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Pediatric Mental Health Emergencies and Special Health Care Needs

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SYNOPSIS

Children with mental health problems are increasingly being evaluated and treated by both pediatric primary care and pediatric emergency physicians. This article focuses on the epidemiology, evaluation, and management of the two most common pediatric mental health emergencies, suicidal and homicidal/aggressive patients, as well as the equally challenging population of children with autism or other developmental disabilities.

Keywords

Psychiatric emergency; pediatric; autism; developmental disorders

INTRODUCTION

Visits for mental health problems to both pediatric primary care settings and pediatric emergency departments have skyrocketed in recent decades, and now account for up to 25-50% of primary care and 5% of pediatric emergency department visits.(1-6) Both pediatricians(7) and pediatric emergency physicians(8, 9) identify lack of training in and lack of confidence in their ability to care for mental health problems as barriers to caring for these patients. The focus of this article will be the two most common pediatric mental health emergencies, both of which involve threats to safety, i.e. suicide, where there is risk of harm to the patient, and homicide or aggression, where there is risk of harm to others. Additionally, the challenges of caring for children with autism or other developmental disabilities will also be discussed.

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SUICIDAL IDEATION & SUICIDE ATTEMPTS

Introduction

Suicide is the 3rd leading cause of death among persons aged 10-24 accounting for over 4,000 deaths per year.(10) Approximately 16% of teenagers report having seriously considered suicide in the past year, 12.8% report having planned a suicide attempt, and 7.8% report having attempted suicide in the past year. While only a small percentage of suicide attempts lead to medical attention,(11) suicide attempts still account for a significant number of emergency visits.(12)

RISK FACTORS

Females are more likely to consider and attempt suicide, but males are more than 5 times more likely to complete suicide. This difference is primarily accounted for their use of more lethal means: males are more likely to attempt via firearms and hanging while females are more likely to attempt suicide via overdose.(11)

Other risk factors for attempting and/or completing suicide include:(13-21)

- History of previous suicide attempts
- Impulsivity, mood, or behavior disorders
- Recent psychiatric hospitalizations
- Substance abuse
- Family history of suicide
- History of physical or sexual abuse
- Homelessness/runaways
- Identification as lesbian, gay, bisexual, or transsexual

Evaluation

IDENTIFYING AT-RISK PATIENTS

Some patients will identify themselves as being suicidal with suicidal ideation or suicide attempt as their chief complaint. However, many may not proactively report their suicidality to providers.(22) Given the prevalence of suicidal ideation and attempts as well as the morbidity and mortality associated with attempts, pediatric providers are encouraged to screen all of their teen patients for suicidality.(23-25) Screens may be brief and focused directly on suicide risk(26) or a more extensive/part of a broader mental health screening tool, such as the Pediatric Symptom Checklist. Another clinical resource is the TeenScreen National Center for Mental Health Checkups.(27) All patients presenting with mood symptoms, substance abuse, ingestions, acute intoxication, single car motor vehicle crashes, self-inflicted or accidental gun-shot wounds, and falls from significant heights should be screened for the presence of suicidal ideation.

ENSURING SAFETY

First and foremost, providers must ensure the safety of the patient, their family, and health care staff during the course of the evaluation. Whenever concern for suicidal ideation or attempt is present, patients should be constantly monitored. They should not be left unobserved, as they are at risk for further injuring themselves or eloping. Patients should undergo a search of their person and belongings, be asked to change into a hospital attire or

examination gown, and be placed in as safe a setting as possible, ideally one without access to medical equipment which could be used for self harm.

CONFIDENTIALITY

When a physician is concerned that the patient may be at imminent risk for harm to self or others, confidentiality requirements no longer apply. Physicians may disclose information gathered by patients to caregivers and they may obtain information from others (including friends, family members, school personnel, and other caregivers) without obtaining consent from the patient or guardians.

INTERVIEW

Patients and caregivers should be interviewed both together and alone. It is essential that providers obtain collateral information from caregivers, as patients frequently minimize the severity of their symptoms or the intention behind their acts. It is paramount to ask patients directly about suicidality. Asking patients about suicidal ideation and attempts does not increase suicidal behaviors. In fact, it may have the opposite effect, as having an open, honest conversation about their suicidal thoughts may provide patients with a sense of safety and relief. This may in turn enable them to fully disclose their suicidality and engage in treatment.

