Agitation & Aggression Management Pathway v3.0: **Table of Contents**

Stop and **Review**

Inclusion Criteria

- Patients ≥5 years experiencing agitation, including those admitted for mental health concerns, including Autism Spectrum Disorder

Exclusion Criteria

- Patients <5 years and/or <25kg
- Patients with delirium

Agitation & Aggression Management Care

Appendix

Last Updated: May 2024
Next Expected Review: March 2029

For questions concerning this pathway, contact:
AgitationAggressionPathway@seattlechildrens.org

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Agitation & Aggression Management Pathway v3.0: **ED Care and Resources**

Stop and **Review**

Inclusion Criteria

- Any patients ≥5 years experiencing agitation or demonstrating aggression, including those admitted for mental health concerns

Exclusion Criteria

- Patients <5 years and/or <25kg
- Patients presenting with delirium

Risk for Inequity

Patient's behavior presenting a safety risk to self, peers, staff or the space

↓

- Address triage needs
- Request PRN

↓

- Consider underlying etiology
- If previously admitted, refer to Behavior Plan, if available. Refer to Policy/Procedure: Behavior Plans (*for SCH only*) for more details
- If also suicidal ideation see Zero Suicide Initiative Pathway

↓

Medical Team Huddle

- Discuss PRN Plan
- Initiate Job Aid: Care of Psychiatric and Behavioral Health patients in ED - RN Checklist (*for SCH only*)
- Refer to GOC: Behavioral/Psychiatric Health Patients in the Emergency Department (*for SCH only*)

↓

Has behavior de-escalated?

NO

Consider:

- Underlying etiology of agitation.
- Previous medications that yielded a positive or negative response.
- Current home medications and potential interactions
- Giving current prescribed medications, consider an extra dose or an early dose
- If inadequate results with multiple doses of a 1st medication, consider adding another therapeutic class of medication
- Be mindful of onset of action, allow time for the medication to take effect
- Assess need for more frequent vital signs based on medication effect

YES

Patient Watch

- All patients at risk for harming themselves or others will have a patient watch assigned until the attending and MHE agree a watch is no longer needed
- Refer to Policy/Procedure: Patient Watch (*for SCH only*) for details
- Refer to GOC: Behavioral/Psychiatric Health Patients in the Emergency Department (*for SCH only*) for ED-specific guidelines

Other Resources

- GOC: Boarding Psychiatric and Behavioral Health Patients in the Emergency Department (*for SCH only*)
- Policy/Procedure: Elopement Policy (*for SCH only*)

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Agitation & Aggression Management Pathway v3.0: **Psychiatry and Behavioral Medicine Unit (PBMU) and ED Mental Health Care and Resources**

Risk for Inequity

Stop and **Review**

Inclusion Criteria

- Patients ≥5 years experiencing agitation, including those admitted for mental health concerns, including Autism Spectrum Disorder

Exclusion Criteria

- Patients <5 years and/or <25kg
- Patients presenting with delirium

Strategies in Caring for Patients

ED Mental Health resources:

- Job Aid: Safety Ladder & Behavioral Escalation (*for SCH only*)
- Policy/Procedure: Behavior Plans (*for SCH only*)
- GOC: Boarding Psychiatric and Behavioral Health Patients in the Emergency Department (*for SCH only*)
- Policy/Procedure: Patient Watch (*for SCH only*)

PBMU resources:

- Job Aid: Safety Ladder & Behavioral Escalation (*for SCH only*)
- Job Aid: PBMU Continuum of Interventions (*for SCH only*)
- Policy/Procedure: Behavior Plans (*for SCH only*)
- GOC: PBMU Child Program (*for SCH only*)
- GOC: PBMU Adolescent Program (*for SCH only*)
- GOC: PBMU Biobehavioral Inpatient Program (*for SCH only*)

Escalation Response

- Consider underlying etiology
- Notify primary team
- Ask patient/caregiver what interventions and/or medications have helped in the past
- Consider initiation of Adaptive Social Response

Resources

- Policy/Procedure: Adaptive Social Response (*for SCH only*)
- Policy/Procedure: Managing Patients at Risk of Self-Harm (*for SCH only*)
- GOC: Non-Suicidal Self-Injury on the Psychiatry and Behavioral Medicine Unit (PBMU) (*for SCH only*)
- Job Aid: Aggression Level Assessment and Intervention (*for SCH only*)
- Job Aid: PBMU - Restraint Decision Making (*for SCH only*)
- GOC: Intentional Foreign Body Ingestion on the PBMU (*for SCH only*)
- Additional Medication Considerations Based on Etiology

Restraint or seclusion may only be used when less restrictive interventions have been ineffective
AND
Patient is at imminent risk to self or others

Proceed to physical restraint per the Policy/Procedure: Restraint or Seclusion (*for SCH only*)

Last Updated: May 2024
Next Expected Review: March 2029

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Agitation & Aggression Management Pathway v3.0: **Medication Management**

