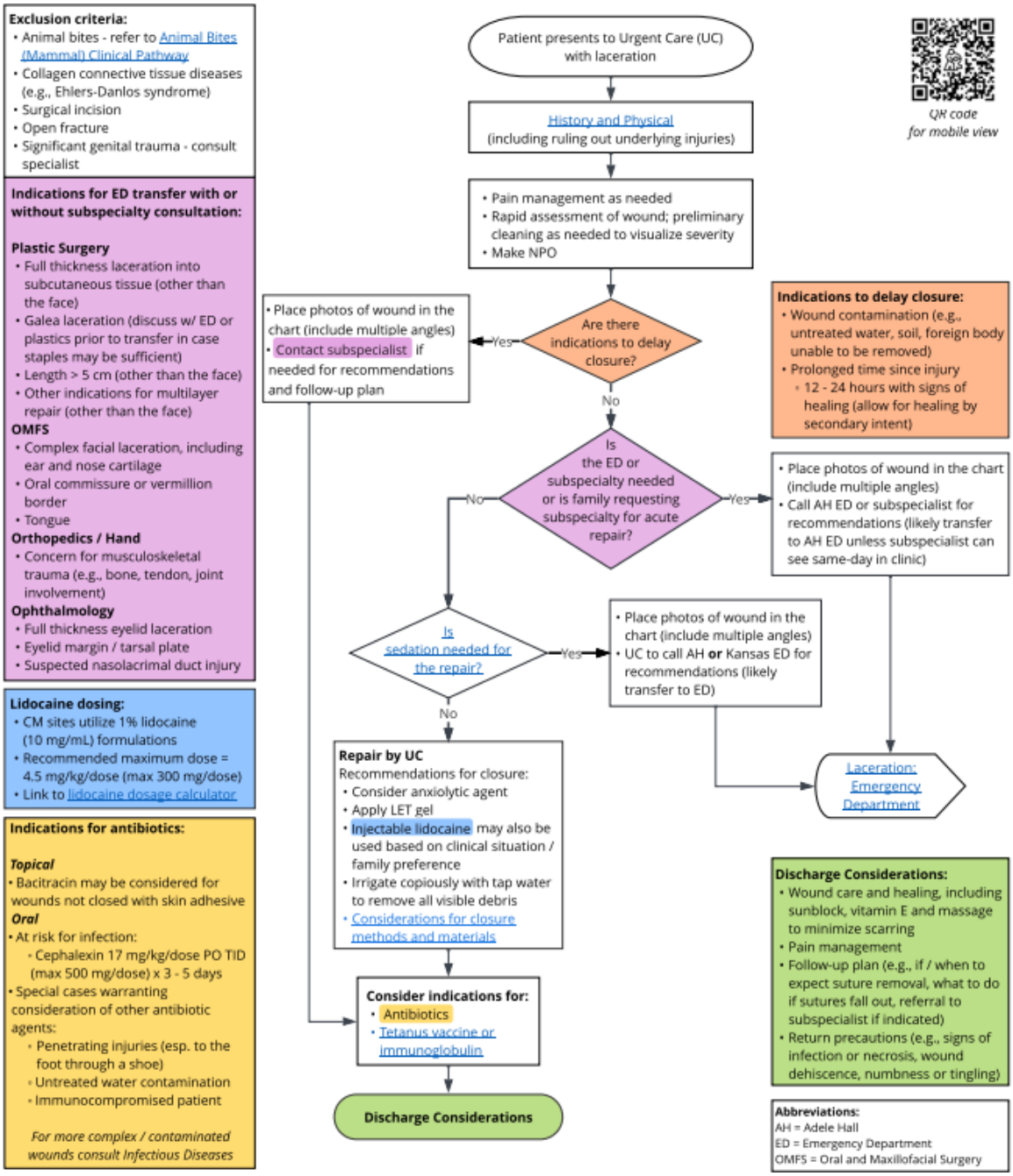
