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Caring for the Agitated Child in the ED

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We have no conflicts of interest to disclose.

All original data shown is published or marked as under review.

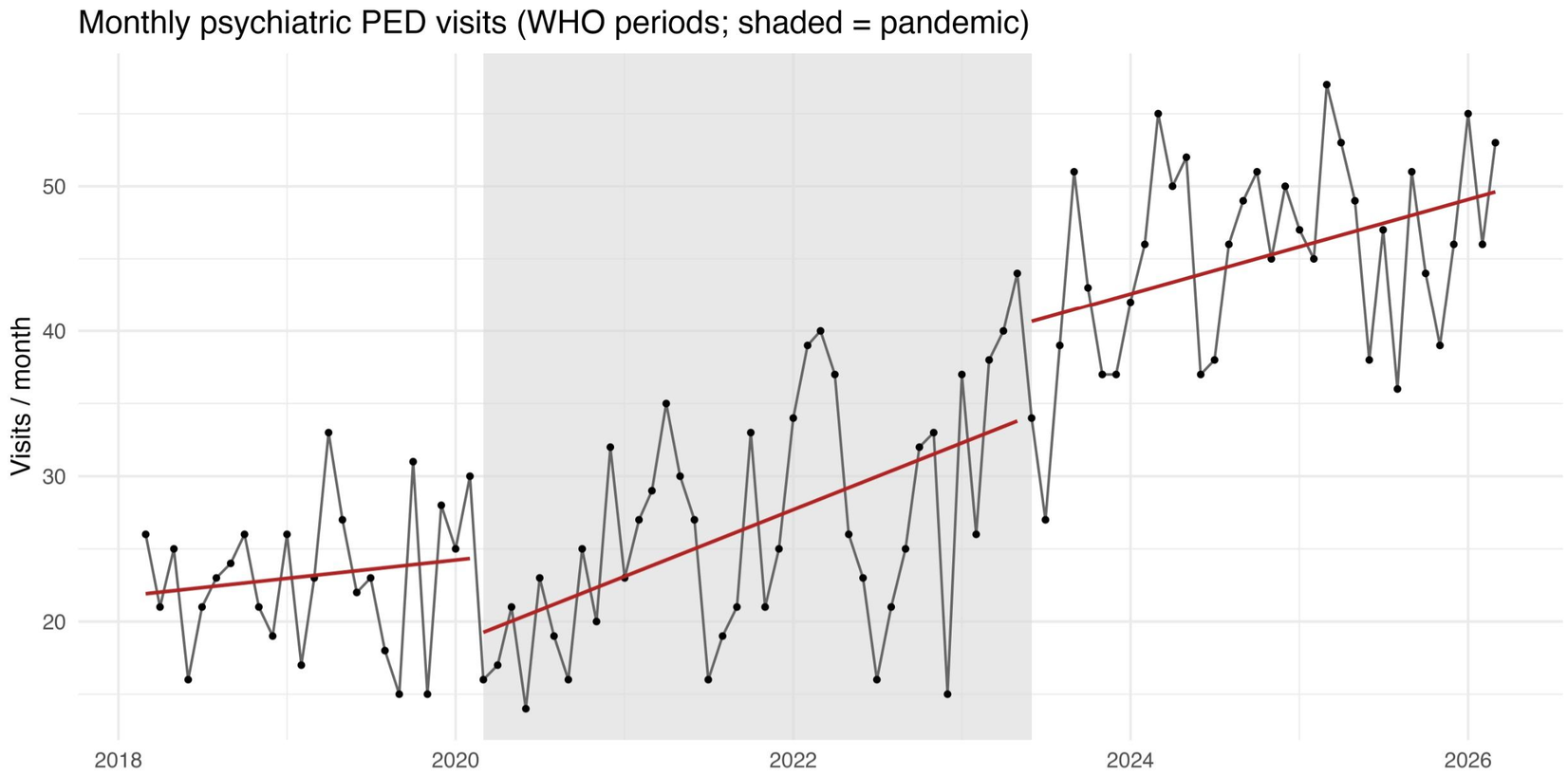
It's 9 p.m., and he's already in your waiting room.

A 13-year-old boy with autism, brought in by police after a verbal and physical altercation with his family. He's placed in the waiting room as the ED is full. He's nonverbal. He starts pacing, obviously agitated.

01

The problem.

The pandemic reset the baseline.



Visits doubled: 23 to 45 a month at OHSU

2×

When admission is the plan, the wait is the problem: 1 in 3 admitted kids boards over 12 hours.

