

# Functional Constipation

## Definition

Functional constipation (FC) is a common gastrointestinal disorder that is defined clinically as difficult, infrequent, or incomplete defecation that persists for several weeks or longer and is not caused by structural or biochemical abnormalities.

Children with functional constipation will present with hard or infrequent stool. They may present with abdominal pain, fecal incontinence / encopresis, pain with defecation, and/or intentional stool retention. Efforts should be made to rule out other medical diagnoses based on history and exam. Otherwise, functional constipation is diagnosed based on exclusion of irritable bowel syndrome and meeting Rome IV Criteria based on age  $\leq 4$  and  $>4$  years.<sup>(1,2)</sup> (See: Table 1)

The Rome IV criteria, which are widely used to diagnose functional gastrointestinal disorders, define functional constipation as the presence of at least two of the following symptoms for at least 12 weeks in the preceding 12 months:

1. Straining during at least 25% of defecations
2. Lumpy or hard stools in at least 25% of defecations
3. Sensation of incomplete evacuation for at least 25% of defecations
4. Sensation of anorectal obstruction or blockage for at least 25% of defecations
5. Manual maneuvers to facilitate at least 25% of defecations (e.g., digital evacuation, support of the pelvic floor)
6. Fewer than three defecations per week

In addition to meeting these criteria, the diagnosis of functional constipation requires that the symptoms cannot be fully explained by another medical condition, such as irritable bowel syndrome or inflammatory bowel disease, and that there is no evidence of structural abnormalities on physical examination or diagnostic tests.

**Table 1:** Constipation, Irritable Bowel, Fecal Impaction Defined:<sup>(1,2)</sup>

Functional Constipation - Rome IV Criteria based on age $\leq 4$ and $>4$ years - (Diagnostic Code K59.0)																				
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Irritable Bowel Syndrome with Constipation (Diagnostic Code K58.1)

In addition to the universal criterion, abdominal pain on  $\geq 4$  days/month for  $\geq 2$  months that is associated with  $\geq 1$  of the following:

- Pain during bowel movements
- Altered stool appearance
- Altered stool frequency - either more or less frequent
  - For children or adolescents with less frequent stools, abdominal pain persists after resolution of constipation

Fecal Impaction - (Diagnostic Code K56.41)

- History of no stool passage > several days
- History of encopresis
- Stool in rectum on digital rectal exam or in the descending colon/rectum on imaging
- Palpable abdominal stool mass on physical exam

### **Epidemiology**

The pediatric prevalence rate of functional constipation in children varies widely across different studies and depends on the diagnostic criteria used. Estimates range from 0.7% to 29.6% in 2016.<sup>(3)</sup> Functional constipation is more common in boys than girls before puberty, but the prevalence becomes similar between the sexes in adolescence. FC is most common in children between the ages of 2 and 6 years old, with a prevalence of around 10%. It is less common in infants and older children, but it can still occur. Children with functional constipation may have a family history of the disorder or may have experienced psychological stressors such as toilet training difficulties, changes in routine, or emotional stress.

Functional constipation can lead to significant morbidity in children, including pain, discomfort, and impaired quality of life. It can also result in complications such as fecal impaction and encopresis (involuntary fecal soiling).

### **Etiology**

The etiology of functional constipation is multifactorial, and it can be challenging to determine the specific cause in many cases. These are some general factors:

1. Behavioral/Psychological factors: Generally thought to be the result of fear or anxiety triggers that stimulate withholding patterns in a child. Fecal retention allows for stool to get overly desiccated, resulting in a feedback loop on the withholding patterns. In severe cases prolonged rectal dilation is thought to impair normal motor patterns of the rectum and pelvic floor.
2. Dietary factors: A diet low in fiber and fluids can contribute to constipation in children.
3. Genetics: Children with a family history of constipation may be at increased risk.

It is important to note that in many cases, functional constipation in children is idiopathic, meaning that no underlying cause can be identified.

