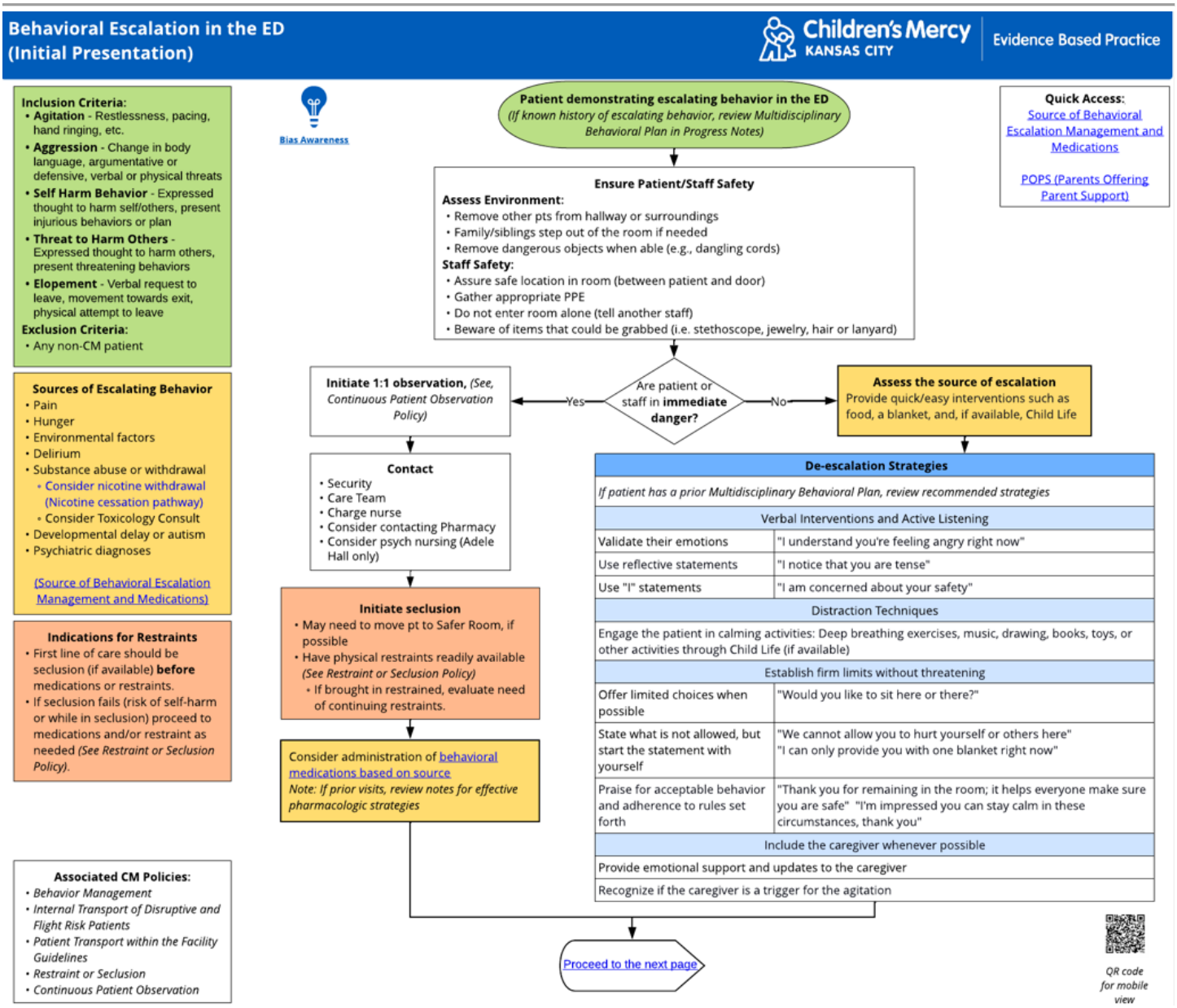
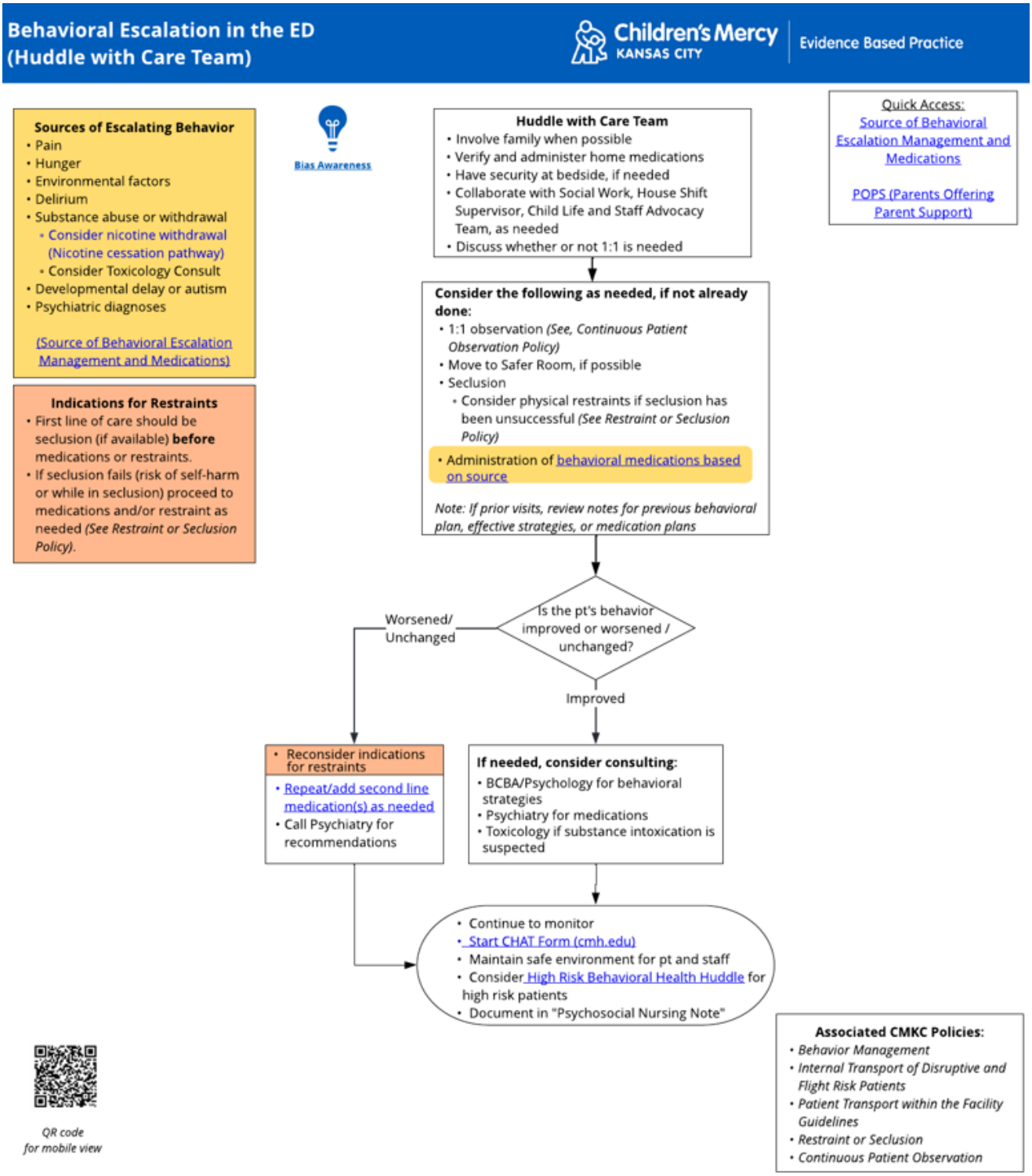
Behavioral Escalation in the ED
Clinical Pathway Synopsis