In addition to obtaining routine historical data, both medical and mental health histories, clinicians should obtain thorough details of the events and symptoms leading up to patient's presentation. Specific attention should be paid to:

- Recent psychosocial stressors, e.g.
 - Family conflict
 - Break-up of a romantic relationship
 - Bullying
 - Academic difficulties
 - Disciplinary actions/legal troubles
- Depression
- Mania
- Anxiety
- Psychosis
- Impulsivity
- Aggression
- Substance abuse
- Access to lethal means
 - Firearms
 - Knives
 - Medications
- Access to a responsible, supportive adult to whom they could turn if they had suicidal thoughts

Younger patients tend to be triggered more often by family conflict, while older adolescents are more likely to cite peer or romantic conflicts.(28)

When discussing suicidal ideation, clinicians should inquire about a patient's reasons for considering/attempting suicide, and what—if any—are their reasons for living. Where were they and what was happening immediately prior to the attempt? Was the attempt planned or impulsive? Did they do anything to avoid discovery? What was their expectation of the outcome would be? It should be noted that adolescents are typically poor judges of the dangerousness of their acts.(29, 30) While patients with low-lethality attempts may not be at significant medical risk, the *patient's* understanding of the potential lethality of their actions should be the basis of the suicide risk assessment.

Patients may deny that their behaviors constituted a suicide attempt and instead report that they 'did it without thinking,' or that they were just trying to go to sleep or get high or get a break from their feelings. Clinicians should be wary of accepting these explanations at face value and should probe for any signs of ambiguity or ambivalence. For example, in the setting of an overdose, it may be useful to ask if the patient questioned the safety of their ingestion beforehand. Was there any part of them that thought it might endanger their life? If so, it may be helpful to wonder out loud whether there was part of them that wouldn't have cared if they didn't wake up from the ingestion. If the patient acknowledges any ambivalence, the clinician should follow up by exploring what parts of them wouldn't have cared. The clinician should also assess how, given the patient's awareness of the ingestion's potential lethality, they arrived at the decision to carry it out.

If the patient responds by steadfastly denying any suicidal thoughts and/or maintaining that they did not consider the consequences of their actions, it may be that there truly was not intent for self-harm. However, there are some circumstances in which there is enough evidence supporting suicidal intent (such as statements to family and friends or postings on social media) that is concerning enough to overcome any potential reassurance from a patient's denial of intent for self-harm. There may also be circumstances in which a patient may not have had any intent to harm themselves, but their lack of judgment about the dangerousness of their actions could be considered life-threatening and still necessitate intensive psychiatric treatment.

FAMILY INTERVIEW

Parents should be questioned about recent signs, symptoms, and stressors as well as the details of the any events that may have led to the patient's presentation. In addition, pediatricians should inquire about the patient's access to lethal means, the level of the caregiver's knowledge of/concern for the patient's safety and wellbeing, their willingness/ability to monitor the patient, their level of openness to psychiatric treatment, and any barriers that might impede engagement in care. Clinicians should also work to identify areas of competence in both the patient and the family. These areas of strength form the basis for a successful treatment plan that enables the family to respond effectively to the crisis at hand.

Physical Examination

There are several purposes to the medical examination in suicidal patients. Clinicians should evaluate the patient for any evidence of injury or ingestion. Specific attention should be paid to the skin exam to look for evidence of cutting and also for signs suggestive of a toxidrome. Clinicians should examine the patient for any signs suggestive of an underlying medical cause for the patient's psychiatric symptoms or for any medical conditions that would require treatment beyond the initial medical evaluation.