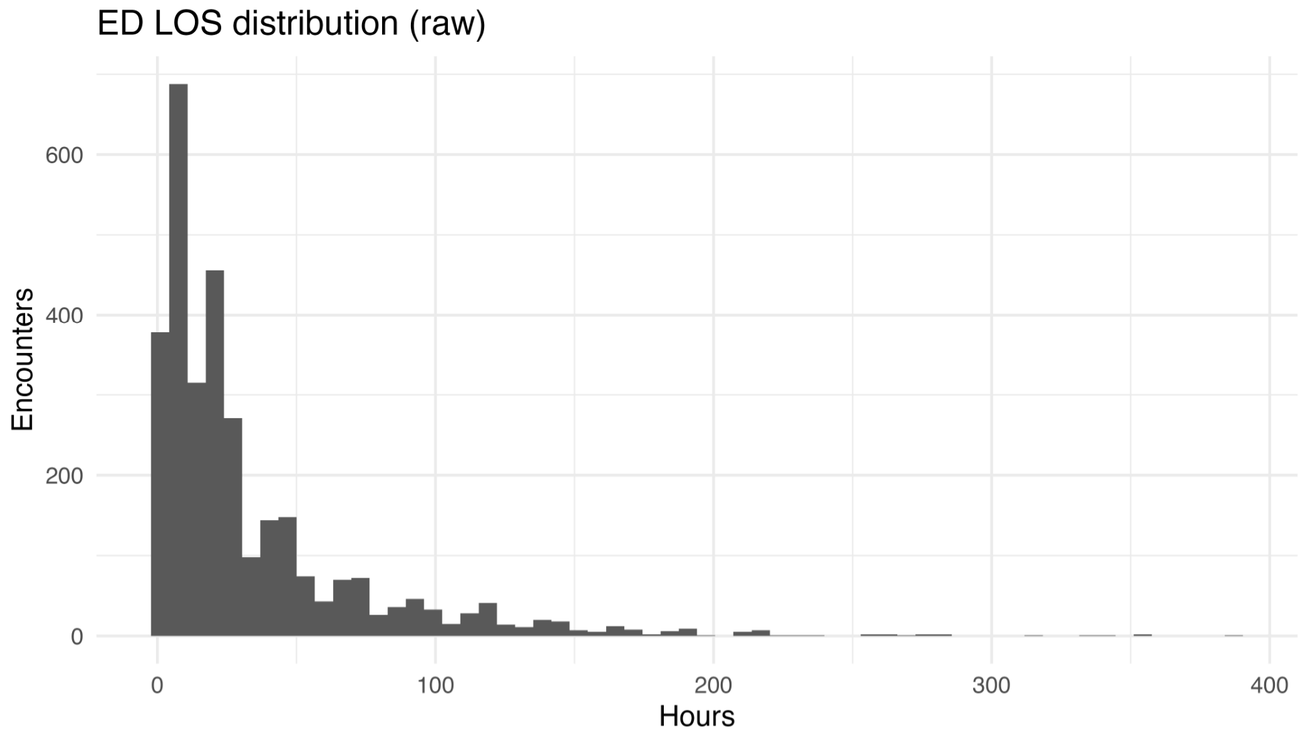
32.1%

of admitted or transferred pediatric mental health ED visits run ≥12 hours; more than 1 in 8 exceed 24 hours.

1 in 10

Medicaid youth mental health visits end in 3–7 days of boarding, mean 4.5 days.

The tail is the burden: stays run past 200 hours



For most Oregon kids there is no psychiatrist: you are the behavioral health system.

72%

of US counties have no practicing child & adolescent psychiatrist (AACAP 2024).

16%

of US children have a diagnosable mental health condition: the ED is the safety net (AAP/ACEP/ENA).

49th

of 50, Oregon's rank in hospital beds per capita; state estimate: ~3,700 behavioral-health beds short (state analyses 2022–2024).

The question isn't whether you'll manage agitation. It's whether you'll manage it with a plan.

02

See it coming.

The BRACHA started as a 14-item tool for predicting inpatient aggression.

The original BRACHA (Brief Rating of Aggression by Children and Adolescents) is a 14-item instrument, scored in the ED but built to predict aggression on the inpatient psychiatry unit.

In a pediatric ED cohort it predicted ED agitation with an AUROC of 0.81. Its length makes it impractical at triage, so the authors distilled the five most predictive items into a short form, the BRACHA-S, on the next slide.

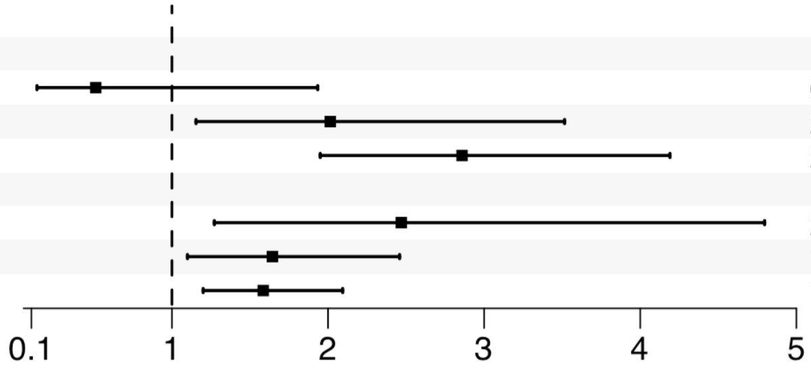
We can see agitation coming: five questions at triage predict it with an AUROC of 0.80.

	BRACHA-S ITEM	SCORE
01	History of psychiatric hospitalizations	No or yes
02	Frequency of physically aggressive acts toward others	Never or often
03	Threats or physical aggression toward self or others in the past 24 hours	No or yes
04	Impulsivity or agitation during evaluation	No or yes
05	Intrusiveness toward others during evaluation	No or yes

Each item scores 0 or 1 · moderate score → ~4× risk · high score → ~9× risk (moderate = score 2–3 · high = 4–5). BRACHA-S = 5-item short form of the 14-item BRACHA.

Children with autism in crisis are restrained at more than twice the rate of other kids in crisis.