These clinical pathways do not establish a standard of care to be followed in every case. It is recognized that each case is different, and those individuals involved in providing health care are expected to use their judgment in determining what is in the best interests of the patient based on the circumstances existing at the time. It is impossible to anticipate all possible situations that may exist and to prepare a clinical pathway for each. Accordingly, these clinical pathways should guide care with the understanding that departures from them may be required at times.



Management Based on Source of Behavioral Escalation

Children's Mercy KANSAS CITY | Evidence Based Practice

Substance Intoxication or Withdrawal

- History and physical exam
- Urine toxicology

- **Unknown substance(s)**
  - Lorazepam (PO/IM/IV), consider adding haloperidol if severely agitated or hallucinating
- **PCP intoxication**
  - Lorazepam (PO/IM/IV/NGT)
- **Alcohol/BZD withdrawal or stimulant intoxication**
  - Lorazepam (PO/IM/IV/NGT), add haloperidol if severely agitated or hallucinating
- **Alcohol/BZD intoxication**
  - Haloperidol (IM/PO) or chlorpromazine (PO/IM)
- **Opiate withdrawal**
  - Clonidine and/or opiate replacement (methadone, suboxone) per hosptial protocol
  - Add symptomatic meds (ibuprofen, maalox, loperamide, ondansetron, dicyclomine) as needed
  - **Nicotine withdrawal** (link to pathway)
- **Urine toxicology negative**
  - Suspect synthetic cannabinoids or cathinones
  - Lorazepam +/- haloperidol (PO/IM/IV) or chlorpromazine (PO/IM)

Delirium

Defined by:
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

Medications for patients still severely agitated
- PO: quetiapine or risperidone or clonidine
- IM: olanzapine or chlorpromazine *
- IV: haloperidol

OR
- Lorazepam (PO/IM/IV/NGT) if there are seizure concerns or catatonia

Developmental Delay or Autism

- Note: Pts with ASD/DD are at higher risk for delirium and medical or psych symptoms

- Attempt behavioral interventions
- Assess pain, hunger, other physical needs
- Consider using visual communication tools
- Utilize sensory tools
- Ask what usually soothes child
- Ask about prior medication responses (positive or negative), especially to benzodiazepines and diphenhydramine

Medications for patients still severely agitated:
- Consider extra dose of pt's regular standing medication
- Avoid benzodiazepines due to risk for disinhibition *
- PO route preferred
- Clonidine (PO) or diphenhydramine (PO/IM) or antipsychotic (risperidone PO, chlorpromazine PO/IM or olanzapine PO/IM/ODT)

Psychiatric Diagnosis

- History to clarify diagnosis and reason for agitation
- Use behavioral deescalation strategies