Laboratory Testing

Many patients--particularly those with preexisting psychiatric diagnoses and who have normal vital signs, a normal physical exam, and no 'red flags' for medical illness on history and review of systems—do not require routine laboratory or radiologic testing. Decisions to obtain laboratory testing should be based on the patient's presenting medical and mental health condition. Clinicians should have a low threshold, however, for obtaining toxicology screens and pregnancy screening. Additionally, patients with an acute change in psychiatric symptoms--especially if psychosis or alterations in mental typically require at some laboratory evaluation.(31-33)

Pharmacologic Considerations

There are no medications whose primary indication is the prevention or treatment of suicide. Pediatricians may consider starting a selective serotonin re-uptake inhibitor (SSRI) for patients with a significant depressive episode or an anxiety disorder. If SSRIs are initiated, these patients and their caregivers should receive extensive education about and be closely monitored for worsening suicidal ideation.(34) Pediatricians should be wary of prescribing disinhibiting medications such as benzodiazepines to suicidal patients and use extreme caution in prescribing medications that could be lethal in overdose (e.g. tricyclic antidepressants or narcotics). If such medications are necessary, special care should be taken to ensure the safety of their administration, such as dispensing a week's worth of medicine at a time and/or having a responsible caregiver lock up and directly administer the medication.

Nonpharmacologic Strategies

One of the primary roles of a pediatrician managing a suicidal patient and their family is to provide psychoeducation about the need and support for engaging in adequate treatment. Caregivers may need help in recognizing the seriousness of the child's symptoms. They may also harbor negative feelings and/or misunderstandings about mental health diagnoses and their management options. Pediatricians should try to impress upon patients and families the many dangers of untreated mental illness and/or unaddressed psychological stressors (including family discord) and that there are safe, confidential, and effective treatments available. It may be useful to inform caregivers that patients are at the highest risk of re-attempting suicide in the months following the initial attempt(35-37) and that, while treatment may take time to help, they should do everything they can to help support the patient in adhering to recommended care.

Determining Level of Care

There are no validated criteria available to guide a pediatrician in assessing level of risk for subsequent suicide and determining level of care needs. However, it is generally agreed that criteria for immediate referral for an inpatient psychiatric admission include any the following:

- continued desire to die
- severe hopelessness
- ongoing agitation
- inability to engage in a discussion around safety planning,
- inadequate support system/ability to adequate monitoring and follow-up
- high lethality attempt or an attempt with clear expectation of death

Under certain circumstances, pediatricians must insist upon admission to a psychiatric inpatient unit over the objections of patients and/or their guardians. Every state in the U.S. has laws governing involuntary admission, i.e. a “psychiatric hold,” for inpatient psychiatric hospitalization. Laws vary from state to state, however in most cases physicians are able to admit a patient against his or her will for a brief period of time. Pediatricians should familiarize themselves with the relevant statutes and involuntary commitment procedures in the states where they practice.

Patients who do not meet criteria for inpatient psychiatric hospitalization should be referred for subsequent mental health intervention. Partial hospital programs, intensive outpatient services, or in-home treatment/crisis stabilization interventions should be considered when a patient needs more intensive or urgent treatment than weekly counseling. It should be noted that even patients who are deemed to be relatively low risk of future suicidal or self-injurious acts still warrant at least some outpatient follow-up. Unfortunately, outpatient mental health providers are not always readily accessible. In those circumstances, primary care providers may need to play an ongoing treatment role, by providing frequent follow-up, bridging care, and/or in-office counseling.(38)

Safety Planning

While having a patient sign a no-suicide contract has not been shown to prevent subsequent suicides,(39) pediatricians should still engage in a safety-planning discussion. Safety plans typically include elements such as identification of: (1) warning signs and potential triggers for recurrence of suicidal ideation; (2) coping strategies the patient could use; (3) healthy activities that could provide distraction or suppression of suicidal thoughts; (4) responsible social supports to which the patient could turn should suicidal urges return; (5) contact information for professional supports, including instructions on how and when to re-access emergency services; and (6) means restriction.(40)

“Means restriction” refers to counseling families about restricting access to potentially lethal methods. Because a large percentage of suicide attempts are impulsive in nature, educating caregivers about “suicide-proofing” their home is critical. One study of patients aged 13-34 who had near-lethal attempts found that 24% of patients went from deciding to attempt suicide to implementing their plan within 0-5 minutes, and another 47% took between 6 minutes and 1 hour.(41) Several studies have demonstrated that patients usually misjudge the lethality of their attempts.(29, 30, 42) There is also a wide variation in the case-fatality rates of common methods of suicide attempt, ranging from 85% for gunshot wounds to 2% for ingestions and 1% for cutting.(43) It thus follows that interventions that decrease access to more lethal means and/or increase the amount of time and effort it would take for someone to carry out their suicidal plan are likely to have a positive effect.