### **Guideline Inclusion Criteria**

All children  $\leq 18$  years old presenting to Dell Children's Medical Center who meet the diagnosis of functional constipation including:

- Infrequent and /or painful defecation
- Fecal incontinence
- Abdominal pain

### **Guideline Exclusion Criteria**

Children <30 days old presenting to DCMC who have possible diagnosis other than functional constipation (see differential), who are followed by [Bowel Management Program](#), have a Gtube, or are followed by the Comprehensive Care Clinic (CCC).

Children who have other underlying medical conditions including, but not limited to:

Congenital heart disease  
Cystic fibrosis  
Hirschsprung's disease  
Short bowel syndrome  
Spina bifida  
History of spinal or abdominal tumors  
Known dysmotility syndromes  
Children currently undergoing chemotherapy or radiation  
Children with history of abdominal surgery

### **Differential Diagnosis**

Differential for constipation includes but is not limited to: Celiac disease, hypothyroidism, hypercalcemia, hypokalemia, malnutrition, diabetes mellitus, dietary protein allergy, drugs/toxics ingestion (opiates, anticholinergics, antidepressants, chemotherapy, heavy metal ingestion (lead), vitamin D intoxication, botulism, cystic fibrosis, Hirschsprung disease, anal achalasia, colonic inertia, anatomic malformations (imperforate anus, anal stenosis), pelvic mass (sacral teratoma), spinal cord anomalies, trauma, tethered cord, abnormal abdominal musculature (prune belly, gastroschisis, Down syndrome), pseudoobstruction (visceral neuropathies, myopathies, mesenchymopathies), and multiple endocrine neoplasia type 2B.

It is important to consider the age of the child at presentation to further narrow the differential.

### **Diagnostic Evaluation**

Functional constipation is a clinical diagnosis made according to the Rome IV criteria (Table 1). In children presenting with constipation, a thorough medical history and complete physical examination can be sufficient to establish the diagnosis. Identification of alarm symptoms (Box 2), raises the suspicion of underlying organic conditions. Laboratory and radiology evaluation are NOT indicated for routine diagnosis and management of constipation. The diagnosis is made through careful history and physical examination.

**PE:** Examine abdomen for stool burden and/or distension, rule out acute abdomen

**Labs:** Routinely, labs do not need to be obtained. However, based on history and exam further evaluation may be useful in the following scenarios:

- If [red flags](#) are identified
- No [red flags](#) are identified, but patient has 2 or more visits to the ED for constipation in the last 2 months
- Continues to be symptomatic from constipation despite ongoing evaluation and treatment.
- Can consider Celiac screening, TSH/T4, CBC, CMP, ESR/CRP, UA, lead level.

**Radiology Studies:** Routine abdominal XR is not recommended for diagnosis of functional constipation.<sup>(6)</sup> If imaging is obtained, understand that stool visualized on XR does not make diagnosis of functional constipation. Pediatric Gastroenterology should be consulted or referred to if further diagnostic work up is indicated.

**Clinical Management**

**Initial Management:** Triage 1-5, Obtain History and Exam, Establish Diagnosis of Functional Constipation, Initiate ED Constipation Power Plan

**Secondary Management** Reassess in 1 hour, Admission to hospital may be necessary if fails initial management for Functional Constipation

**Treatment:**

Treatment of functional constipation in children usually involves a combination of dietary modifications, behavioral interventions, and laxative therapy. Outpatient cases of functional constipation are often undertreated resulting in emergency room visits and inpatient admissions for constipation cleanout.<sup>(5)</sup>

**Treatment Per Rectum**

Age	Treatment	Medication	Dose
<b>&lt;1 - 2 year(s)</b>  **children <1 year should be managed off pathway	1st and 2nd Line	Glycerin pediatric suppository	½ - 1 suppository if no stool in the previous 24 hrs.
<b>&gt;2 yrs</b>	1st and 2nd Line Treatment	Fleet enema (Sodium Phosphate) <sup>***</sup>	<b>2 - 4 yrs:</b> ½ pediatric enema (33 mL) <b>5 - 11 yrs:</b> 1 pediatric enema (66 mL) <b>≥ 12 yrs:</b> 1 adult enema (133 mL)
		Saline Mineral Oil Glycerin (SMOG) enema	10 ml/kg/dose (Max 300 mL/day)

