

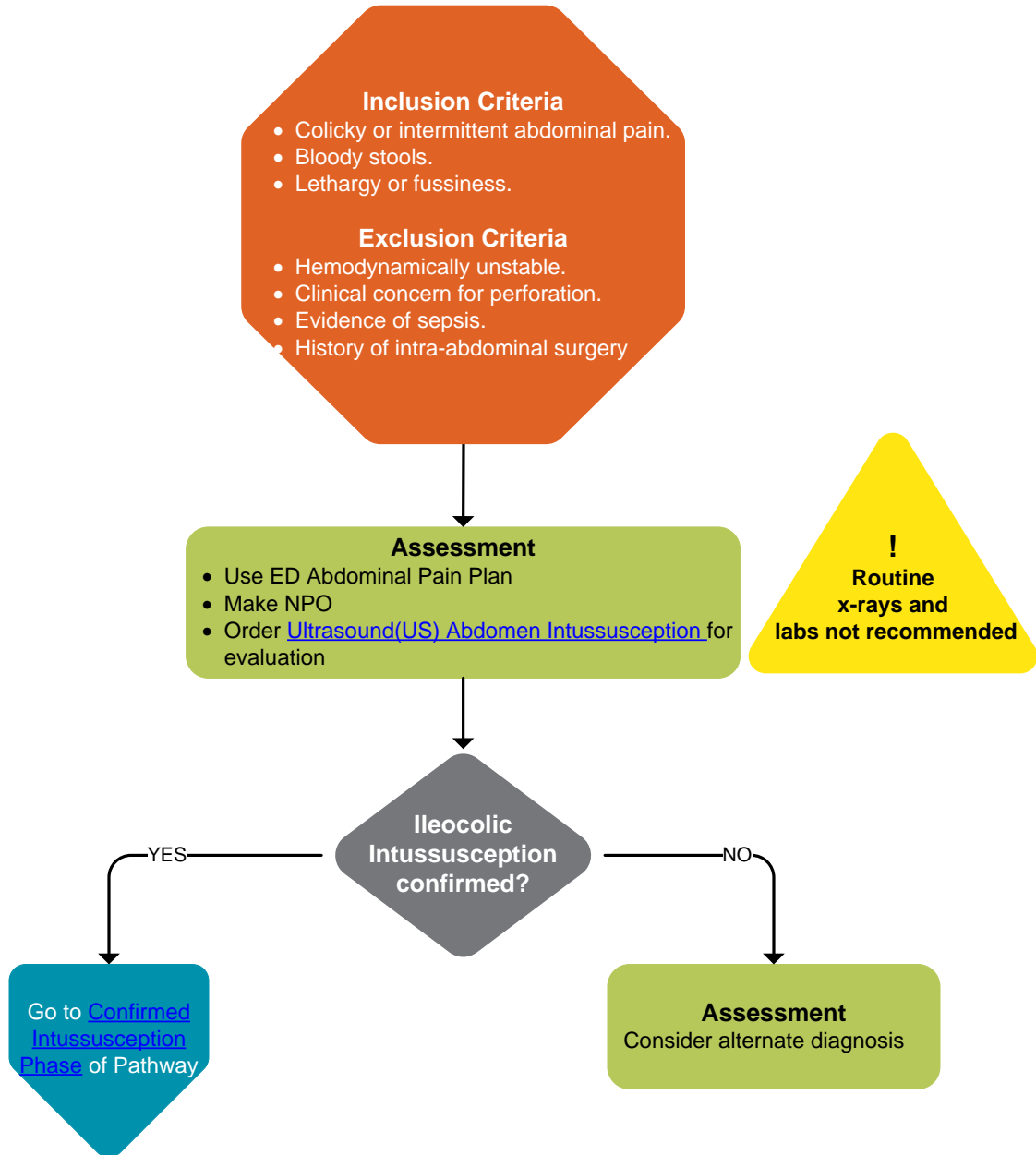
# ED Intussusception: Diagnosis Phase, version 1.0

[Approval & Citation](#)

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## ED Intussusception: Diagnosis Phase – Clinical concern for Intussusception