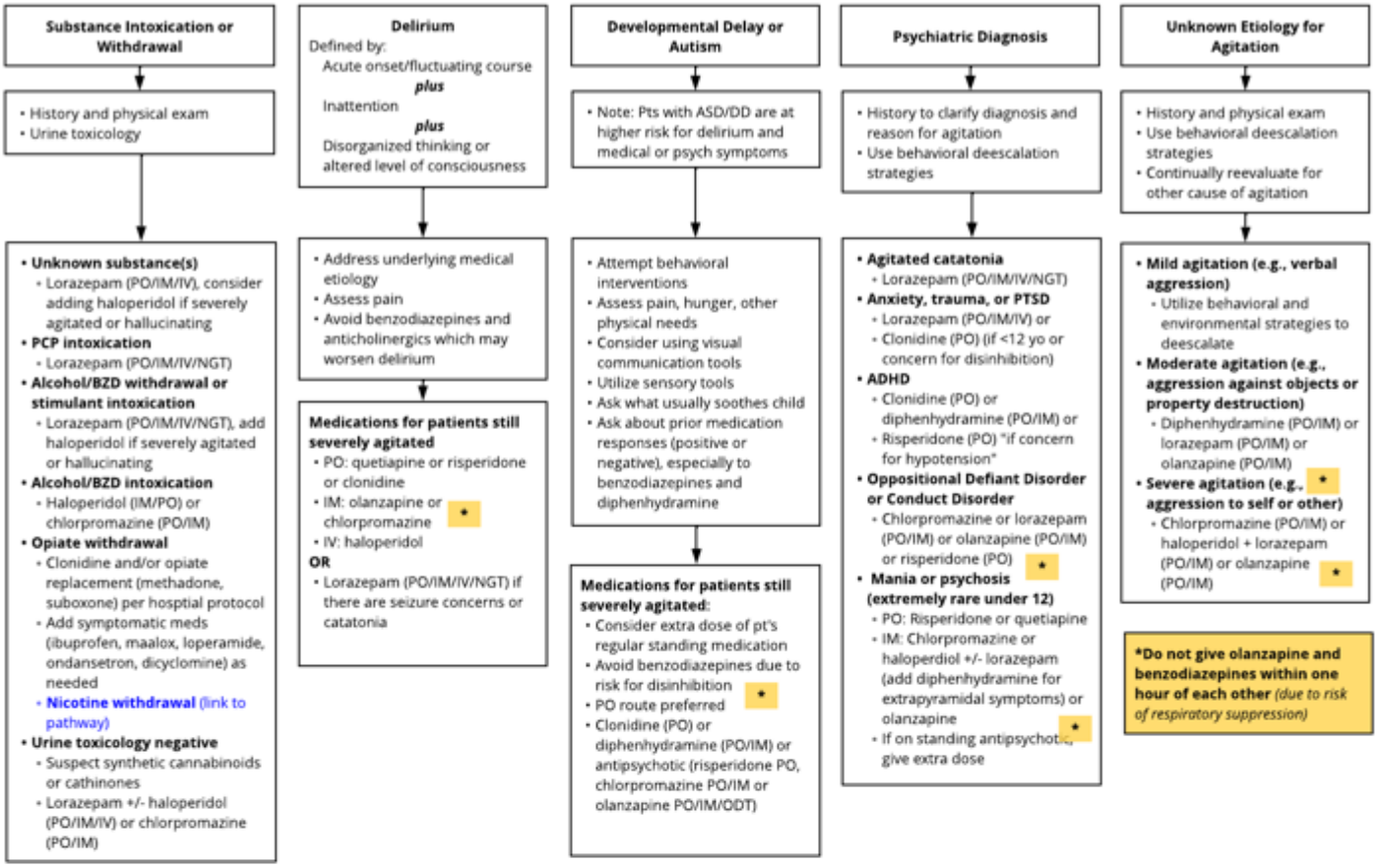
- **Agitated catatonia**
  - Lorazepam (PO/IM/IV/NGT)
- **Anxiety, trauma, or PTSD**
  - Lorazepam (PO/IM/IV) or
  - Clonidine (PO) (if <12 yo or concern for disinhibition)
- **ADHD**
  - Clonidine (PO) or diphenhydramine (PO/IM) or
  - Risperidone (PO) "if concern for hypotension"
- **Oppositional Defiant Disorder or Conduct Disorder**
  - Chlorpromazine or lorazepam (PO/IM) or olanzapine (PO/IM) or risperidone (PO) *
- **Mania or psychosis (extremely rare under 12)**
  - PO: Risperidone or quetiapine
  - IM: Chlorpromazine or haloperdiol +/- lorazepam (add diphenhydramine for extrapyramidal symptoms) or olanzapine *
  - If on standing antipsychotic, give extra dose

Unknown Etiology for Agitation

- History and physical exam
- Use behavioral deescalation strategies
- Continually reevaluate for other cause of agitation

- **Mild agitation (e.g., verbal aggression)**
  - Utilize behavioral and environmental strategies to deescalate
- **Moderate agitation (e.g., aggression against objects or property destruction)**
  - Diphenhydramine (PO/IM) or lorazepam (PO/IM) or olanzapine (PO/IM)
- **Severe agitation (e.g., aggression to self or other)**
  - Chlorpromazine (PO/IM) or haloperidol + lorazepam (PO/IM) or olanzapine (PO/IM) *