Restraint Type / Age Group	ASD n (%)	Control n (%)	aOR (95% CI)	P Value
Physical Restraint	516	2953		
5-8 years	3 (5.2%)	16 (8.6%)	0.51 (0.14-1.93)	0.324
9-12 years	25 (14.6%)	40 (7.3%)	2.01 (1.15-3.52)	0.014
>12 years	45 (15.7%)	120 (5.4%)	2.86 (1.95-4.19)	<0.001
Pharmacologic Restraint	516	2953		
5-8 years	32 (55.2%)	73 (39.5%)	2.47 (1.27-4.80)	0.008
9-12 years	69 (40.4%)	167 (30.3%)	1.64 (1.10-2.46)	0.015
>12 years	122 (42.5%)	701 (31.6%)	1.59 (1.20-2.09)	0.001



14.1% vs 6.0% physically restrained · aOR 2.28 (95% CI 1.68–3.08) · N=3,469 · both groups in psychiatric crisis.

Two disparities, two timelines: medication from age 5, physical restraint from age 9.

	AGES 5–8	AGES 9–12	AGES >12
Physical restraint	0.51 · NS	2.01	2.86
Pharmacologic restraint	2.47	1.64	1.59

The tool matters less than the habit: structured screening turns a crisis into a plan.

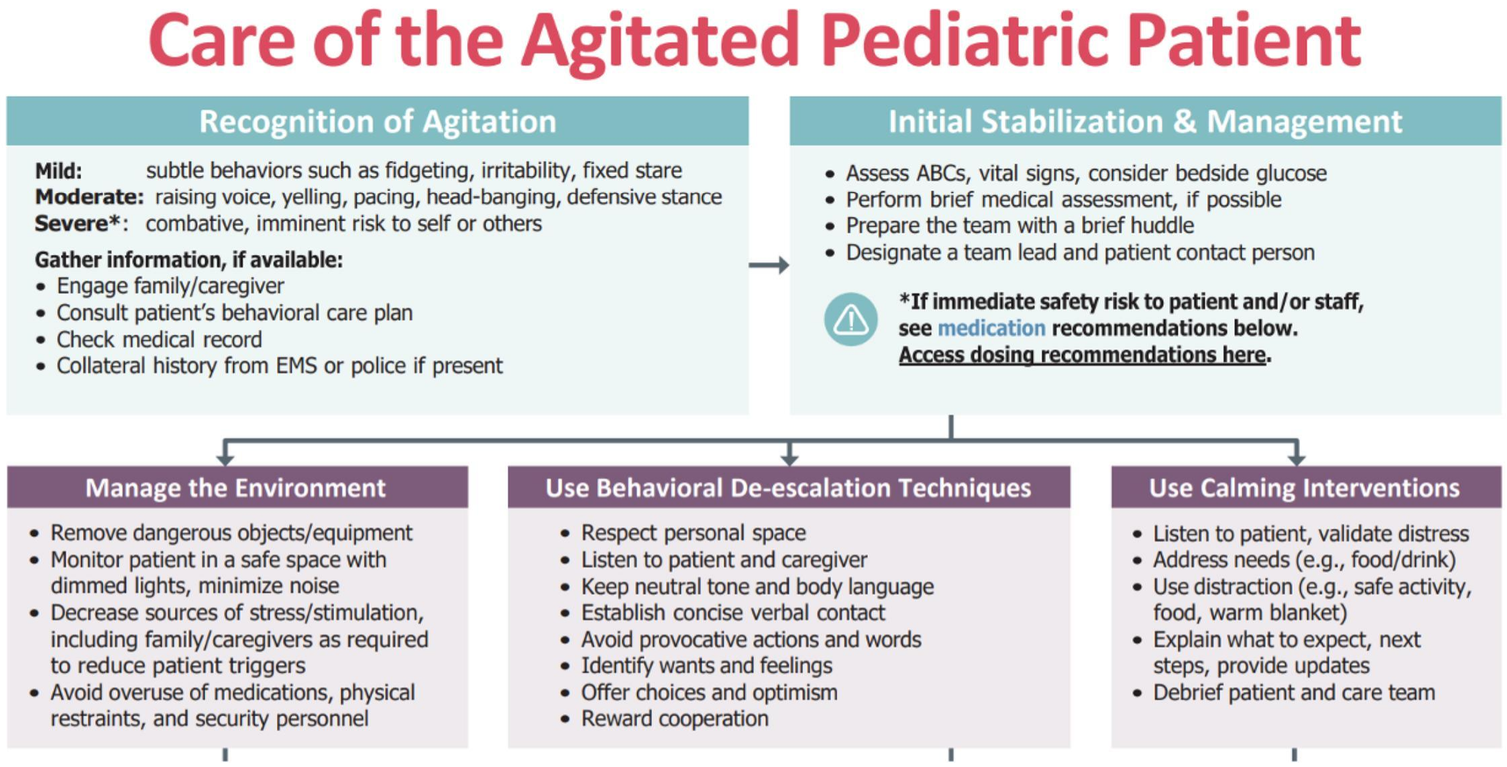
BRACHA-S	Built for the pediatric ED; retrospective AUROC 0.80; prospective validation underway (Ketabchi 2025; Klein 2026).
DASA / DASA-YV	Pediatric ED and acute-care evidence emerging (Costigan 2026; Sund 2025).
Brøset Violence Checklist	Adult tool; inpatient and adult-ED evidence only.