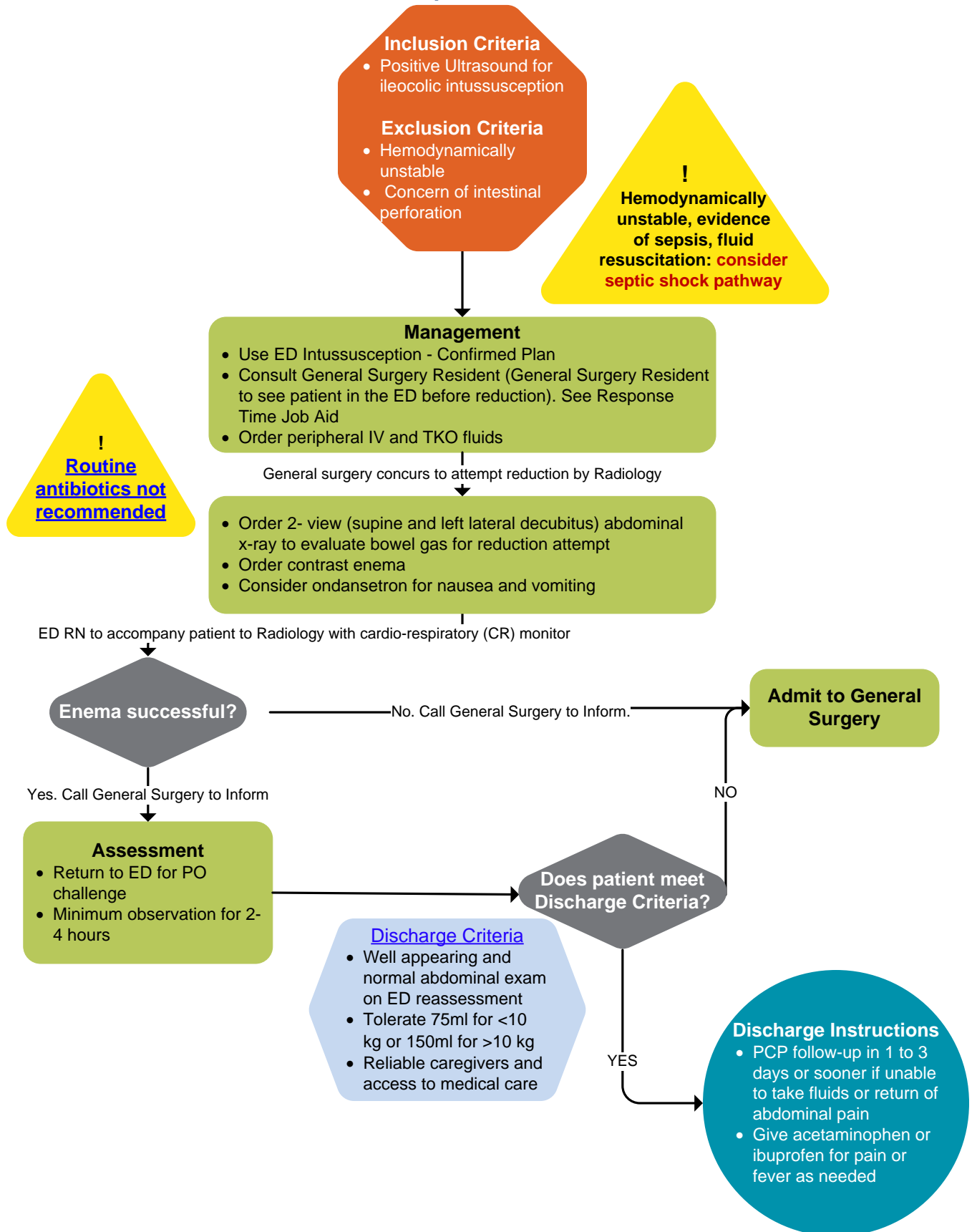
# ED Intussusception: Confirmed Phase, version 1.0

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## ED Intussusception: Confirmed Phase



# Diagnostic Imaging

## Recommendations

- Order ultrasound for the diagnostic evaluation of intussusception.
- Do not order x-ray for diagnostic evaluation for the concern of intussusception for patients who are hemodynamically stable with non-acute abdomen.
- If concern for perforation in patients who are hemodynamically unstable and/or with peritoneal signs, consult surgery and order 3-view abdominal radiographs (supine, lateral and left lateral decubitus).

