that interferes with daily functioning. Most people have an anxiety of certain things (or situations) so they avoid them (think of spiders, small spaces, etc.) A phobia is when the fear changes the person’s day to day functioning. The exposure to their anxiety can trigger an overreaction that could include a panic attack.

Mood Disorders can be defined as “a pervasive and sustained emotion that colors a person’s perception of the world”\(^2\). The most common mood disorders are depression and bipolar disorder. Depression is characterized by profound sadness or feelings of melancholy. Depression is the most prevalent psychiatric condition affecting 10 - 15% of the population. Most people have experienced depression, in some form, during their lives. When depression becomes prolonged or severe, then it can be categorized as a major depressive episode. Bipolar Disorder (in the past called manic-depressive) patients have manic periods (periods of elation) that can be in combination with periods of depression. These changes in personality are not sudden transformations, but can occur over days.

A Factitious Disorder is a condition in which a person acts as if they have an illness by deliberately producing, feigning, or exaggerating symptoms. The patient can have a very plausible story and are usually well versed in the medical field. Munchausen Syndrome is when the patient has created the illness for themselves. A factitious disorder imposed on another is a condition in which a person deliberately produces, feigns, or exaggerates the symptoms of someone in his or her care. Munchausen Syndrome by Proxy is a mental illness and a form of abuse. The caretaker either makes up fake

Symptoms or causes real symptoms to make it look like the cared for is sick.

**Somatoform Disorders** are characterized by physical symptoms that have no apparent cause. The patient may present with sharp pain, exaggeration of a non-life threatening illness or a loss of function. For these patients, a full medical exam (and work up) will be the only way to rule out a medical reason for their symptoms.

**Eating Disorders** are usually seen in females between adolescence and early adulthood, but it is not limited to that group. **Anorexia Nervosa** is a disorder where the patient will not eat or is in a continuous fasting state. **Bulimia Nervosa** is a disorder where a patient will eat a large amount of food (binge) and will use vomiting/diarrhea or excessive exercise to remove what they have eaten. Both of these disorders can cause serious physical problems for the patient. Some common things seen in these patients are dehydration, anemia, hypoglycemia, and cardiovascular issues. There is a potential to see Torsade de Points on an ECG because these patients can have imbalances with their body chemistry.

**Personality Disorders** refer to a broad spectrum of patients. These patients are ill equipped to function adequately in society. These patients can be categorized by “Clusters” of differing personalities. Each cluster of personalities has general traits that can be expected. **Cluster A** patients generally have social issues that include distrust, discomfort with close relationships and can appear very eccentric. **Cluster B** patients can be very dramatic and emotional. These patients can have little regard for others, attention seeking and lack empathy. **Cluster C** patients can appear very anxious. These patients can appear to be very outgoing, hypersensitive to criticism and can be perfectionists. Most of these patients will be experiencing multiple issues. Care of these patients should be for their chief complaint.

**Substance Abuse** can cause a patient to present as any of the previously mentioned behaviors or make those behaviors more intense. Even withdrawal from a substance can cause similar problems. Be aware that a patient may be using drugs or alcohol as a way of coping with a behavior. Psychological dependency on a substance can also lead to a physical dependency.

**Excited Delirium Syndrome** (or agitated delirium) has been associated with restraining of a patient and sudden cardiac arrest. This is an elevated mental and physical state that has been associated with elevated dopamine levels in the brain. Though an exact cause for this state is not known, there are indications that there is a link with a psychiatric disorder and substance abuse. There is no clear way to tell if a patient is violent or suffering from Excited Delirium. The only indication may be when the patient goes into cardiac arrest. Keep a high index of suspicion for a patient that was very aggressive and then becomes very calm. Chemical restraints of these patients may be contraindicated.