None yet prospectively validated for pediatric ED agitation, and none validated for children with autism or developmental disabilities. Awareness, not any specific score, is the intervention.

03

De-escalate.

Agitation care is a sequence: prevent, de-escalate, treat the cause, and restrain only as a last resort.



Prevention starts before the child escalates: ask the person standing next to the gurney.

01 **What triggers him?**

02 **What calms him?**

03 **What meds, and when was the last dose?**

04 **What made it worse last time?**

Write it where the next shift can see it.

The environment is your first medication

01 **Lights down**

02 **Noise down**

03 **Fewer people, not more**

04 **One voice**

05 **Out of the waiting room**

06 **Food, blanket, tablet**

Verbal de-escalation is a procedure: it has technique and it's learnable.

Respect personal space.

One calm voice, at eye level.

Short sentences, concrete words.

Offer real choices ("juice or water").

Agree where you can.

Set limits kindly and specifically.

Praise the behavior you want.

Run it like a resuscitation: assigned roles, one leader talking.

The default playbook assumes a neurotypical child so the kids who differ most pay the most.

SLIDE 15

aOR 2.28

ASD-specific care isn't an add-on. It's where the standard approach breaks.

And once admitted, children with autism wait longest for a bed: boarding >24 h aOR 1.68 (1.41–2.00); >48 h aOR 3.91 (2.62–5.84) (Cohen, J Emerg Med 2025 · PECARN, 73,624 admitted MH visits).

For children with autism: communication, sensory, and the caregiver as your expert.

Communication

Nonverbal ≠ not understanding. Talk to the child. Fewer words, more time.

Sensory

Dim what you can, silence what you can.

Hidden discomfort

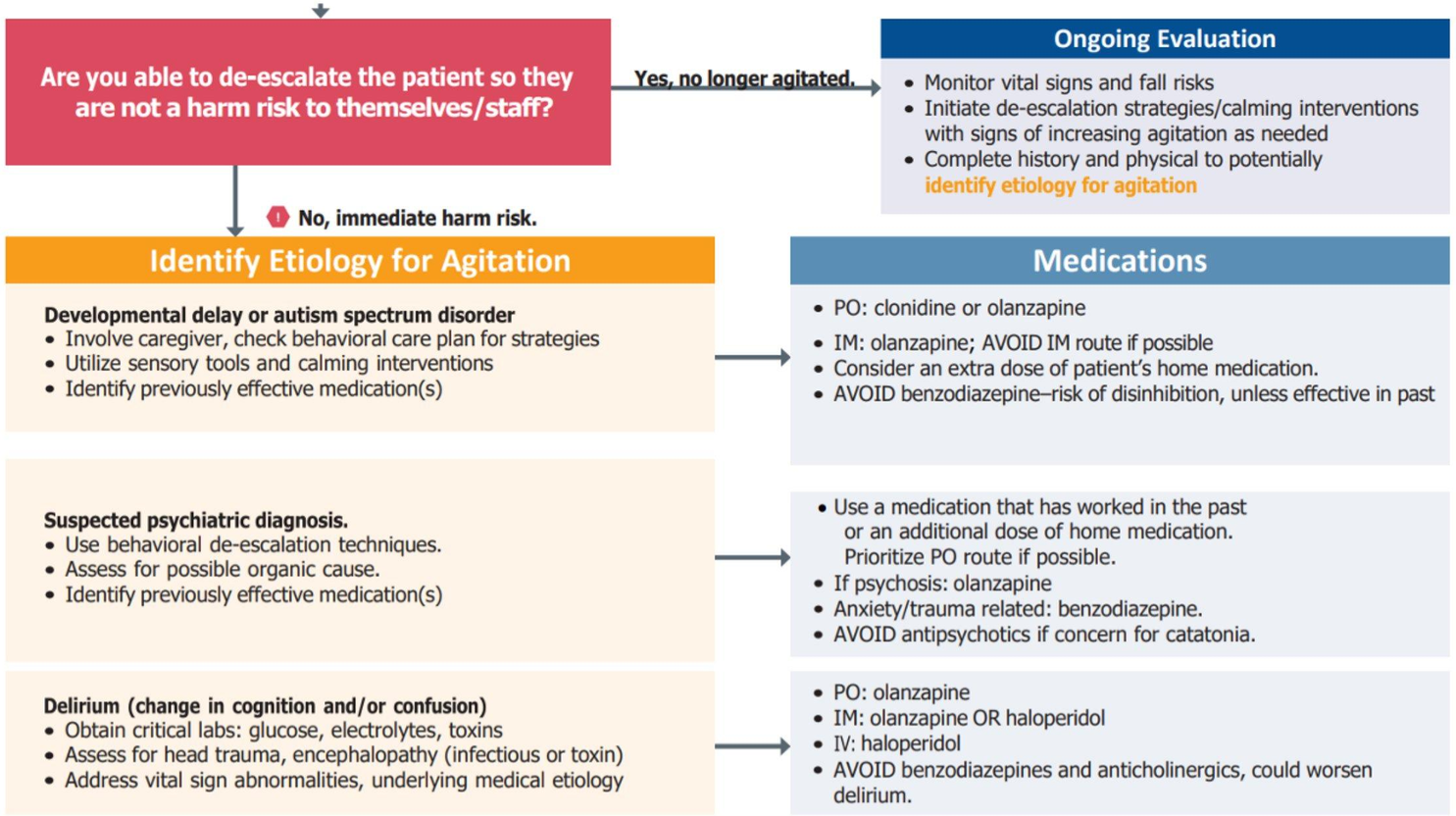
Look for dental pain, constipation, hunger.