***Do not give olanzapine and benzodiazepines within one hour of each other** *(due to risk of respiratory suppression)*



Medication	Dose / Re-administration	Peak Effect	Max Daily Dose (MDD)	Onset	Redosing Frequency	Notes/monitoring
Diphenhydramine (antihistamine)	PO/IV/IM: 12.5 - 50mg (1 mg/kg/dose)	PO: 2 hours	Child: 50 - 100 mg Adolescent: 100 - 200 mg	PO: 15 - 60 min IV/IM: 15 min	Q 4 - 6 hours	Avoid in delirium. Can cause disinhibition or delirium in younger or DD youth. May cause QT prolongation.
Lorazepam (benzodiazepine)	PO/IV/IM/NGT: 0.5 mg - 2 mg (0.05 - 0.1 mg/kg/dose)	IV: 10 minutes PO/IM: 1 - 2 hours	Child: 4 mg Adolescent: 6 - 8 mg Depending on weight/prior medication exposure	PO 20 - 30 min IV 2 - 5 min IM 15 - 30 min	Q 1 - 2 hours	Can cause disinhibition or delirium in younger or DD youth. Can be given with haloperidol, chlorpromazine or risperidone. Do not give with olanzapine (especially IM due to risk of respiratory suppression).
Clonidine (alpha-2 agonist)	PO: 0.05 mg - 0.1 mg	PO: 30-60 minutes	27 - 40.5 kg: 0.2 mg/day 40.5 - 45 kg: 0.3 mg/day >45 kg: 0.4 mg/day	No reliable data	Q 8 hours	Monitor for hypotension and bradycardia. Avoid giving with BZD or atypical antipsychotic due to hypotension risk.
Chlorpromazine (antipsychotic)	PO: 12.5 - 50 mg (0.55 mg/kg/dose) IM: 0.28mg/kg (max 25mg)	PO: 30-60 minutes IM: 15 minutes	Child <5 years: 40mg/day Child ≥5 years: 75mg/day	30 - 60 min	Q 4 hours	Monitor for hypotension. Monitor for QT prolongation.
Haloperidol (antipsychotic)	PO/IM: 0.5 mg - 5 mg (0.55 mg/kg/dose)	PO: 2 hours IM: 20 minutes	15-40 kg: 6mg >40 kg: 15 mg Depending on prior antipsychotic exposure	30 - 60 min	Q 4 hours	Monitor for hypotension. Consider EKG or cardiac monitoring for QT prolongation, especially for IV administration. Note: Risk of extrapyramidal side effects (EPS) with MDD >3mg/day, with IV dosing having very high EPS risk. Consider pairing with diphenhydramine to reduce risk of EPS (if not concerned for QT prolongation)
Olanzapine (atypical antipsychotic)	PO/ODT or IM: 2.5 - 10 mg	PO: 5 hours (range 1-8 hours) IM: 15-45 minutes	10 - 20 mg Depending on antipsychotic exposure	15 min	Q 2 hours	Do not give with or within 1 hour of any BZD given risk for respiratory suppression.
Risperidone (atypical antipsychotic)	PO/ODT: 0.25 - 1mg (0.005-0.01mg/kg/dose)	PO: 1 hour	Child: 1 - 2 mg Adolescent: 2 - 3 mg Depending on antipsychotic exposure	60 - 70 min	Q 0.5 - 2 hours	Can cause akathisia (restlessness/agitation) in higher doses.
Quetiapine (atypical antipsychotic)	PO: 25 - 50 mg (1-1.5 mg/kg/dose or divided)	PO: 30 minutes-2 hours	>10 years: 600 mg Depending on prior antipsychotic exposure	No reliable data	Q 12 hours	More sedating at lower doses. Monitor for hypotension.

Table of Contents

Objective of Clinical Pathway

The objective of the Behavioral Escalation in the ED Clinical Pathway is to provide a structured, evidence-based approach to managing children and adolescents who exhibit challenging or aggressive behaviors. These pathways are designed to ensure that healthcare providers follow consistent, safe, and effective de-escalation, diagnosis, and treatment strategies while promoting a compassionate, patient-centered environment.