Stop and **Review**

Inclusion Criteria

- Patients ≥5 years experiencing agitation, including those admitted for mental health concerns, including Autism Spectrum Disorder

Exclusion Criteria

- Patients <5 years and/or <25kg
- Patients with delirium

When de-escalation strategies have failed and the patient is at risk to harm self, others, or the space:

- Ask patient/caregiver what interventions and/or medications have helped in the past
- Check Behavior Plan, if available, for any patient specific management strategies
- The medications below are the options available for patients expressing moderate aggression, as appropriate. There may be variations based on individual patient presentations

[Medication Considerations] for possible underlying etiologies

Physician or APP: Order one medication from each category at the same time

RN: Submit Med Request for both medication doses, if not in Omnicell

Moderate:

Raised voice, gesturing, clenched fists, threatening posture, pacing

PO

- Hydroxyzine
- Lorazepam*
- Diphenhydramine
- Risperidone
- Consider extra dose of home meds

***Warning: Higher/frequent doses of benzodiazepines and/or diphenhydramine can lead to idiosyncratic reactions including disinhibition +/- delirium, especially in children with autism**

IM

- Lorazepam* (ED Only)
  - If ineffective, may repeat dose 60 min after initial dose

Suspicion or Known Substance Use:

- Start with lorazepam* to reduce the risk of worsening an underlying toxidrome
- If the patient is in alcohol or opiate withdrawal, refer to the Substance Use Screening & Management Pathway

Severe:

Breaking and throwing things, harmful to self or others, head banging, attempting to cut or strangle self/others, property destruction

PO

- Olanzapine**
  - If ineffective, repeat 1x after 45 minutes
- Chlorpromazine
- Haloperidol + Diphenhydramine
- Consider extra dose of home meds

****Do NOT use IM/IV Olanzapine within 1 hour of IM/IV benzodiazepines administration due to risk of cardiorespiratory depression**

IM

- Olanzapine**
- Chlorpromazine
- Haloperidol + Diphenhydramine
  - May repeat in 4-6 hours

Definitions

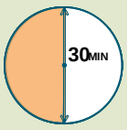
Moderate

- Raised voice, gesturing, clenched fists, threatening posture, pacing

Severe

- Breaking and throwing things, harmful to self or others, head banging, attempting to cut or strangle self/others, property destruction

Assess after 20 minutes and prepare next medication if inadequate response



If necessary, at 30 min administer next medication

RN to document the reassessment for patient

For questions concerning this pathway, contact:
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Additional Medication Considerations Based on Etiology

The table below is adapted from the Best Practices for Evaluation and Treatment of Agitated Children and Adolescents (BETA) in the Emergency Department: Consensus Statement of the American Association for Emergency Psychiatry (full citation in Bibliography).

	Interventions	Medications
Is it delirium? Acute onset/fluctuating course *plus* inattention *plus* disorganized thinking or altered level of consciousness	• Address underlying medical etiology. • Assess pain. • Avoid benzodiazepines and anticholinergics which may worsen delirium	PO: • Quetiapine or risperidone or clonidine IV/IM: • Haloperidol and diphenhydramine (IM) • If there are seizure concerns or catatonia, then Lorazepam (IV/IM)
Is it substance intoxication or withdrawal?	• History • Urine tox • Physical exam • If patient is in opioid or alcohol withdrawal: Refer to the Substance Use Screening & Management Pathway	• **If patient is in opioid or alcohol withdrawal:** refer to the Substance Use Screening & Management Pathway • **Negative Utox, suspect synthetic cannabinoids or cathinones:** Lorazepam +/- haloperidol (PO/IM/IV) or chlorpromazine (PO/IM) **PCP:** • Lorazepam (PO/IV/IM)
Does the patient have developmental delays or autism? *Note ASD and DD are at higher risk for delirium and medical or psych symptoms	• Refer to Behavior Plan, if available. • Attempt behavioral interventions. • Assess pain, hunger, other physical needs. • Consider visual communication tools. • Utilize sensory tools. • Ask what usually soothes child. • Ask about prior medication responses (positive or negative, especially to benzodiazepines and diphenhydramine	• Consider extra dose of patient's regular standing medication. • Note: higher risk of disinhibition with benzodiazepines and/or diphenhydramine: PO: • Hydroxyzine • Risperidone • Chlorpromazine • Olanzapine • Clonidine IM: • Chlorpromazine • Olanzapine

Continued on next page

Additional Medication Considerations Based on Etiology, page 2

Does patient have a clear psychiatric diagnosis?	• Refer to Behavior Plan, if available. • Assessment to clarify diagnosis and reason for agitation. • Use behavioral de-escalation strategies	**Agitated catatonia:** • Lorazepam (PO/IV/IM)
		Anxiety, trauma, or PTSD: • Lorazepam (PO/IV/IM) OR • Clonidine (PO), particularly if <12 years or concerned about disinhibition
		ADHD: • Clonidine (PO) • Hydroxyzine (PO/IM) • Risperidone (PO) if concerned for hypotension
		ODD or CD: • Chlorapromazine (PO/IM) • Olanzapine (PO/IM/ODT) • Risperidone (PO)
		Mania or psychosis (extremely rare under age 12): • If on standing antipsychotic consider extra dose **PO:** • Risperidone • Quetiapine **IM:** • Haloperidol and diphenhydramine OR Chlorpromazine OR Olanzapine • Consider adding lorazepam to haloperidol or chlorpromazine, but do not combine IM lorazepam with IM olanzapine