Structured tools: "Get to know me" + lanyard cards (slide 41).

04

Treat the cause.

Agitation is a symptom, not a diagnosis: the cause picks the drug.



Psychiatric agitation: offer oral first, and check what home meds they missed.

Oral before IM, every time it's safe. An offered pill preserves the alliance. ODT olanzapine: fast, hard to cheek, feels voluntary.

A missed home dose, sometimes missed because of your waiting room, is a leading, fixable cause of escalation. Give the home med.

For autism and developmental disability: clonidine first, and skip the benzos.

Clonidine first-line.

Benzodiazepines can disinhibit rather than sedate in ASD/DD. The spiral: lorazepam → worse → more lorazepam → restraint.

These kids already carry the highest antipsychotic burden in pediatrics; the pharmacologic disparity starts at age 5 (aOR 2.47).

Dose by weight band, not by guess, and never olanzapine with a parenteral benzo.

Medication for MILD/MODERATE Agitation					
In individuals who are not able to behaviorally de-escalate, medication may be more effective and should be considered early to prevent agitation escalation.					
Drug	**Route**	**Dose**	**PRN Interval**	**Onset**	**Considerations**
Lorazepam	PO/IM/IV	0.05 – 0.1 mg/kg/dose MAX single dose: 2 mg	Every 4-6 hours	PO: 30-60 min IM: 15-30 min IV: 5-15 min	**Contraindications:** AVOID in delirium, autism spectrum disorder, history of paradoxical reaction, or AVOID within 1 hour IM olanzapine. **Side effects:** respiratory depression if administered with an antipsychotic, disinhibition, delirium
Clonidine	PO	<40 kg: 0.05 mg ≥40 kg: 0.1 mg MAX total daily dose: 0.4 mg/day	Every 6-8 hours	PO: 30-60 min	**Contraindications:** hypotension, bradycardia. Caution use with antipsychotics and benzodiazepines. **Side effects:** hypotension, bradycardia Hold if pulse is less than 60 or systolic blood pressure is less than 90 mm Hg.
Olanzapine	ODT	20-39 kg: 2.5 mg 40-59 kg: 5.0 mg ≥60 kg: 10 mg Max daily dose (IM+PO): 20 mg	Every 8 hours	15-60 min	Side effects: paradoxical reaction, sedation, EPS Note: Consider lower doses for the treatment of delirium
Medications for SEVERE Agitation					
In individuals who are not able to behaviorally de-escalate, medication may be more effective and should be considered early to prevent agitation escalation.					
Olanzapine	IM	20-39 kg: 5.0 mg 40-59 kg: 5.0-10.0 mg ≥60 kg: 10 mg Max daily dose (IM + PO): 20 mg	Every 8 hours	15 - 45 min	**Contraindications:** AVOID concurrent use of IM olanzapine and IM/IV benzodiazepines **Side effects**: paradoxical reaction, sedation, EPS **Note**: Consider lower doses for the treatment of delirium

Never IM olanzapine within 1 hour of a parenteral benzodiazepine: respiratory depression.

05

Last resort.

Restraint is a treatment failure, with its own complication profile.

A failure of the situation, not of the nurse. Something upstream didn't happen.

6–10% of pediatric psychiatric ED visits end in restraint.

≥30 US children have died in restraint-related incidents.

Racial disparities documented in physical restraint use.

If you must restrain: release at the first safe moment.

01	**Fewest points**	The minimum needed for safety
02	**Shortest time**	Release is the goal from the start
03	**Continuous reassessment**	The child never stops being a patient
04	**Release**	At the first safe moment

A restrained child is at the highest-risk moment of their visit. Children have died in restraints. Someone needs eyes on that child.

Debrief every restraint: it's how the next one gets prevented.

01	**What triggered it**	Name the escalation's starting point
02	**What we missed**	The warning the family often saw first
03	**What changes**	Michael will show you where this feeds

06 Transitions.

Rising agitation got a systematic response at Doernbecher: IMPWR.

Improving Mental health Processes, Workflows & Responses (IMPWR)

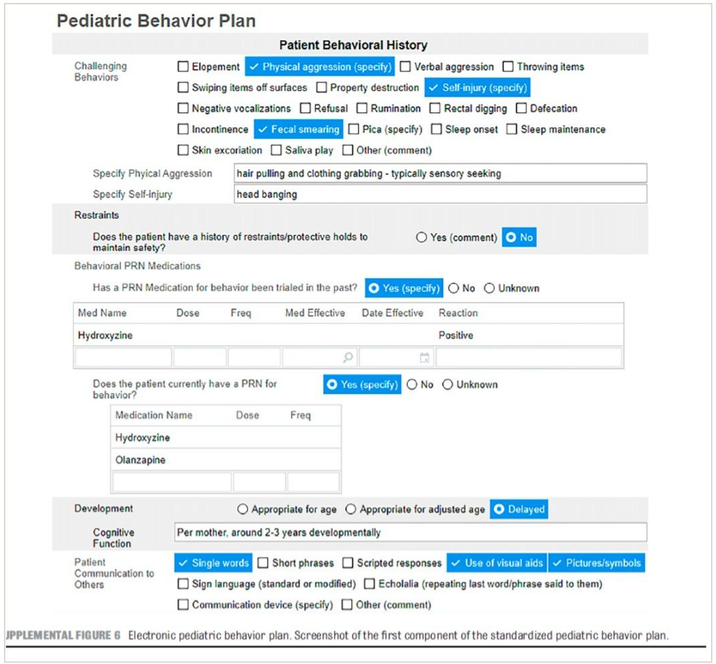
Doernbecher's restraint-reduction response has five working parts.