## Evidence

- A systematic review by Broomfield (2008) reported a low sensitivity (36-90%) and specificity rate (45-90%) for diagnostic plain abdominal x-ray. GRADE: ★★○○
- A published Japanese guideline (Ito, 2012) reports that abdominal radiographs are not helpful in diagnosing intussusception but may be useful to detect free air.

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# Empiric Antibiotics

## Recommendations

- Antibiotics are not recommended for routine treatment of intussusception in a patient who is hemodynamically stable and without peritoneal signs.
- See sepsis pathway if concern for sepsis.

## Evidence

- Cohort study by Al-Tokhais (2012) found no difference in incidence of fever, length of stay, time to oral intake comparing a hospital with routine antibiotic use to one without. GRADE: ★○○○
- 12-18% of patients will have post-reduction fevers whether or not antibiotics are given.

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# Disposition

## Recommendations

- After successful reduction, hemodynamically stable patients, without peritoneal signs and with access to medical care may be discharged home after successfully tolerating oral rehydration.
- Admit patients to general surgery after successful reduction if unable to tolerate oral intake or have no reliable follow-up.
- Admit patients to general surgery if first attempt at reduction is unsuccessful or a complication occurs.

## Evidence

A meta-analysis by Gray et al (2014) found recurrence rates of intussusception reduced by air enema of 2.2% (95% CI: 0.7-6.5%) at 24 hours and 2.7% (95% CI: 1.2-6.5%) at 48 hours. GRADE: ★★○○

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# ED Intussusception Approval & Citation

Approved by the CSW ED Intussusception Team for October 10, 2016

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Emergency Medicine, Stakeholder  
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Radiology, Stakeholders

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**Retrieval Website:** <http://www.seattlechildrens.org/pdf/ed-intussusception-pathway.pdf>

## Please cite as:

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# Evidence Ratings

This pathway was developed through local consensus based on published evidence and expert opinion as part of Clinical Standard Work at Seattle Children's. Pathway teams include representatives from Medical, Subspecialty, and/or Surgical Services, Nursing, Pharmacy, Clinical Effectiveness, and other services as appropriate.

When possible, we used the GRADE method of rating evidence quality. Evidence is first assessed as to whether it is from randomized trial or cohort studies. The rating is then adjusted in the following manner (from: Guyatt G et al. J Clin Epidemiol. 2011;4:383-94.):

Quality ratings are *downgraded* if studies:

- Have serious limitations
- Have inconsistent results
- If evidence does not directly address clinical questions
- If estimates are imprecise OR
- If it is felt that there is substantial publication bias

Quality ratings are *upgraded* if it is felt that:

- The effect size is large
- If studies are designed in a way that confounding would likely underreport the magnitude of the effect OR
- If a dose-response gradient is evident

Guideline – Recommendation is from a published guideline that used methodology deemed acceptable by the team.

Expert Opinion – Our expert opinion is based on available evidence that does not meet GRADE criteria (for example, case-control studies).

## Quality of Evidence:

★★★★ High quality

★★★○ Moderate quality

★★○○ Low quality

★○○○ Very low quality

Guideline

Expert Opinion

# Summary of Version Changes

- **Version 1.0 (10/10/2016):** Go live

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## Medical Disclaimer

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.

However, in view of the possibility of human error or changes in medical sciences, neither the authors nor Seattle Children's Healthcare System nor any other party who has been involved in the preparation or publication of this work warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such information.

Readers should confirm the information contained herein with other sources and are encouraged to consult with their health care provider before making any health care decision.