**Suicidal Patients** are patients that should be taken seriously. There is no specific age or gender, but there has been an increase in the adolescent and geriatric population. We will treat the primary complaint of the patient (Trauma, medication overdose, etc.) but, be aware that future treatment of the patient can be based on what is found at the scene. In a lot of cases, the Psychiatrist that will be doing long term treatment will not have access to what was found on the scene. Detailed documentation will help with this. As well as patient information and treatment, be sure to include in the report what was found with the patient.

**Treatment of Patients with Behavioral Disorders**

The treatment of these patients are still the same as any other patient. Even if your suspicion is high that there is no problem, you have to do a thorough medical assessment. Scene size-up will be important for the safety of the crew. If the call is received as a “behavioral” type call, it may be prudent
to have police respond with you. Even though most behavioral calls are not violent, there is always the chance that the scene can change. Upon approaching a patient, do not put yourself in a position that an egress has been blocked. Don’t allow a patient to isolate you, or a crew member. Another thing to be aware of is bystanders that are agitating the patient. They should be removed from the scene or the patient may be moved to a more controlled area. If a situation does not “feel right”, it probably isn’t.

**Primary Assessment**

Your primary assessment will be the same for any patient. Your general impression of the scene can help determine not only immediate life threats to your patient, but also to yourself. Airway, Breathing, Circulation are still initially assessed and corrected when a problem is identified. Disability will not only be LOC, but also mental status and comprehension. Take note of the patient’s responses to questions and their body position and posture. With these patients, be aware that touching (checking pulse) may escalate the situation. Approach the patient in a non-threatening manner and be clear with directions and your expectations from them.

In addition to medical care that we give these patient’s, we must also give some psychological care. This can be done by taking some extra time and establishing a rapport with them. The initial contact will set the “tone” for the rest of the call. With a patient that has a distorted perception of the world, they may not understand that EMS is there to help them. Listening and observing will be the best way to get information and maintain control of the call. Talking a patient “Down” (to being calm) takes skill and effort, but can be done. Sometimes you may only calm a patient to the point of transporting them for an evaluation. This is still better than making the situation worse by making the patient combative. Lastly, do not patronize a patient. This will only have you lose credibility with the patient.

Document like any other patient and make sure to document what was found on the scene with the patient. We do not diagnose behavioral disorders, but our information can help with treatment for the patient in the future.
1. **Assess Scene and Personal Safety**: Call law enforcement personnel to scene, if needed. **DO NOT JEOPARDIZE YOUR OWN SAFETY**; always position self for a safe exit.
   - Inspect environment for bottles, drugs, letters, notes, or toxins.
   - Ask bystanders about recent behavioral changes.

2. **Assess Patient's Decisional Capacity**
   - Consciousness/level using GCS (see ITC for chart), attention span
   - Activity: restlessness, agitation (consolable or non-consolable), compulsions
   - Speech: rate, volume, articulation, content
   - Thinking/thought processes: delusions, flight of ideas, obsessions, phobias; thoughts of suicide/harm to others
   - Affect and mood: appropriate or inappropriate
   - Memory: immediate, recent, remote
   - Orientation × 4, understands and complies with instructions
   - Perception: delusions, hallucinations (auditory, visual, tactile)
   - General appearance: odors on breath
   - Inspect for Medic alert jewelry; evidence of alcohol/drug abuse; trauma
   - Is patient a threat to self or others, or unable to care/provide for self?
   - Explore suicidal thoughts/intentions with patient directly. Bring any suicidal notes to hospital.

3. **IMC Special Considerations**
   - Limit stimuli and the personnel treating the patient as much as possible.
   - Do not touch patient without telling them your intent in advance.
   - Provide emotional reassurance. Verbally attempt to calm and reorient the patient as able.
   - Do not reinforce patient's delusions or hallucinations.
   - Avoid threatening or advanced interventions unless necessary for patient safety.
   - Protect patient from harm to self or others. Do not leave the patient alone.

