

# Evidence-Based Development of Clinical Care Pathways for Pediatric Surgery Patients

## Assess Need for Change

- Pediatric surgery patients are cared for by multiple teams including surgeons, **nurses**, and other subspecialists
- There is a **lack of clarity** in management of common surgical conditions for **nurses** who strive to provide excellent patient care
- It would be useful to have **guidelines** that **streamline communication**, minimize avoidable complications, and **standardize patient care**

## Benefits of clinical care pathways<sup>2,3</sup>



Shorten hospital stay



Standardize and improve patient care



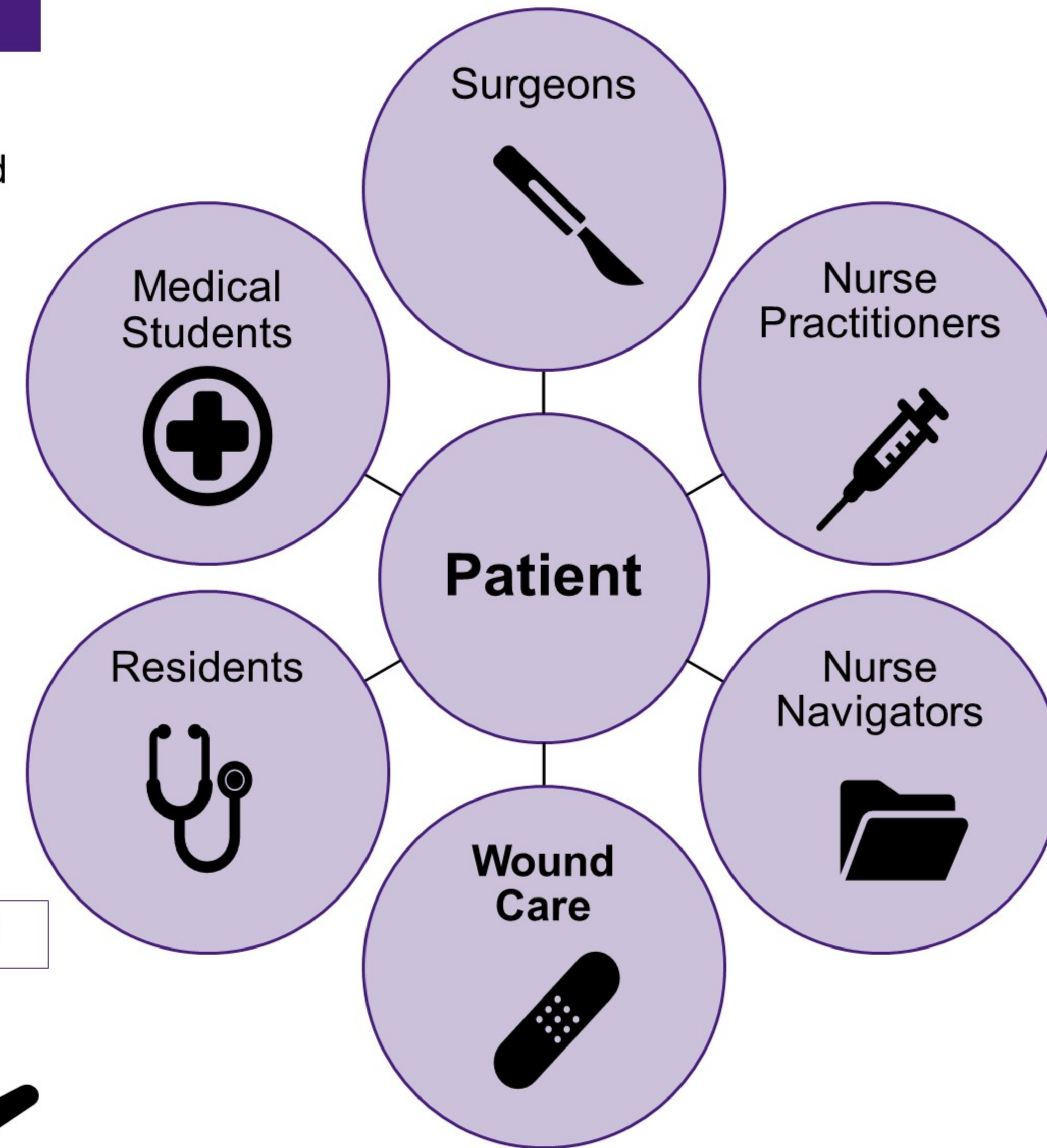
Enhance communication



Educational resources



Efficient use of healthcare resources



## Gather Evidence

- **Discrepancies in management** lead to **suboptimal outcomes**<sup>4,5,8</sup>
- **Fewer evidence-based guidelines** available for pediatric conditions<sup>1,7</sup>
- The **American Pediatric Surgical Association** has **quicksheets** for select conditions, yet these are **not up-to-date, easily accessible, or visually appealing**<sup>6</sup>

## Translate into Practice

The **Clinical Care Pathways** packet was created by the pediatric surgery team at Children's Hospital in New Orleans and distributed to nursing stations:

- Descriptions of **surgery team members**
- Pathways for the **most common pediatric surgery conditions** (9)
- **Visual aids** for common medical equipment and complex procedures

**6**

**ACUTE APPENDICITIS**

**Classic Presentation and Etiology:**  
Appendicitis is caused by the obstruction of appendiceal lumen by stool or lymphoid hyperplasia

**Symptoms** can include anorexia, migrating pain from periumbilical to right lower quadrant, nausea, vomiting, general malaise, and sometimes fever and diarrhea

**Pre-Operative Management:**

- Initial work up in ED/OSH can include labs (CBC) and imaging (US, sometimes CT)
- Keep NPO for surgery due to peritonitis
- IV antibiotics - Zosyn (ciproflaxyl if PCN allergy)
- IV fluids
- Make sure patient has a CHG wipe down and is changed into a gown with undergarments off, and has urinated before going to OR

**Post-Operative Course:**

**NON-PERFORATED APPENDICITIS:**

- Regular diet
- Stop antibiotics/IV fluids
- Ambulate
- Likely discharge POD 0 or 1

**PERFORATED APPENDICITIS:**

- Can have regular diet as tolerated
- Continue IV antibiotics
- Ambulate
- Can stay in hospital for 2-10 days
- If still not well, imaging (ultrasound or CT) done at around 7 days to evaluate for abscess
  - o May require drain placement by Interventional Radiology

**Discharge Criteria**

- Discharge criteria: afebrile, tolerate diet, improved pain, no diarrhea

## Evaluate and Maintain

- A **short survey** was dispersed to surgical floor nurses
- Assessed strengths, weaknesses and overall satisfaction with these guidelines

**100%**

of respondents (n=5) *strongly agree* these guidelines clarify post-surgical care expectations

**100%**

of respondents (n=5) *strongly agree* they will utilize these guidelines in future practice

## Future work

- Continue collecting survey data
- Expand pathways to multidisciplinary teams
- Evaluate associations with patient outcomes

## References

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- <sup>3</sup>Fatemi Y, et al. Clinical pathways and diagnostic reasoning: A qualitative study of pediatric residents' and hospitalists' perceptions. J Hosp Med. 2023;18(2):139-146. doi:10.1002/jhm.13010
- <sup>4</sup>Landrigan CP, et al. Variation in pediatric hospitalists' use of proven and unproven therapies: A study from the Pediatric Research in Inpatient Settings (PRIS) network. J Hosp Med. 2008;3(4):292-298. doi:10.1002/jhm.347
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