



Effective Health Care

Gastroesophageal Reflux Disease in Children

Nomination Summary Document

Results of Topic Selection Process & Next Steps

- *Gastroesophageal Reflux Disease in Children* was found to be addressed by three systematic reviews (listed below) that cover the topic and also reinforce the sparse literature base. Given that these existing systematic reviews cover this nomination, no further activity will be undertaken on this topic.
 - Tighe M, Afzal NA, Bevan A, et al. Pharmacological treatment of children with gastro-oesophageal reflux. *Cochrane Database Syst Rev*. 2014 Nov 24;11:CD008550. Doi:10.1002/14651858.CD008550.pub2. PMID: 25419906
 - Psaila K, Foster JP, Richards R, et al. Non-nutritive sucking for gastro-oesophageal reflux disease in preterm and low birth weight infants. *Cochrane Database Syst Rev*. 2014 Oct 15;10:CD009817. doi: 10.1002/14651858.CD009817.pub2. PMID: 25315840
 - van der Pol R, Langendam M, Benninga M, et al. Efficacy and safety of histamine-2 receptor antagonists. *JAMA Pediatr*. 2014 Oct;168(10):947-54. doi: 10.1001/jamapediatrics.2014.1273. PMID: 25133940

Topic Description

Nominator(s): Individual

Nomination Summary: The nominator's daughter was diagnosed with gastro-esophageal reflux disease (GERD). Based on her course of treatment, the nominator is interested in identifying the effectiveness of pharmacologic interventions and feeding or other behavior modifications for pediatric patients suffering from GERD.

Staff-Generated PICO

Population(s): Pediatric population suffering from GERD

Intervention(s): Pharmacologic interventions (e.g., prophylactic use of probiotics, prokinetics and proton-pump inhibitors [PPIs]) and feeding or other behavior modifications (e.g., thickened formula and elevated positioning)

Comparator(s): Those listed above (i.e., compared to each other)

Outcome(s): Growth, less crying, quality of life, heartburn, colic

Key Questions from Nominator: The nomination did not include a specific key question; however, based on the content of the nomination, we formed the following key question:

What is the effectiveness of treatments for gastro-esophageal reflux disease (GERD) for children?

Considerations

- There are multiple options available to treat and manage GERD in infants and children. Treatment options may depend on a variety of factors including the patient's age, GERD severity, and provider preference. There is limited clinical guidance related to the management of gastro-esophageal reflux disease (GERD) in infants and children; most of the evidence is specific to pharmacologic treatments and may provide little guidance to patients and/or caretakers regarding other interventions to consider, such as changes in feeding or other behaviors to improve symptoms and patients' quality of life.
- Topic was found to be addressed by the following systematic reviews:
 - A 2014 Cochrane systematic review titled *Pharmacological treatment of children with gastro-oesophageal reflux* examined the target population of children (birth until 16 years of age).
 - A 2014 Cochrane Review titled *Non-nutritive sucking for gastro-oesophageal reflux disease in preterm and low birth weight infants* examined non-nutritive sucking (NNS) for GERD in preterm and low birth weight infants.
 - A 2014 JAMA Pediatrics systematic review titled *Efficacy and safety of histamine-2 receptor antagonists (H2RAs)* published in October 2014 examined use of the intervention in infants and children.