4. **If Combative and/or Uncooperative (See possible medication Rx below)**
   - Attempt verbal reassurance to calm. If unsuccessful: Provide chemical and/or physical restraint per procedure.
   - Use only to protect the patient and/or EMS personnel.
   - They should not be unnecessarily harsh or punitive. Document reasons for use.
   - In an emergency, apply restraints; then confirm necessity with OLMC.
   - Ensure an adequate airway, ventilations, and peripheral perfusion distal to restraint after application.
   - Monitor patient's respiratory and circulatory status.

5. **Consider Medical Etiologies** of behavioral disorder and treat according to appropriate SOP:
   - Hypoxia: substance abuse/overdose; alcohol intoxication
   - Neurologic disease: stroke, seizure, intracerebral bleed, Alzheimer’s, etc.
   - Metabolic disorders: hypoglycemia (glucose), acidosis, electrolyte imbalance, thyroid/liver/renal disease etc.
   - Evidence of traumatic injuries

6. **If Patient is Non-Decisional and/or a Threat to Self or Others and/or is Unable to Care for Themselves**
   - Complete Petition Form for all adults who meet above criteria: Persons who witnessed statements or behaviors should sign the form.
   - Make every effort to gain the patient's consent for transport.
   - Refusing transport. Call OLMC from the scene. Pt must be transported against their will if necessary.
   - Ask police for assistance for transport if needed.

7. **Severe Anxiety** and **SBP ≥ 90 (MAP ≥ 65); Midazolam** 2 mg increments slow/IVP q. 2 min (0.2 mg/kg) IN PALS
   - 1 mg to 10 mg titrate to response. If IV unable/N contraindicated: IM 5-10 mg (0.1-0.2 mg/kg) max 10 mg single dose.
   - All routes may repeat to total of 20 mg pm if SBP ≥ 90 (MAP ≥ 65) unless contraindicated.
   - If hypovolemic, elderly, debilitated, chronic dx (COPD) and/or opiates or CNS depressants: ↓ total dose to 0.1 mg/kg.
# Centegra Psychiatric Emergency Service (PES) Diversion Decision Matrix

A behavioral health crisis can be unpredictable and should be assessed and stabilized with adequate supports as soon as possible. Centegra Health System can provide immediate access to a continuum of crisis stabilization services. Each facility offers the following services:

**Centegra Hospital-Woodstock (3701 Dolly)** – Immediate access to Emergency Department/Psychiatric Emergency Services (ED/PES), including short-term crisis stabilization and the inpatient psychiatric unit.

**Centegra Hospital-McHenry** – Access to Emergency Department services and assessment within 45 minutes.

**Centegra Hospital-Huntley** – Access to Emergency Department services and assessment within 45 minutes.

The table below may be used as a guide in selecting the most appropriate location for immediate behavioral healthcare. A patient presenting with "life-safety risk" factors should be transported to the nearest medical facility. However, patients at "high" or "moderate" risk may benefit from being transported to the Centegra Hospital – Woodstock location. A diversion to Centegra Hospital – Woodstock ensures the following:

- More immediate access to crisis assessment and stabilization services;
- Additional supports for family members;
- Increased collaboration with community partners (i.e., EMS, police, community providers, education, etc.);
- Access to resources specific to Centegra Health System.

### Diversion Decision Matrix

<table>
<thead>
<tr>
<th>High-Risk - Medical/Psychiatric</th>
<th>High Risk - Psychiatric</th>
<th>Moderate Risk - Psychiatric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harm to self and immediate need of medical attention (i.e., overdose, poison, strangulation, significant wounds, etc.)</td>
<td>Harm to self but stable to accommodate diversion to hospital within system</td>
<td>Threat of harm to self or others and stable for transport</td>
</tr>
<tr>
<td>Acute medical emergency with behavioral health presentation</td>
<td>Non decisional capacity but stabilized for transport</td>
<td>Verbal or physical acting out but stable for transport</td>
</tr>
<tr>
<td>Harm to self or others and actively requiring physical intervention</td>
<td>Active hallucinations or delusions but not at risk of harming self or others</td>
<td>Reports of hallucinations or delusions</td>
</tr>
<tr>
<td>Active hallucinations or delusions at immediate risk of harming self or others</td>
<td>Intoxicated - no immediate medical risk</td>
<td>Intoxicated</td>
</tr>
<tr>
<td>Intoxicated with altered mental status and concern for airway management, or at medical risk due to detoxification</td>
<td></td>
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</tbody>
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### Transport to nearest medical facility