Providing Equitable Care

Pause to examine bias:

- Racial disparities are present in rates of IM medications. Please consider your own bias when assessing for agitation or aggression
- Seattle Children's data is similar to what was found in the study below
- The definition of "Pharmacologic Restraint" used in this study was administration of either IV/IM medication for acute agitation. **Note:** The definition used in this study does not align with the definition of pharmacologic restraint from CMS, who governs the use of restraints in hospital settings. Seattle Children's follows the CMS guidelines and definitions regarding pharmacologic restraint.

We all want to provide high-quality, equitable care. Visualizing inequities is the first step.

A recent study published in Pediatrics (citation below):

TABLE 3 Pharmacologic Restraint Use by Race and Ethnicity

			Stratified by Sex	
	Overall Pharmacologic Restraint Use Frequency[a]	Overall aOR[b] (95% CI)	Male aOR[c] (95% CI)	Female aOR[c] (95% CI)
Non-Hispanic Black	14.8%	Reference	Reference	Reference
Non-Hispanic white	11.1%	0.81 (0.72–0.92)	0.68 (0.59–0.77)	0.93 (0.8–1.08)
Hispanic	12.3%	0.87 (0.73–1.03)	0.89 (0.72–1.11)	0.88 (0.73–1.05)
Asian	11.6%	0.82 (0.68–0.99)	0.68 (0.47–0.98)	0.93 (0.73–1.19)
Other	9.5%	0.68 (0.57–0.82)	0.49 (0.37–0.65)	0.83 (0.68–1.01)

aOR, adjusted odds ratio; CCC, complex chronic conditions; CI, confidence interval; DSM-V, Diagnostic and Statistical Manual of Mental Disorders, fifth edition; H-RISK, Hospitalization Resource Intensity Scores for Kids.

[a] Use of pharmacologic restraint is defined as the administration of any included parenteral medication during hospitalization. Medications included benzodiazepines (lorazepam, diazepam, midazolam), barbiturates (phenobarbital, pentobarbital), antipsychotics (ziprasidone, aripiprazole, haloperidol, olanzapine, paliperidone, prochlorperazine, chlorpromazine, risperidone), antihistamines (diphenhydramine, hydroxyzine, promethazine), and other (ketamine, benztropine).

[b] Adjusted for age, sex, payer, DSM-V category, CCC, hospital disposition, and H-RISK.

[c] Adjusted for age, payer, DSM-V category, CCC, hospital disposition, and H-RISK.

Wolf, R. M., Hall, M., Williams, D. J., Antoon, J. W., Carroll, A. R., Gastineau, K. A. B., Ngo, M. L., Herndon, A., Hart, S., Bell, D. S., & Johnson, D. P. (2024). Disparities in Pharmacologic Restraint for Children Hospitalized in Mental Health Crisis. *Pediatrics*, *153*(1), e2023061353. https://doi.org/10.1542/peds.2023-061353

What is Implicit Bias?

The National Institutes of Health defines implicit bias "as a form of bias that occurs automatically and unintentionally, that nevertheless affects judgments, decisions, and behaviors." This bias impacts our interpersonal relationships with patients, families/caregivers, and colleagues and care decisions. Please keep this in mind when utilizing CSW pathways and consciously challenge your assumptions and biases.

Summary of Version Changes

- **Version 1.0 (12/28/2023):** Partial go live (Medical Management only).
- **Version 2.0 (3/27/2024):** Full pathway go live. ED, PBMU, and ED Mental Health Care and Resources pages added.
- **Version 3.0 (5/22/2024):** Changes include:
  - Incorporated an Equity Pause to consider inequity risks with supporting content
  - Added PBMU resource
  - Corrected the pathway citation link

Approval & Citation

Authored by Clinical Standard Work (CSW) Agitation and Aggression Management Pathway team for May 22, 2024, go-live
(*Denotes final approval)

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Bibliography

Literature Search Methods

A search was conducted in September 2023 to identify standard work/pathways used by peer institutions to care for children with agitation and aggression. The team also reviewed references cited by these pathways.

Literature Search Results

The review of 4 peer institution pathways resulted in the inclusion of 2 pathways. The review of the pathway bibliographies identified 8 additional records that met the inclusion criteria for our patient population.

We have included a total of 10 citations.

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Medicine is an ever-changing science. As new research and clinical experience broaden our knowledge, changes in treatment and drug therapy are required.

The authors have checked with sources believed to be reliable in their efforts to provide information that is complete and generally in accord with the standards accepted at the time of publication.

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