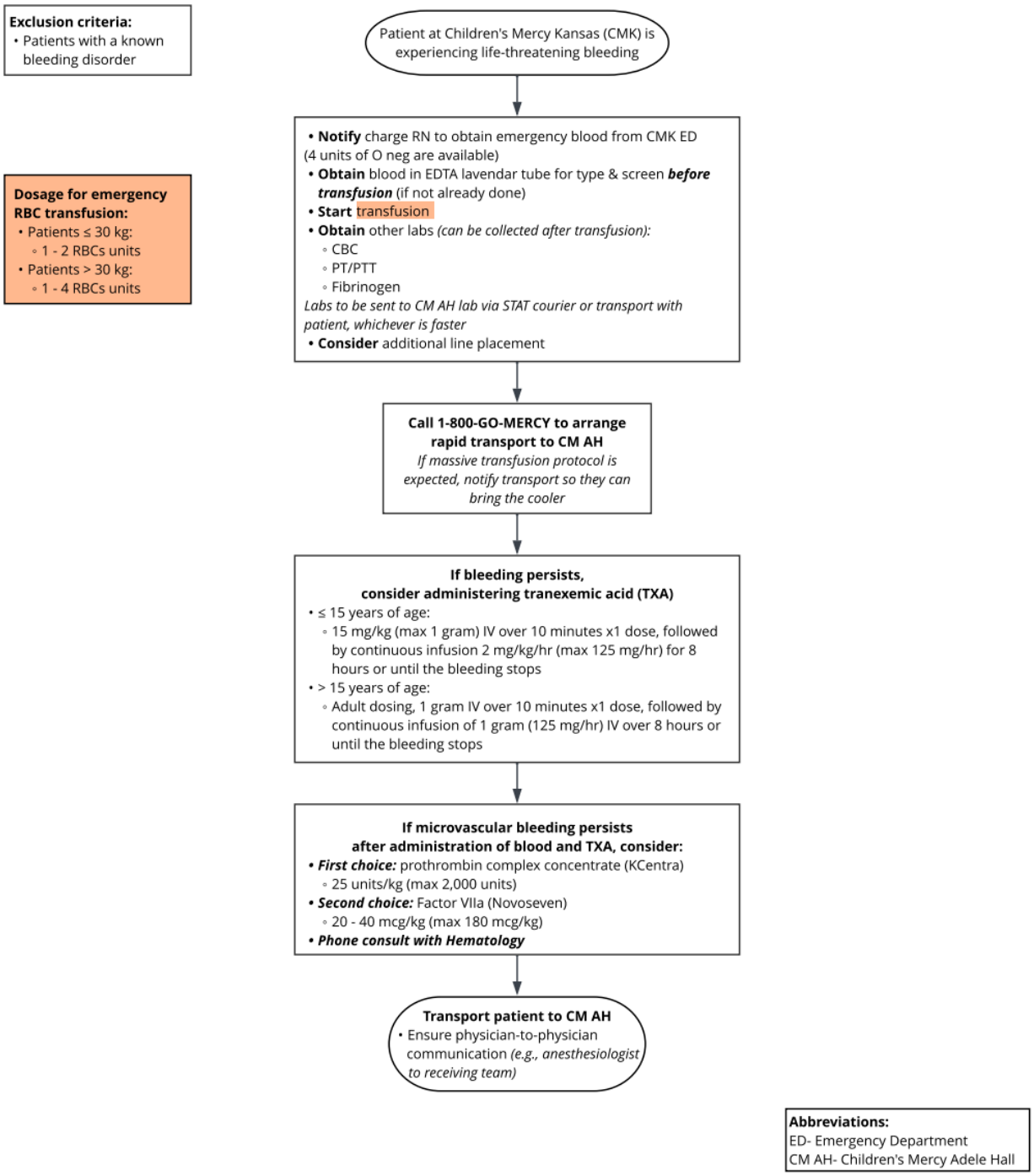
Bleeding (Life-Threatening): Children's Mercy Kansas Clinical Pathway Synopsis

Bleeding (Life-Threatening): Children's Mercy Kansas Algorithm



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.

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Objective of Clinical Pathway

To provide care standards for patients experiencing life-threatening bleeding at Children's Mercy Kansas (CMK). The aim of this pathway is to provide guidance for transfusion, administration of hemostatic agents, and transport of the patient to Children's Mercy Adele Hall (AH).