Background

Pediatric behavioral escalation presents significant challenges in the emergency department (ED) (Saidinejad et al., 2023). Behavioral crises in children, marked by aggressive or disruptive actions, are becoming more common as mental health-related visits to the ED increase (Radhakrishnan, 2022). A substantial proportion of healthcare staff, particularly emergency nurses, have experienced incidents of verbal or physical abuse in these situations (Benning et al., 2024). In pediatric cases, mental health visits frequently escalate to a point of requiring interventions such as physical restraints, with 6% to 10% of these cases involving such measures (Gerson et al., 2019). Implementing effective management strategies, including prevention, early identification of escalation, verbal de-escalation techniques, and timely behavioral interventions, are critical to maintaining a safe environment for patients and staff (Gerson et al., 2019).

Target Users

- Physicians (Emergency Medicine, Fellows, Resident Physicians)
- Nurse Practitioners
- Nurses
- Social Work
- Care Assistance

Target Population

Inclusion Criteria

- Patients presenting or developing the following behaviors
    - **Aggression** - Change in body language, argumentative or defensive, verbal or physical escalation
    - **Elopement** - Verbal request to leave, movement towards exit, physical attempt to leave
    - **Self-Harm Behavior** - Expressed thought to harm self/others, present injurious behaviors or plan, intent during care
    - **Threat to Harm Others** - Expressed thought to harm others, present plan or intent during care

Exclusion Criteria

- Any non-Children's Mercy Kansas City patients
    - Including parents and family members

Practice Recommendations

Please refer to the American Association for Emergency Psychiatry's Best Practices for Evaluation and Treatment of Agitated Children and Adolescents (BETA) for full practice recommendations, evaluation, and treatment recommendations (Gerson et al., 2019).

Additional Questions Posed by the Clinical Pathway Committee

No additional clinical questions beyond the scope of Emergency Psychiatry's consensus statement were posed for this review.

Updates from Previous Versions of the Clinical Pathway

- Renamed pathway from "Aggressive Patient in ED" to "Behavioral Escalation in the ED"
- Broadened scope to include not only aggression, but also concern for self-harm or elopement
- Removed the Behavioral Health Observation Tool and instead incorporated key points into the pathway itself
- Recategorized level of aggression from mild/moderate/severe to immediate risk versus potential risk
- Added recommendations for keeping the patient care environment safe for patients and medical team members

- Highlighted behavioral strategies for de-escalation
- Added the use of seclusion as a recommended intervention
- Recommend pharmacologic treatment based on source of behavioral escalation
- Expanded medication table, including dose, route, time of onset, and time of peak effect

Recommendation Specific for Children's Mercy

Children's Mercy adopted the majority of the practice recommendations made by American Association for Emergency Psychiatry's Best Practices for Evaluation and Treatment of Agitated Children and Adolescents (BETA) for full practice recommendations, evaluation, and treatment recommendations (Gerson et al., 2019).

Variations/Additions include: No deviations were made from the practice recommendation paper, but logistical processes specific to Children's Mercy were added.

Measures

- Use of the Behavioral Escalation Clinical Pathway

Value Implication

- Improved safety of patients
- Improved safety of medical team members
- Decreased need for physical restraints
- Decreased unwarranted variation in care

Organizational Barriers and Facilitators

Potential Barriers

- Variability in training in de-escalation strategies by medical team members
- Variability in resources based on location (availability of Safe Rooms)

Potential Facilitators

- Collaborative engagement across care continuum settings during clinical pathway development
- High rate of use of clinical pathways

Diversity/Equity/Inclusion

Our aim is to provide equitable care. These issues were discussed with the Committee, reviewed in the literature, and discussed prior to making any practice recommendations.

Associated Policies

- Behavior Management
- Internal Transport of Disruptive and Flight Risk Patients
- Patient Transport within the Facility Guidelines
- Restraint or Seclusion
- Continuous Patient Observation

Clinical Pathway Preparation

This pathway was prepared by the Evidence Based Practice (EBP) Department in collaboration with the Behavioral Escalation Clinical Pathway Committee composed of content experts at Children's Mercy Kansas City. If a conflict of interest is identified, the conflict will be disclosed next to the committee member's name.