01	**Lanyard cards**	De-escalation cues on every badge, at the bedside when needed
02	**"Get to know me"**	The child's triggers, calmers, and communication, from the family
03	**Behavioral health handoff**	A standardized protocol so the plan travels with the child at every transition
04	**Agitation pathway**	EIIC-derived, adapted locally
05	**Care of the Agitated Pediatric Patient guideline**	The OHSU-wide standard

A behavioral support plan is the family's knowledge, written down before the crisis.

A behavioral-health support plan is patient-centered and built with the family. It captures baseline behavior, known triggers, and what calms the child, and defines the response in advance. The goals: prevent escalation, minimize restraint, and keep care consistent across every shift and unit. It is the four caregiver questions, formalized so they survive shift change and transfer.

A behavioral support plan turns caregiver knowledge into a plan the whole team can see.



Pediatric Behavior Plan

Patient Behavioral History

Challenging Behaviors
- ☐ Elopement
- ☑ Physical aggression (specify)
- ☐ Verbal aggression
- ☐ Throwing items
- ☐ Swiping items off surfaces
- ☐ Property destruction
- ☑ Self-injury (specify)
- ☐ Negative vocalizations
- ☐ Refusal
- ☐ Rumination
- ☐ Rectal digging
- ☐ Defecation
- ☐ Incontinence
- ☑ Fecal smearing
- ☐ Pica (specify)
- ☐ Sleep onset
- ☐ Sleep maintenance
- ☐ Skin excoriation
- ☐ Saliva play
- ☐ Other (comment)

Specify Phyical Aggression: hair pulling and clothing grabbing - typically sensory seeking

Specify Self-injury: head banging

Restraints

Does the patient have a history of restraints/protective holds to maintain safety? ○ Yes (comment) ◉ No

Behavioral PRN Medications

Has a PRN Medication for behavior been trialed in the past? ◉ Yes (specify) ○ No ○ Unknown

Med Name	Dose	Freq	Med Effective	Date Effective	Reaction
Hydroxyzine					Positive

Does the patient currently have a PRN for behavior? ◉ Yes (specify) ○ No ○ Unknown

Medication Name	Dose	Freq
Hydroxyzine		
Olanzapine		

Development: ○ Appropriate for age ○ Appropriate for adjusted age ◉ Delayed

Cognitive Function: Per mother, around 2-3 years developmentally

Patient Communication to Others
- ☑ Single words
- ☐ Short phrases
- ☐ Scripted responses
- ☑ Use of visual aids
- ☑ Pictures/symbols
- ☐ Sign language (standard or modified)
- ☐ Echolalia (repeating last word/phrase said to them)
- ☐ Communication device (specify)
- ☐ Other (comment)

JPPLEMENTAL FIGURE 6 Electronic pediatric behavior plan. Screenshot of the first component of the standardized pediatric behavior plan.

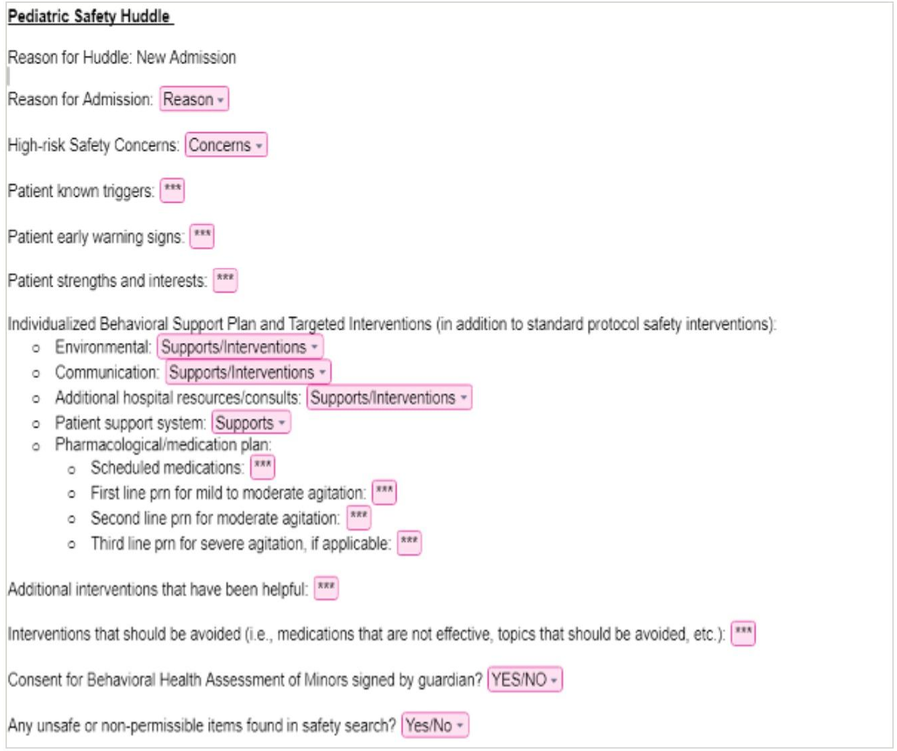
Baseline · known triggers · individualized interventions, with a stepwise ladder: non-pharmacologic first, a pharmacologic plan defined in advance.