Background

Uncontrolled bleeding in pediatric patients may lead to hypovolemic shock, coagulopathy, and multi-organ failure, increasing the risk of morbidity and mortality (Gruen et al., 2023). In the event of life-threatening bleeding occurring at CMK, the immediate priority is patient stabilization through transfusion, administration of hemostatic medications, and expedited transfer to Children's Mercy Adele Hall. This pathway outlines the steps for transfusion, laboratory testing, transport coordination, hematology consultation, and targeted administration of antifibrinolytics or coagulation factors to manage persistent bleeding.

Target Users

- Physicians (Anesthesiology, Surgery, Emergency Medicine)
- Advanced Practice Providers
- Nurses
- Pharmacists

Target Population

Inclusion Criteria

- Patients experiencing life-threatening bleeding at CMK

Exclusion Criteria

- Patients with a known bleeding disorder

Practice Recommendations

In lieu of a clinical practice guideline fully addressing the management of life-threatening bleeding in pediatric and adolescent patients, guidance from pediatric literature was used in conjunction with the expert consensus of the Clinical Pathway Committee to inform the assessment, acute management, and referral guidance in this pathway.

Additional Questions Posed by the Clinical Pathway Committee

No additional clinical questions were posed for this review.

Measures

- Access of the clinical pathway (website hits)

Value Implications

The following improvements may increase value by reducing healthcare costs and non-monetary costs (e.g., missed school/work, loss of wages, stress) for patients and families and reducing costs and resource utilization for healthcare facilities.

- Decreased risk of adverse outcomes
- Decreased unwarranted variation in care

Organizational Barriers and Facilitators

Potential Barriers

- Variability in experience among clinicians
- Need for effective communication and coordination among clinicians and specialties

Potential Facilitators

- Collaborative engagement across the continuum of clinical care settings and healthcare disciplines during clinical pathway development
- Anticipated high rate of use of the clinical pathway

Bias Awareness

Our goal is to recognize the social determinants of health and minimize healthcare disparities, while acknowledging that our unconscious biases can contribute to these disparities.

Associated Policies

There are no policies associated with this pathway.

Educational Materials

There are no educational materials associated with this pathway.

Clinical Pathway Preparation

This pathway was prepared by the EBP Department in collaboration with the Bleeding (Life-Threatening): CMK 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.

Bleeding (Life-Threatening): CMK Clinical Pathway Committee Members and Representation

- Nichole Doyle, MD, FASA, FAAP | Anesthesiology | Committee Chair
- Lauren Amos, MD, MS | Hematology/Oncology/BMT | Committee Member
- Molly Camis, PharmD, MSHA, BCPS | Pharmacy | Committee Member
- Shannon Carpenter, MD, MS | Hematology/Oncology/BMT | Committee Member
- Carrie Clarke, MD | Anesthesiology | Committee Member
- Jennifer Flint, MD | Critical Care Transport | Committee Member
- Lejla Music Aplenc, MD | Pathology and Laboratory Medicine | Committee Member
- John David Nolen, MD, PhD | Pathology and Laboratory Medicine | Committee Member
- Murari Vasudevan, MD | Anesthesiology | Committee Member

EBP Committee Members

- Todd Glenski, MD, MSHA, FASA | Anesthesiology, Evidence Based Practice
- Megan Gripka, MPH, MLS (ASCP) SM | Evidence Based Practice

Clinical Pathway Development Funding

The development of this clinical pathway was underwritten by the following departments/divisions: Anesthesiology, Hematology, Pathology & Laboratory Medicine, Pharmacy, Critical Care Transport, and Evidence Based Practice.

Conflict of Interest

The contributors to the Bleeding (Life-Threatening): CMK 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 EBP Department and the Bleeding (Life-Threatening): CMK Committee after committee members garnered feedback from their respective divisions/departments. It was then approved by the Medical Executive Committee.

Review Requested

Department/Unit	Date Requested
Anesthesiology	November 2025
Hematology	November 2025
Pathology and Laboratory Medicine	November 2025
Pharmacy	November 2025
Critical Care Transport	November 2025
Evidence Based Practice	November 2025

Version History

Date	Comments
December 2025	Version one – algorithm development

Date for Next Review

- 2028

Implementation & Follow-Up

- Once approved, the pathway was implemented and presented to the appropriate care teams:
  - Announcements made to relevant departments
  - Additional institution-wide announcements were made via the hospital website and relevant huddles
- Pathways are reviewed every 3 years (or sooner) and updated as necessary within the EBP Department at CMKC. Pathway committees are involved with every review and update.

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 to determine 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.

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