- Consider mineral oil enema before Fleets to soften stool
- \*\*\* Do not repeat Sodium phosphates (Fleet's) enema without bowel movement in between doses; Increased risk of toxicity and death exists in those patients that received more than 1 dose without a bowel movement in between doses.
- \*\*\*Do not use sodium phosphate (Fleet) enema in patients with severe renal impairment.
- 1st and 2nd Line Rectal Treatment Inpatient (depending on if admit from ED or not).

**PO/NG Treatment** (If cleanout is indicated)

**PO/Rectal Stimulant Dosing:** For all patients > 20 kg give a stimulant laxative, Bisacodyl or Senna, 4 hours prior to initiation of PO/NG cleanout.

Patient Age	Senna Liquid (8.8 mg sennosides per 5 mL)	Senna Tablet (8.6 mg sennosides per tablet)	Maximum daily dose (Recommended to Divide BID)		Bisacodyl (5 mg tablet)	Bisacodyl (10 mg suppository)
			(Liquid)	(Tablet)		
≥ 2 years to < 6 years	2.5 mL (4.4 mg sennosides)	½ tablet (4.3 mg sennosides)	7.5 mL	2 tablets	1 tablet* (5 mg)	½ suppository* (5 mg)
≥ 6 years to < 12 years	5 mL (8.8 mg sennosides)	1 tablet (8.6 mg sennosides)	15 mL	4 tablets	1-2 tablets (5-10 mg)	½ to 1 suppository (5-10 mg)
≥ 12 years and adolescents	10 mL (17.6 mg sennosides)	2 tablets (17.2 mg sennosides)	30 mL	8 tablets	1-3 tablets (5-15 mg)	1 suppository (10 mg)

- Senna is FDA approved in ages greater than/equal to 2 years and adults. Do not exceed maximum recommended daily dose per age group.
- Senna oral syrup will be ordered in *milliliters* (mL) based on the guidelines above (not to exceed the max daily dose).
  - Senna oral syrup may be mixed with juice or milk to mask taste.
- Senna oral tablets will be ordered in *number of tablets* based on guidelines above (not to exceed max daily dose).
- The oral syrup or tablet will be chosen based on the patient's ability, age, and/or preference.
- Certain disease states may warrant higher doses of senna. In these instances, the APP may elect to keep patients off protocol if the daily dose exceeds the maximum recommended daily dose.
- If the APP wishes to maximize the dose or frequency of senna, they must specify "DNS" (do not substitute) or "DAW" (dispense as written) in the order.

- Bisacodyl oral and suppository - limited data available in ages <6 years
- Once daily dosing

**Oral (PO) Cleanout Options**

	Dose	Rate	Comment
<b>Miralax</b>	4 g/kg over 6-10 hours	<p>&lt;50 kg: Max 12 packets of Miralax</p> <p>&gt;50 kg: Max 14 packets of Miralax</p> <p>MUST drink at least 1 cup (4-8 oz) every hour to avoid NG tube placement.</p>	<p>Weight (kg) * 4 = Total grams</p> <p>Total gram ÷ 17 = Packets of Miralax</p> <p>Packets of Miralax * 8 oz = Total Fluid Mix</p> <p>17 g = 1 cap; 8.5 g = ½ cap</p> <p>-Mix packets in sports drink or clear fluid.</p> <p>-Be sure to give stimulant medication before starting clean out.</p> <p>-Can use GoLyteLy if preferred, but noted to be less palatable in most cases.</p> <p>-Continue until rectal effluent is clear.</p> <p>-Do NOT give more than once.</p>

**Nasogastric (NG) Cleanout Options**

Convert to NG if patient does not tolerate PO

	Dose	Rate	Comment
<b>GoLytely</b>	10-20 kg: up to 100 mL/kg/dose, total dose to be determined on an individual basis  > 20 kg: 125 mL/kg/dose or up to 4 liters	25-40 mL/kg/hr (administer over 4-10 hours)  START at 100 ml/hr and advance by 100 ml/hr q1h as tolerated until GOAL with MAX 450 ml/hr	-ONLY for children >6 months -Continue until rectal effluent clear -May repeat multiple times -Be sure to give stimulant medication before starting clean out.  If repeated: -Check BMP, assess for dehydration, electrolyte abnormalities -Supplement with IVF as needed  -Can use Miralax if preferred, but NG Golytely is more effective.