Means restriction education should include recommendations for securing knives, locking up medicines, and removing firearms. It is important to note that parents often underestimate their children’s abilities to locate and access firearms(44) and that a gun in the home has been shown to double the risk of youth suicide.(45) Families who are reluctant to permanently remove firearms from the home may be open to temporarily relocating them until the child is in a better emotional state. If families insist on keeping firearms in the home, they should be counseled to secure them with trigger locks, to store them unloaded in a specialized or tamper-proof safe, to separately lock or temporarily removing ammunition, and ensure that minors do not have access to keys or lock combinations. Given the rates of drug and alcohol intoxication among attempts and completers, physicians may also want to recommend restricting access to alcohol and drugs, and referral for substance abuse treatment.

Instill Hope

At the conclusion of the visit, pediatricians should review with the patient their reasons for living. Many patients may need help in generating this list. Pediatricians should highlight any of the patient's stated goals for the future and the ways in which the recommended treatment plan is designed to help them not only to survive but to thrive.

HOMICIDAL IDEATION, AGGRESSION & RESTRAINT

Introduction

Aggressive, violent behavior is not a diagnosis unto itself, but is the result of an underlying medical, toxicological, or mental problem(s), or a combination of these conditions. Symptoms vary widely, depending on the patient's age, developmental level, and physical condition, and may include restlessness, hyperactivity, confusion, disorientation, verbal threats, to frank violence towards property, others, or oneself. It is a frequent cause of injury to both patients and medical staff.(46, 47) As the evaluation of homicidal ideation and aggression share many of the priorities and strategies of the evaluation of the suicidal patient, this section will focus primarily on the management of aggressive patients.

RISK FACTORS

[Table 1]

Evaluation

Strategies and priorities for evaluating the aggressive patient are the same as those detailed above in the evaluation of the suicidal patient. The first priority is ensuring the safety of the patient and the medical staff. One critical difference with these patients regards the potential victim(s) of future violence. If (a) potential victim(s) of an aggressive patient is/are identified, there is an established legal precedent and duty to warn the victim(s) of the possibility of future violence.(48) Similar to the situation with the suicidal patient, this duty supersedes patient confidentiality.

When interviewing an aggressive patient, one should utilize the same techniques as discussed with the suicidal patient. Asking directly about homicidal ideation, thoughts or plans of violence, probing ambiguous or ambivalent statements, obtaining a comprehensive medical, mental health, substance abuse, legal/law enforcement history, inquiring about past and current psychosocial stressors, and access to weapons, from both the patient and caregivers, should all be employed. The goal of the physical examination and any laboratory work up is to evaluate for potential medical causes of the patient's aggression, as well as to detect any potential injuries or illnesses.

Management Goals

In 1998 the Hartford Courant published a series of articles detailing deaths of psychiatric patients which they believed were attributed to the use of physical restraint.(49) In response to these articles, the Centers for Medicare and Medicaid, and subsequently the Joint Commission for the Accreditation of Hospital Organizations, adopted regulations governing the use of and monitoring requirements for restraint (CMS-3018-F (42 CFR Part 482, RIN 0938-AN30).(50) Key features of these regulations can be found in [Table 2].

Nonpharmacologic Strategies

Verbal restraint and staff training in restraint reduction and de-escalation strategies have both been shown to be effective at reducing the need for chemical and physical restraint. Common verbal restraint strategies can be found in [Table 3].(51) The presence of family

members, caregivers, and friends are usually calming to a patient, though in some situations they may escalate a patient's agitation. In these situations, asking that person to temporarily leave the room is advisable.