Safety huddles put the plan in motion before the patient arrives.

01 **Pre-admission / transfer**

02 **Routine**

03 **Urgent**



Pediatric Safety Huddle

Reason for Huddle: New Admission

Reason for Admission: Reason

High-risk Safety Concerns: Concerns

Patient known triggers: ***

Patient early warning signs: ***

Patient strengths and interests: ***

Individualized Behavioral Support Plan and Targeted Interventions (in addition to standard protocol safety interventions):

- Environmental: Supports/Interventions
- Communication: Supports/Interventions
- Additional hospital resources/consults: Supports/Interventions
- Patient support system: Supports
- Pharmacological/medication plan:
  - Scheduled medications: ***
  - First line prn for mild to moderate agitation: ***
  - Second line prn for moderate agitation: ***
  - Third line prn for severe agitation, if applicable: ***

Additional interventions that have been helpful: ***

Interventions that should be avoided (i.e., medications that are not effective, topics that should be avoided, etc.): ***

Consent for Behavioral Health Assessment of Minors signed by guardian? YES/NO

Any unsafe or non-permissible items found in safety search? Yes/No

The urgent huddle regroups the team the moment risk changes.

Pediatric Safety Huddle

Reason for Huddle: Urgent

Date of initial safety huddle documentation: ***

Ongoing safety concern: ***

Recent significant safety events: ***

Specific interventions that have been helpful: ***

Interventions that should be avoided (i.e., medications that are not effective, topics that should be avoided, etc.): ***

Scheduled/PRN meds given in last 24hrs: ***

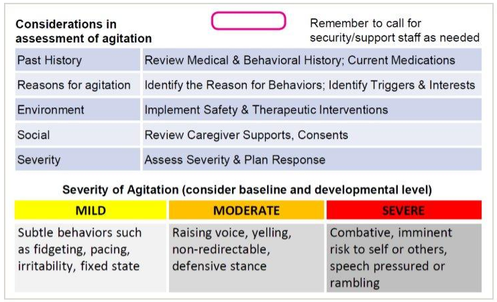
Given updated risk assessment, what observation method is most appropriate? Risk assessment safety

Updates and additions to Individualized Behavioral Support Plan and Targeted Interventions: ***

Put de-escalation in every pocket: lanyard cards and "Get to know me."

Lanyard cards

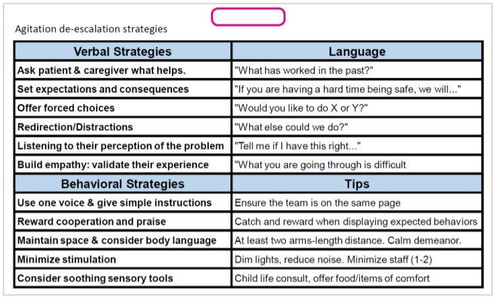
De-escalation phrasing on every badge, at the bedside when it's needed.



Considerations in assessment of agitation	Remember to call for security/support staff as needed
Past History	Review Medical & Behavioral History; Current Medications
Reasons for agitation	Identify the Reason for Behaviors; Identify Triggers & Interests
Environment	Implement Safety & Therapeutic Interventions
Social	Review Caregiver Supports, Consents
Severity	Assess Severity & Plan Response

Severity of Agitation (consider baseline and developmental level)

MILD	MODERATE	SEVERE
Subtle behaviors such as fidgeting, pacing, irritability, fixed state	Raising voice, yelling, non-redirectable, defensive stance	Combative, imminent risk to self or others, speech pressured or rambling