- Consider transport to Centegra-Woodstock ED - Psychiatric Emergency Services (PES) - may consult OLMC for guidance.
- Transport to Centegra-Woodstock ED - Psychiatric Emergency Services (PES).
1) All behavior calls should be transported to Centegra - Woodstock?
   a. True     b. False

2) Which behavioral disorder deals with limits set on a patient by Society?
   a. Psychosocial
   b. Sociocultural
   c. Factitious Disorder
   d. Mood Disorder

3) What is Munchausen Syndrome?
   a. Is characterized by recurrent periods of extreme anxiety that can result in extreme emotional distress
   b. When a person acts as if they have an illness by deliberately producing, feigning, or exaggerating symptoms.
   c. When the patient will not eat or is in a continuous fasting state
   d. This is an elevated mental and physical state that has been associated with elevated dopamine levels in the brain

4) _________ is a chronic disorder that progresses over time and ______ is an acute disorder?
   a. Bulimia Nervosa, Anorexia Nervosa
   b. Munchausen Syndrome, Munchausen Syndrome by proxy
   c. Cluster A, Cluster C
   d. Dementia, Delirium

5) All patients with self-inflicted wounds should be transported to Woodstock - PES?
   a. True     b. False

6) Behavioral Emergency patients are pleasant people and crew safety is not a concern.
   a. True     b. False
7) Which of the following is classified as Dementia?
   a. Schizophrenia
   b. Depression
   c. Alzheimer’s disease
   d. Excited Delirium Syndrome

8) A 20 y/o male patient has been in an argument with his girlfriend on the phone. You were called to the scene, because the girlfriend said the patient has made specific treats to hurt himself. Upon contact with the patient, you find an empty bottle of Jack Daniels near him. He admits to drinking all day and has not taken anything. Patient is non-combative/compliant. Vitals are stable. Where should this patient be transported to?
   a. Have patient sign a refusal of care. (Obviously, the threat is hearsay).
   b. Centegra – Huntley ED (the closest ED).
   c. Centegra- Woodstock Emergency Department/ Psychiatric Emergency Services (PES)
   d. Centegra – McHenry ED (this is the primary location for your departments transports)

9) Per our SOP, which medication can be given for a patient experiencing severe agitation or anxiety?
   a. Midazolam
   b. Valium
   c. Ketamine
   d. No medications – Talk them through the episode

10) You are called for a 60 y/o patient that had surgery 2 days ago. The patient has been acting confused and worrying the patient’s family. Patient was acting normal yesterday. Vitals are normal, but patient is becoming more confused as you are talking with them. Cincinnati Stroke Scale shows no deficits. What could potentially be wrong with this patient?
   a. Alzheimer’s Disease
   b. Excited Delirium Syndrome
   c. Delirium
   d. New onset Schizophrenia

IF YOU ARE NOT A MEMBER OF THE MCHENRY WESTERN LAKE COUNTY EMS SYSTEM, PLEASE INCLUDE YOUR ADDRESS ON EACH OPTIONAL QUIZ TURNED INTO OUR OFFICE. WE WILL FORWARD TO YOUR HOME ADDRESS VERIFICATION OF YOUR CONTINUING EDUCATION HOURS.

IF YOU ARE A MEMBER OF OUR EMS SYSTEM, YOUR CREDIT WILL BE ADDED TO YOUR IMAGE TREND RECORD. PLEASE REFER TO IMAGE TREND TO SEE YOUR LIST OF CONTINUING EDUCATION CREDITS.

ANY QUESTIONS REGARDING THIS CAN BE ADDRESSED TO THE EMS OFFICE AT 815/759-8040. THANK YOU.