Physical restraint has been associated with adverse outcomes including death. Recommended physical restraint approaches are listed in [Table 4]. Physical restraint should be applied with a minimum of 5 staff, one to control each limb and one for the patient's head. Restraints made of sturdy (e.g. leather) materials should be used, while those of less durable construction (e.g. "soft restraints") should be avoided. Once a patient has calmed, removal of restraints should be considered. Restraint removal will be dictated by the severity of the patient's condition. In some cases they may be removed all at once; in others, they may need to be removed one at a time with reassessment of the patient's agitation after the removal of each restraint. In every case, the same number of personnel that were present during the placement of the restraints should be available during removal of restraints, in the event that the restraints need to be re-applied.

Pharmacologic Strategies

While many first and second generation antipsychotics have been approved by the Food and Drug Administration for use in children with autistic, mood, psychotic and tic disorders, none have been approved for use in agitation or aggression.⁽⁵²⁾ Despite a growing body of literature on the use of benzodiazepines and antipsychotics for agitated adults in emergency department and psychiatric settings,⁽⁵³⁻⁵⁶⁾ very few children were included in these studies and there are no high quality pediatric trials. These limitations aside, most psychiatric and emergency medicine experts feel that these medications are both efficacious and safe, with rare but easily treated adverse reactions.

Table 5 lists commonly used medications and starting doses for pediatric chemical restraint. If a patient is already on one of these medications, administering their usual or an increased dose of that medication is acceptable. Regarding which medication should be used as the first line agent, most experts recommend tailoring the choice of medication to the severity and underlying cause of the agitation (Table 6).

The most common adverse effects of chemical restraint medications are cardiorespiratory and CNS depression, and extrapyramidal reactions. The former are usually easily treated with simple supportive measures, the latter with anticholinergics (e.g. diphenhydramine, benztropine, or trihexyphenidyl). Invasive or aggressive treatment measures are rarely needed. The most serious acute, adverse effects of antipsychotics are arrhythmias due to QT_c prolongation. These events are rare and are most likely to occur in patients receiving other QT_c prolonging medications and/or with underlying cardiac conditions. Continuous cardiorespiratory monitoring is thus recommended for patients receiving chemical restraint.

CARE OF CHILDREN WITH AUTISM AND DEVELOPMENTAL DISORDERS

Introduction

The incidence of autism spectrum disorders (ASD) is increasing, for a multitude of reasons, many of which are still unclear.⁽⁵⁷⁾ The three cardinal features of ASD are impaired communication and social interaction, and repetitive/restrictive areas of interest. The severity of these symptoms and the degree of impairment vary greatly, and include people who have obtained PhD's (e.g. Temple Grandin) to people who are non-verbal, and cannot communicate nor care for themselves. Additionally, each person may have specific and distinctive interaction patterns and response to stimuli. For all these reasons, caring for these children can be extremely challenging.

Children with other developmental disorders (DD) similarly span a wide range of symptoms, severity, and disabilities, too numerous to list and beyond the scope of this article. As the strategies for caring for these children are similar to those utilized in caring for children with ASD, for the purposes of this article, the term “ASD/DD” will be used to collectively refer to all these children.

Evaluation

One of the most challenging aspects of caring for children with ASD/DD is interpreting the unique meaning of their behaviors, as well as discovering the optimal methods for interacting with and caring for the child. Fortunately, most of these children are accompanied by an expert in these areas, namely their parent(s) and/or caregiver(s). Time spent asking them about the child is likely to be time well spent, increasing the efficiency with which care is delivered and the patient's, family's and clinician's satisfaction with the encounter. Suggested topics to discuss with the parent/caregiver are listed below.

- What is your child's level of communication, cognitive, and psychosocial functioning?
- How does your child communicate?
- When your child does (behavior), what does it mean?
- What upsets or scares your child? What calms/soothes them?
- Is your child sensitive to light, sound, or other stimuli?
- What's the best way to prepare your child for something new?
- Does your like to be touched? If so, what types of tactile sensations do they like?
- Are there things (e.g. toys, a favorite object, electronic devices, etc) which are good distractions for your child?