**If cleanout is NOT indicated:**

**Discharge/Maintenance Treatment (No or Treated Fecal Impaction)**

- ALL patients should be on 1st line medications
- Miralax® (Polyethylene glycol) is preferred, may substitute with Lactulose if family prefers or patient did not do well with Miralax
- 2nd line medications are prescribed IN ADDITION to 1st line medications, prescribe if:
  - Patient already on a 1st line medication, but symptoms persisting

Choice of 2nd line medications are made by the provider and family together, consider the following:

- **Senna:** Available as liquid or pills, may cause cramping
- **Milk of Magnesia:** May increase cramping
- **Bisacodyl:** Only available as pills, but smaller in size than Senna, may cause cramping

**Discharge/Maintenance Medications 1st and 2nd Line**

	Duration	Medications/Dose
<b>1st Line PO Medications</b>	Prescribe one for 1 month Should continue for at least 2 months	<b>PEG 3350 (Miralax)</b> <b>10-20 kg:</b> 0.5 cap (8.5 g) once a day <b>&gt; 20 kg:</b> 1 cap (17 g) once a day titrate to effect
		<b>Lactulose</b> <b>&gt;10 kg:</b> 1-2 g/kg/day Once/twice daily Max: 60 g/day, 90 ml/day

<b>2nd Line PO Medications</b>	Prescribe for 2 weeks Should NOT be continued unless instructed to at follow-up	<b>Senna (refer to dosing chart)</b> <b>2 - 6 yrs:</b> 2.5 - 5 mg daily (1 tablet; 2.5 mL) 4.4.mg or 2.5 mL, ½ tab Max: 7.5 mL, 2 tabs <b>6 - 12 yrs:</b> 7.5 - 10 mg daily (2 tablets; 5 mL) 8.8 mg or 5 mL, 1 tab Max: 15 mL, 4 tabs <b>&gt; 12 yrs:</b> 15 - 20 mg daily (3 tablets; 10 mL) 17.6 mg or 10 mL, 2 tabs Max: 30 mL, 8 tabs
		<b>Milk of Magnesia (magnesium hydroxide)</b> <b>2 - 5 yrs:</b> 0.4 – 1.2 g/day, once or divided <b>6 - 11 yrs:</b> 1.2 – 2.4 g/day, once or divided <b>12 - 18 yrs:</b> 2.4 – 4.8 g/day, once or divided
		<b>Bisacodyl (refer to dosing chart)</b> <b>2 - 6 yrs:</b> 5 mg tablet or suppository daily <b>6 - 12 yrs:</b> 5 - 10 mg tablet or suppository daily daily <b>&gt; 12 yrs:</b> 5 - 15 mg tablet or 10 mg suppository daily
		<b>Fiber</b> MIN: Child's age + 5 = grams of fiber needed per day MAX: Child's age + 10 = grams of fiber needed per day Max: 30 g/day

**Critical Points of Evidence**

**Evidence Supports** *provides evidence to support an intervention*

- The North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition (NASPGHAN) guidelines for the evaluation and treatment of functional constipation in infants and children do not specifically recommend a digital rectal exam (DRE) as a routine part of the diagnostic evaluation for functional constipation.<sup>(7,8)</sup>
- A careful history and stool diary is the initial step in the diagnosis of constipation. There is little evidence to support the use of routine blood tests or endoscopy in constipated patients without alarm features.