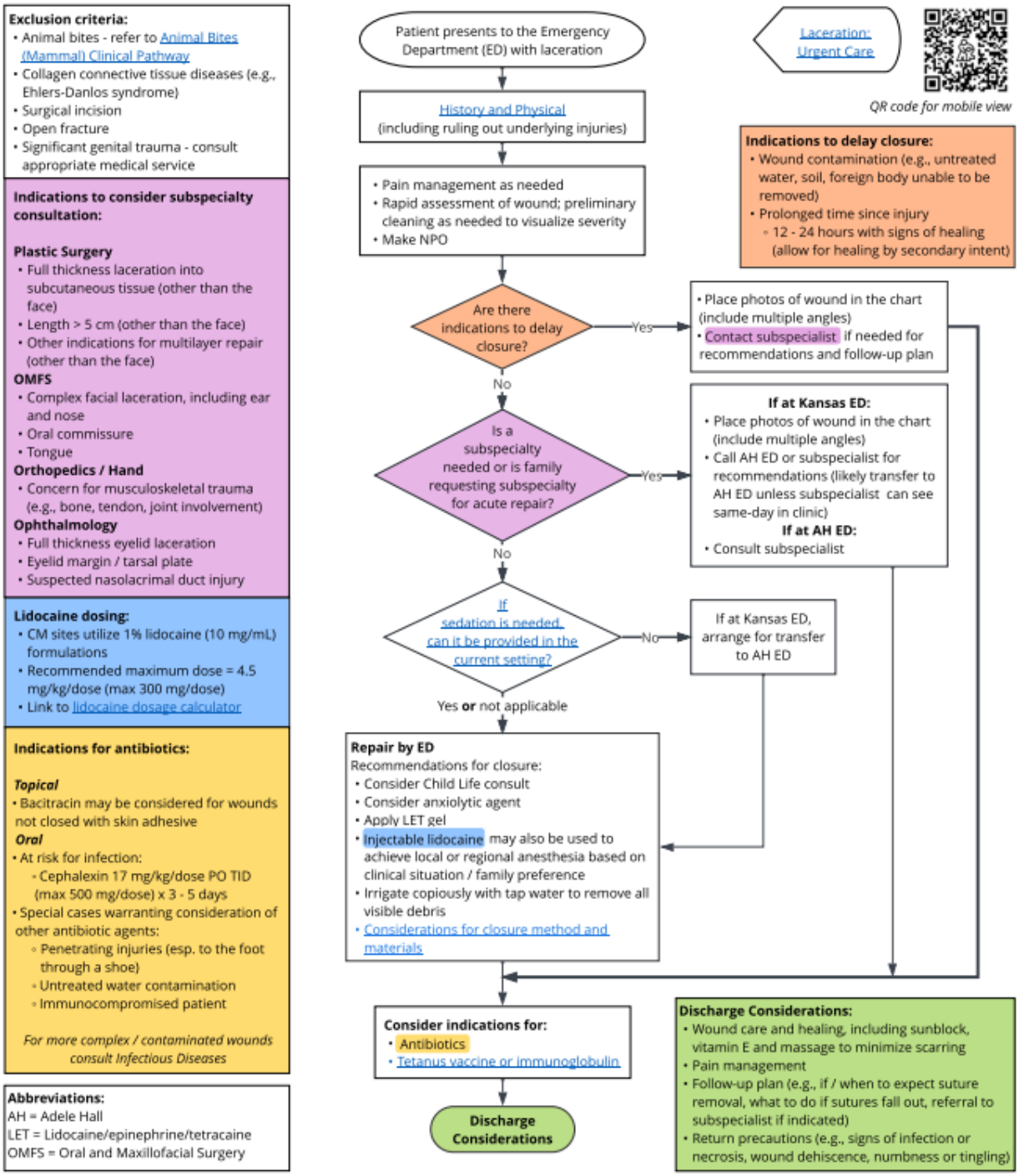
Laceration
Clinical Pathway Synopsis