Transition Planning

Preparing a child with ASD for what is about to happen is one of the most common strategies employed by their caregivers. In ideal cases, the parent/caregiver begins talking to the child about what to expect while en route to the medical setting. Once there, it is worthwhile discussing what will occur during the visit and determining a plan for how to prepare the child for the visit.

Transition planning may also include planned breaks for the child. Some children with ASD/DD are able to stay on task or remain in one location for only brief periods of time. Building rest periods, distractions, bathroom breaks, etc into the visit may be an important component to a successful visit. Finally, a method for signaling transitions and/or new activities may also be helpful. A transition cue may be auditory (e.g. certain words or phrases, ringing a bell, etc), visual (e.g. pointing to a picture, turning on a light, showing the child a certain object, etc), or tactile (e.g. a touch with a specific object).

Sensory/Environmental Modification and Distraction

Some patients may be very sensitive to environmental stimuli such as light, noise, crowds of people, complex/cluttered environments, etc. If a child has such sensitivities, altering their environment and visit may be helpful. For example, instead of sitting in a busy, noisy waiting room, have the child wait in a quiet office or counseling area. Turning the lights in a room off or down, or lighting a room with a single lamp, may help a child who is sensitive to light. A rocking chair or rocking toy (with supervision) may soothe a child who prefers motion. For children who respond to tactile stimulation, a weighted blanket (available

through occupational therapy vendors), a radiology leaded vest, or a “bean bag” chair can all serve to provide the sensation of a heavy touch. Those who prefer the sensation of a light touch may respond to gentle massage (manual or mechanical devices) or stroking the skin with a soft object (e.g. a cotton ball, gauze pad, soft blanket, etc). Any toy or electronic device which holds the child’s attention and distracts them may assist in caring for the child.

Communication Adjuncts

Visual communication systems, both print and electronic versions, have demonstrated efficacy in improving communication with children with ASD/DD.(58-61) Not only may such a system improve communication with the child, more importantly, it may be the only way the child can communicate with the clinicians. There are a large number of both free and commercial products which are readily available, such as Picture Exchange Communication System (Pyramid Educational Consultants Inc, Newark, DE), modified American Sign Language signs, PDD (Pragmatic Organization Dynamic Display) books and software (Dynavox Mayer-Johnson, Pittsburgh, PA), iPad (Apple Inc, Cupertino, CA) with iCommunicate (Grembe Apps, Marston Mills, MA), Proloquo2go (AssistiveWare, Amsterdam, Netherlands), etc. Alternatively, a system customized to a particular setting can easily be made with digital photographs and/or computerized clip art. A custom visual communication tool has the advantage of containing pictures specific to the site. The disadvantage of such a system however, is that that patient may not be familiar with it.

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SUICIDAL IDEATION & SUICIDE ATTEMPTS

Key Points

- Suicide is one of the leading causes of death in pediatric patients.
- Constant observation is necessary to ensure patient safety during suicide evaluation and crisis stabilization.
- Evaluation includes assessment for potential underlying or associated medical conditions.
- Laboratory and/or imaging should be obtained on an as needed basis.
- High risk patients should be referred directly for inpatient psychiatric admission.
- Less-intensive treatment options may be considered for patients who are able to maintain their safety in outpatient settings.
- While no medications directly treat suicidality, there are safe and effective treatments for the majority of the associated psychiatric conditions.
- All evaluations of patients in the setting of suicidal ideation or suicide attempts should include a thorough discussion of safety planning, including means restriction and indications for seeking emergency care.

HOMICIDAL IDEATION, AGGRESSION & RESTRAINT**Key Points**

- Aggression is the final common pathway for a variety of medical and mental health conditions.
- Similar to the approach to the suicidal patient, careful evaluation for potential medical causes which may be the underlying cause and/or may complicate treatment of the aggression is vital.
- Mandatory federal and regulatory standards should guide the use of restraints with children and adolescents, including using the least restrictive methods as possible, frequent reassessment of the need for continued vs. discontinuing restraint, and offering of food, drink, and bathroom facilities.
- Physical and chemical restraint may have significant adverse effects and require careful planning, administration, and monitoring.