Clinical Pathway Committee Members and Representation

- John Graham, MD | Emergency Department | Committee Chair
- Dani Wentzel, DO | Developmental and Behavioral Health | Committee Chair
- Christopher Kennedy, MD | Emergency Department | Committee Member
- Brandi Missel, ARNP | Emergency Department | Committee Member
- Alec Bernstein, PhD, BCBA-D, LBA | Developmental and Behavioral Health | Committee Member
- Ibad Siddiqi, PharmD | Pharmacy | Committee Member

- Emily Snow, LMSW, MHSA | Developmental and Behavioral Health | Committee Member
- Philip Lawler, MBA, CPP | Security/Transportation | Committee Member
- Katie Stangler, MSN, APRN, CPNP, CCRN | Emergency and Trauma Services | Committee Member
- Tanis Stewart, MSN, RN, FNP-BC, CPN | Kansas Emergency Department | Committee Member
- Erin Bass, LCSW, LSCSW | Social Work | Committee Member
- Kathryn Worland, MSW, LCSW, LSCSW | Social Work | Committee Member
- Kourtney Frederes, RN | Emergency Department | Committee Member
- Holly Reid, RN | Emergency Department | Committee Member
- Michele Smith, CNA | Emergency Department | Committee Member
- Sarah Nienhaus, MSN, RN, CPEN | Emergency Department | Committee Member
- Viktoriya Stoycheva, MHA, BSN, RN, CPN | Emergency Department | Committee Member

EBP Committee Members

- Kathleen Berg, MD, FAAP | Hospitalist, Evidence Based Practice
- Jarrod Dusin, MS, RD, LD, CPHQ | Evidence Based Practice

Clinical Pathway Development Funding

The development of this clinical pathway was underwritten by the following departments/divisions: Evidence Based Practice, Emergency Department, Developmental and Behavioral Health, and Social Work.

Conflict of Interest

The contributors to the Behavioral Escalation Clinical Pathway have no conflicts of interest to disclose related to the subject matter or materials discussed.

Approval Process

- This pathway was reviewed and approved by the Behavioral Escalation in the ED Clinical Pathway Committee, Content Expert Departments/Divisions, and the EBP Department; after which they were approved by the Medical Executive Committee.
- Pathways are reviewed and updated as necessary every 3 years within the EBP Department at CMKC. Content expert teams are involved with every review and update.

Review Requested

Department/Unit	Date Obtained
Emergency Department	February 2025
Developmental and Behavioral Health	October 2024
Security and Transportation	October 2024
Evidence Based Practice	October 2024
Pharmacy	October 2024
Social Work	October 2024

Version History

Date	Comments
7/23/2021	Version one – The pathway was developed to manage aggressive patients in the ED using a behavioral health observation tool (BHOT).
3/2025	Version two – Renamed from aggressive patients in the ED, BHOT removed, scope of patients expanded, treatment based on source of behavior, medication table expanded.

Date for Next Review

- March 2028

Implementation & Follow-Up

- Education was provided to all stakeholders:

Nursing units where the clinical pathway is used
Providers from the Emergency Department and Developmental and Behavioral Health

- Additional institution-wide announcements were made via email, hospital website, and relevant huddles.

Disclaimer

When evidence is lacking or inconclusive, options in care are provided in the supporting documents and the power plan(s) that accompany the clinical pathway.

These clinical pathways do not establish a standard of care to be followed in every case. It is recognized that each case is different, and those individuals involved in providing health care are expected to use their judgment in determining what is in the best interests of the patient based on the circumstances existing at the time.

It is impossible to anticipate all possible situations that may exist and to prepare clinical pathways for each. Accordingly, these clinical pathways should guide care with the understanding that departures from them may be required at times.

References

Benning, L., Teepe, G. W., Kleinekort, J., Thoma, J., Röttger, M. C., Prunotto, A., ... & Hans, F. P. (2024). Workplace violence against healthcare workers in the emergency department—a 10-year retrospective single-center cohort study. *Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine*, *32*(1), 88.

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