Laceration: Urgent Care 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.

Laceration: Emergency Department Algorithm



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Objective of Clinical Pathway

To provide care standards for the patient presenting with an acute laceration, including guidance for closure and when to refer for emergency department (ED) or subspecialist repair (e.g., plastic surgery, oral maxillofacial surgery, orthopedics, ophthalmology).

Background

Lacerations are a common pediatric injury, accounting for millions of healthcare visits each year (Forsch et al., 2017). These types of injuries vary considerably in their mechanism, depth and location, involvement of nearby structures, contamination risk, and time since occurrence (Silverberg et al., 2022). Depending on the comfort level and experience of practitioners in acute care settings, patients may be subject to variations in care related to the type and timing of repair, materials used, and indications for referral.

Due to the nuanced nature of both the injury and type of repair, the Laceration Clinical Pathway was developed to assist medical staff in discerning which types of repairs are indicated in which care settings as well as recommend approaches to optimize patient comfort, wound healing, cosmetic outcomes, infection prevention, and resource utilization.

Target Users

- Physicians (Emergency Medicine, Urgent Care, Primary Care, Ambulatory Clinics, Fellows, Residents)
- Advanced Practice Providers
- Nurses

Target Population

Exclusion Criteria

- Animal bites - refer to Animal Bites (Mammal) Clinical Pathway
- Collagen connective tissue diseases (e.g., Ehlers-Danlos syndrome)
- Surgical incisions
- Open fracture
- Significant genital trauma - consult specialist

Practice Recommendations

Practice recommendations in this clinical pathway are based on consensus among providers with knowledge of the existing evidence and expertise in the evaluation, treatment, and monitoring of pediatric patients with acute lacerations.

Additional Questions Posed by the Clinical Pathway Committee

No clinical questions were posed for this review.

Measures

- Access of 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 as well as reducing costs and resource utilization for healthcare facilities.

- Decreased unwarranted variation in care
- Decreased frequency of transfer, when appropriate
- Timely consultation with or referral to subspecialist, when appropriate

Organizational Barriers and Facilitators

Potential Barriers

- Variability in experience among clinicians
- Variability in acceptable level of risk among providers

- Difficulty with follow-up faced by some families

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 aim is to recognize social determinants of health and minimize healthcare disparities, acknowledging that our unconscious biases can contribute to these inequities

Associated Policies

- Topical LET (Lidocaine, Epinephrine, Tetracaine) Gel for Simple Lacerations Standing Order
- Skills: Wound Cleaning and Irrigation of Traumatic Wounds (Pediatric)

Clinical Pathway Preparation

This pathway was prepared by the Evidence Based Practice (EBP) Department in collaboration with the Laceration Clinical Pathway Committee, composed of content experts at Children's Mercy Kansas City.

Laceration Clinical Pathway Committee Members and Representation

- James Garner, MD | Urgent Care | Committee Chair
- Ayman Abdul-Rauf, MD, FAAP | Emergency Department | Committee Member
- Rohan Akhouri, MD, MPH, MS | Emergency Department | Committee Member
- Ali Fowler, MD | Emergency Department, Fellow | Committee Member
- Shao Jiang, MD | Plastic and Reconstructive Surgery | Committee Member

EBP Committee Members

- Kathleen Berg, MD, FAAP | Evidence Based Practice
- Kori Hess, PharmD | Evidence Based Practice

Clinical Pathway Development Funding

The development of this clinical pathway was underwritten by the following departments/divisions: Emergency Medicine, Evidence Based Practice, Plastic and Reconstructive Surgery, and Urgent Care.

Conflict of Interest

The contributors to the Laceration: Acute Management 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 Laceration: Acute Management 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 Obtained
Emergency Medicine	November 2025
Plastic Surgery	November 2025
Urgent Care	November 2025
Evidence Based Practice	November 2025

Version History

Date	Comments

November 2025	Version one – (development of algorithm, synopsis, and corresponding supporting documents)

Date for Next Review

- October 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
  - Community clinics affiliated with Children's Mercy received announcements via "Progress Notes"
- Care measurements may be assessed and shared with appropriate care teams to determine if changes need to occur.
- 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.

References

Forsch, R. T., Little, S. H., & Williams, C. (2017). Laceration Repair: A Practical Approach. *Am Fam Physician*, *95*(10), 628-636.

Silverberg, B., Moyers, A., Wainblat, B. I., Cashio, P., & Bernstein, K. (2022). A Stitch in Time: Operative and Nonoperative Laceration Repair Techniques. *Prim Care*, *49*(1), 23-38. https://doi.org/10.1016/j.pop.2021.10.008

Skills: Wound Cleaning and Irrigation of Traumatic Wounds (Pediatric), (August 2025), *Patient Care Policies – Elsevier Performance Manager.* Children's Mercy Hospital, Kansas City, Missouri.

Topical LET (Lidocaine, Epinephrine, Tetracaine) Gel for Simple Lacerations Standing Order (February 2024), *Patient Care / Standing Orders Manual.* Children's Mercy Hospital, Kansas City, Missouri.