CARE OF CHILDREN WITH AUTISM AND DEVELOPMENTAL DISORDERS**Key Points**

- Children with autism and other developmental disorders span a wide range of symptoms of severities, ranging from very high functioning with minimal disabilities to profoundly impairment.
- Accordingly, such children may have unique and idiosyncratic communication methods, interaction styles, and responses to sensory stimuli.
- Parents and caregivers are the pediatricians' greatest allies, in planning and delivering optimal treatment for their children.
- A number of simple strategies, such as communication adjuncts, transition planning, sensory and environmental modification, and distraction techniques, may be useful in caring for these patients.

Table 1**Aggression/Violence Risk Factors**

• History of violence (especially recent)	• Verbal/physical threats
• Possession of weapons	• Psychomotor agitation
• Intoxication	• Paranoia
• Command hallucinations	• Impaired executive functioning
• Impulse control disorders	• History of antisocial behavior
• Concurrent psychosocial stressor(s)	• Concrete plans to harm others

Table 2**CMS Restraint Regulations**

<ul style="list-style-type: none"> • Regulations apply to both physical and chemical restraint • Must document need for and monitoring of restraint on 100% of patients 	
<u>Restraint Order Time Limit (time to renew)</u>	<u>Monitoring/Basic Care Requirements</u>
<ul style="list-style-type: none"> • Under 9 years: every 1 hour • 9-17 years: every 2 hours • Above 18 years: every 4 hours 	<ul style="list-style-type: none"> • Visual check: every 15 minutes or constant observation • Release a restraint: every 2 hours (may re-apply if needed) • Neurovascular check: every 2 hours • Offer food/water/bathroom: every 2 hours • Behavior check: every 2 hours • Respiratory status check: every 2 hours • Change physical position: every 2 hours

Table 3**Verbal Restraint Strategies**

<ul style="list-style-type: none">• Introduce oneself, staff• Prepare patient for what will happen• Respect patient autonomy• Offer food and liquids• Empathetic listening• Ask about patient requests/preferences• Honor reasonable requests• Non-punitive limit setting	<ul style="list-style-type: none">• Simple direct language, soft voice• Decrease environmental stimulation• Allow patient to walk/move in room• Reassure patient that they will be safe• Offer distraction (e.g. toy/books/movie)• Non-threatening movement/posture• Remove breakable objects, equipment
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Table 4**Physical Restraint Recommendations**

• Supine position preferred	• Avoid covering patient's face/mouth/nose
• Avoid pressure on neck/back/chest	• Elevate head of bed, if possible
• Mandatory staff training on restraint	

Table 5**Medications for Pediatric Chemical Restraint**

Medication	Initial Dose	Onset (min)	Half-life(hours)
Diphenhydramine	1.25 mg/kg	20-30 (PO)	2-8
	Teen: 50 mg	5-15 (IM)	
Lorazepam	0.05-0.1 mg/kg	20-30 (PO)	12
	Teen: 2-4 mg	5-15 (IM)	
Midazolam	0.05-0.15 mg/kg	20-30 (PO)	3-4
	Teen: 2-4 mg	5-15 (IM)	
Haloperidol	0.1 mg/kg	30-60 (PO)	21
	Teen: 2-4 mg	15-30 (IM)	
Risperidone	<12 yr: 0.5 mg	45-60 (PO)	20
	Teen: 1 mg		
Olanzapine	<12 yr: 2.5 mg	45-60 (PO)	30
	Teen: 5-10 mg	30-60 (IM)	
Ziprasidone	<12 years: 5 mg	60 (PO)	2-7
	Teen: 10-20 mg	30-60 (IM)	
Aripiprazole	<12 yr: 1-2 mg	60-180 (PO)	75
	Teen: 2-5 mg	30-120 (IM)	

Table 6

Choice of Initial Chemical Restraint Agent

<u>Etiology of Agitation</u>	<u>Symptom Severity</u>	
	<u>Mild/Moderate</u>	<u>Severe</u>
Medical	Benzodiazepine	Benzodiazepine or Antipsychotic
Psychiatric	Benzodiazepine or Antipsychotic	Antipsychotic