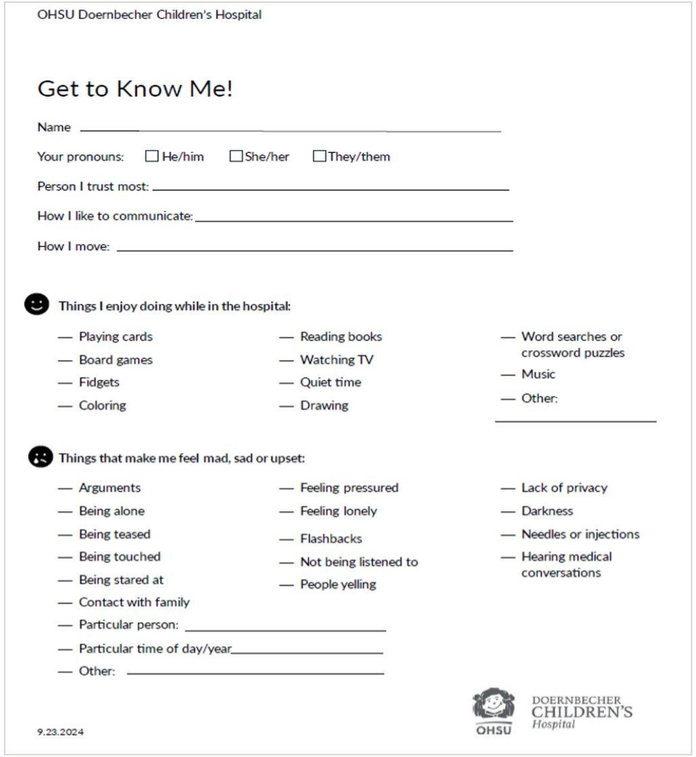


Agitation de-escalation strategies

Verbal Strategies	Language
Ask patient & caregiver what helps.	"What has worked in the past?"
Set expectations and consequences	"If you are having a hard time being safe, we will..."
Offer forced choices	"Would you like to do X or Y?"
Redirection/Distractions	"What else could we do?"
Listening to their perception of the problem	"Tell me if I have this right..."
Build empathy: validate their experience	"What you are going through is difficult
Behavioral Strategies	**Tips**
Use one voice & give simple instructions	Ensure the team is on the same page
Reward cooperation and praise	Catch and reward when displaying expected behaviors
Maintain space & consider body language	At least two arms-length distance. Calm demeanor.
Minimize stimulation	Dim lights, reduce noise. Minimize staff (1-2)
Consider soothing sensory tools	Child life consult, offer food/items of comfort

"Get to know me"

The child's triggers, calmers, and communication, gathered from the family, posted for the team.



OHSU Doernbecher Children's Hospital

Get to Know Me!

Name _____

Your pronouns: ☐ He/him ☐ She/her ☐ They/them

Person I trust most: _____

How I like to communicate: _____

How I move: _____

Things I enjoy doing while in the hospital:

- Playing cards
- Board games
- Fidgets
- Coloring
- Reading books
- Watching TV
- Quiet time
- Drawing
- Word searches or crossword puzzles
- Music
- Other: _____

Things that make me feel mad, sad or upset:

- Arguments
- Being alone
- Being teased
- Being touched
- Being stared at
- Contact with family
- Particular person: _____
- Particular time of day/year_____
- Other: _____
- Feeling pressured
- Feeling lonely
- Flashbacks
- Not being listened to
- People yelling
- Lack of privacy
- Darkness
- Needles or injections
- Hearing medical conversations

9.23.2024

OHSU DOERNBECHER CHILDREN'S Hospital

None of this requires a children's hospital.

✓ PREVENT ✓ DE-ESCALATE ✓ TREAT THE CAUSE ✓ RESTRAIN LAST

07 Implementation

Any ED can do this: a room plan, a med card, one voice.

01 Designate a low-stimulation space: a dimmer, not a locked room.

02 Print the weight-based med card.

03 One-voice rule for escalations.

04 Triage questions to define risk

05 Debrief every restraint.

Nurse leaders: three habits make this a system.

01	**Support plans**	For returning patients, you already know their names
02	**Huddles**	Five minutes when a known patient hits the board
03	**Debriefs**	A norm after every restraint

None of these cost money. All of them take repetition.

Agitation is predictable, and
predictable problems deserve a plan.

The kids who differ most from the default need the plan most.

Questions

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Take these with you.

SCAN OR OPEN THE LINK

https://www.dropbox.com/scl/fo/436h7l2kouj681ddubwao/AKzKCgweiKVV35ZzHWidCEg?rlkey=t1p0iae1ddzmknlwdbpzifczd&st=l9dss4f5&dl=0

De-escalation quick reference: one page, laminate-ready.

Weight-band medication card

EIIC pediatric mental health toolkit · this deck + handout.

EIIC: Emergency Medical Services for Children Innovation & Improvement Center, a federal (HHS/HRSA) program; its pediatric mental health toolkit is free and national.

Contact: mcgaughe@ohsu.edu

Bommersbach TJ et al. JAMA. 2023;329(17):1469-1477

Calabrese ME et al. Pediatrics. 2024;153(1)

Cohen JS et al. J Emerg Med. 2025;80:253-265

Costigan AD et al. Pediatr Emerg Care. 2026;42(6):419-426

Cushing AM et al. JAMA Pediatr. 2023;177(2):168-176

Gerson R et al. West J Emerg Med. 2019;20(2):409-418

Hoffmann JA et al. Pediatrics. 2023;151(3):e2022057383

Hoffmann JA et al. JACEP Open. 2025;6(4):100180

Ketabchi B et al. Pediatrics. 2025;156

Klein L et al. JMIR Res Protoc. 2026;15:e92452

McBain RK et al. JAACAP. 2022;61(7):926-933

McConnell KJ et al. JAMA Health Forum. 2025;6(8):e253177

McEnany FB et al. Pediatrics. 2020;146(4)

McGaughey S et al. J Autism Dev Disord. 2026 (DOI 10.1007/s10803-026-07359-4)

McGonigle JJ et al. Child Adolesc Psychiatr Clin N Am. 2014

Nash KA et al. JAMA Pediatr. 2021

Okwori G. Child Youth Serv Rev. 2022;136:106441

Overhage LN et al. JAMA Pediatr. 2024;178(9):923-931

Richmond JS et al. West J Emerg Med. 2012;13(1):17-25

Saidinejad M et al. Pediatrics. 2023;152(3):e2023063255

Saidinejad M et al. JACEP Open. 2024;5:e13255

Sund G et al. J Pediatr Nurs. 2025;82:e23-e30

AACAP Workforce Maps 2024

OHA 2025 Annual Report on PRTF Capacity

OHSU data: McGaughey et al., under review (pandemic-era psychiatric utilization; adolescent SI prescribing)

THANK YOU

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