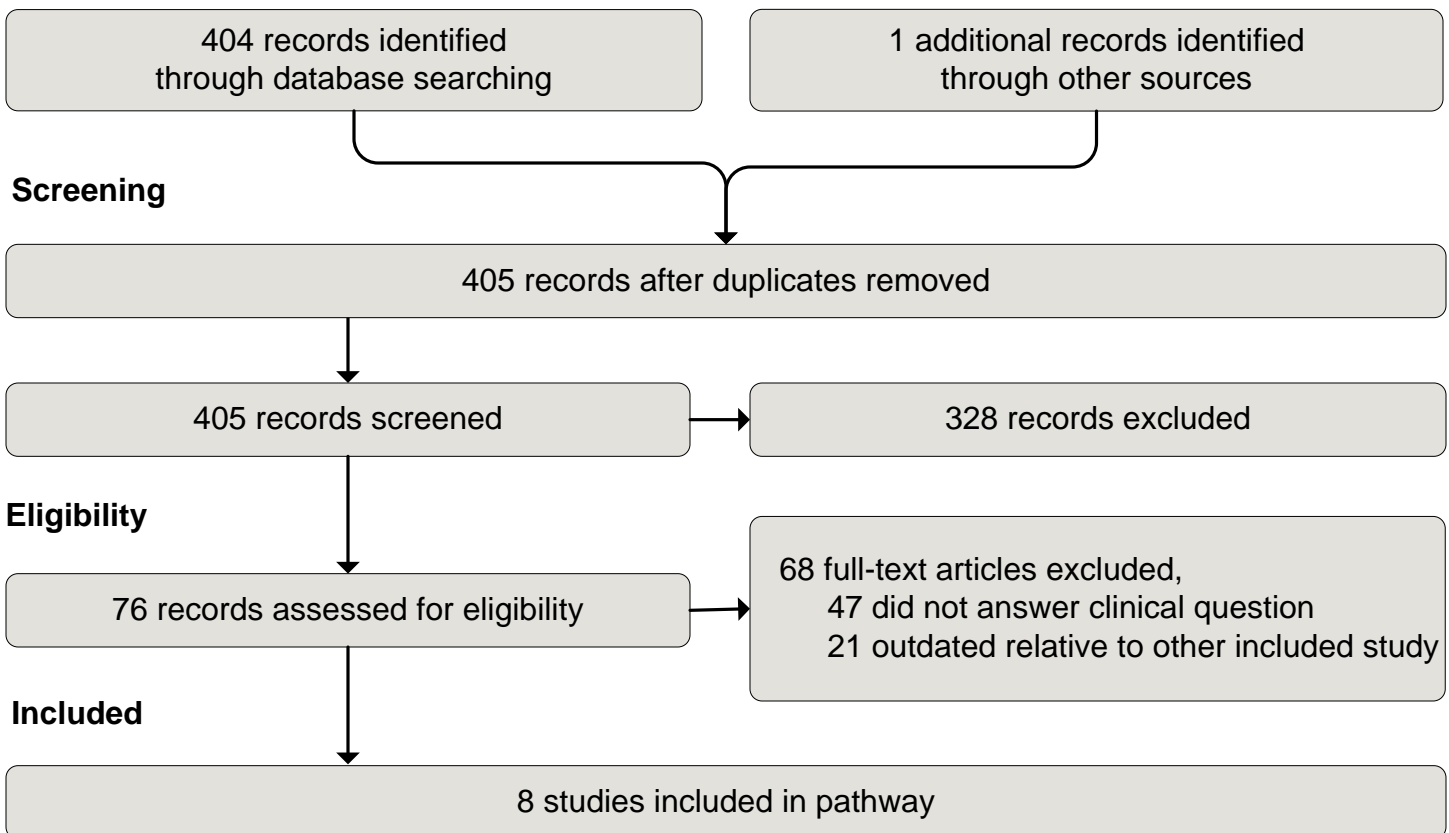
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# Bibliography

Describe how search was performed include databases used, search terms or and search limiters that were employed. Date the entry.

Studies were identified by searching electronic databases using search strategies developed and executed by a medical librarian, Jackie Morton. The searches for all aspects of intussusception were performed in June 2016. The following databases were searched – on the Ovid platform: Medline and the Cochrane Database of Systematic Reviews; elsewhere – Embase, National Guideline Clearinghouse, TRIP and Cincinnati Children’s Evidence-Based Care Guidelines. Clinical questions regarding intussusception were searched from 2006 to date. A search with no evidence categories, study, or publication type limitations was conducted for pediatrics ages 0 – 18 years. A second search limited to certain evidence categories, such as relevant publication types, Clinical Queries filters for diagnosis and therapy, index terms for study types and other similar limits was conducted with no age specifications. All retrieval was limited to English language. In Medline and Embase, appropriate Medical Subject Headings (MeSH) and Emtree headings were used respectively, along with text words, and the search strategy was adapted for other databases using their controlled vocabularies, where available, along with text words.

## Identification



Flow diagram adapted from Moher D et al. BMJ 2009;339:bmj.b2535

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