**Evidence Lacking/Inconclusive** *provides evidence against an intervention*

- The use of probiotics: While there is some evidence to suggest that probiotics may be helpful for the treatment of functional constipation in children, the overall evidence is still considered inconclusive, and more research is needed to determine the optimal strains and dosages of probiotics for this condition.<sup>(9)</sup>
- While dietary interventions, such as increased fiber intake or reduced dairy consumption, are often recommended as part of the management of functional constipation in children, the evidence supporting the efficacy of these interventions is mixed, and more research is needed to determine the optimal dietary approaches for this condition.<sup>(10)</sup>

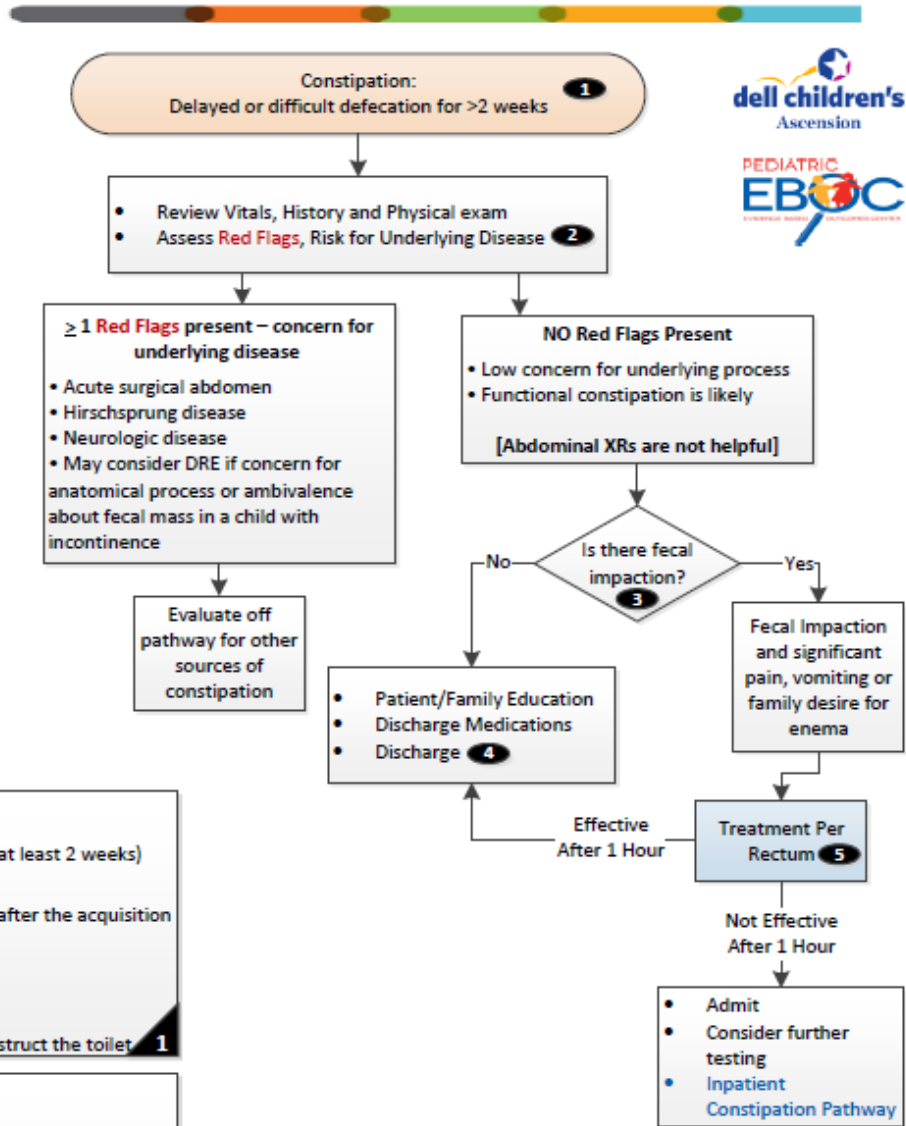
**Evidence Against** *indicates there is insufficient evidence to support or refute an intervention and no conclusion can be drawn from the evidence.*

- Routine use of x-rays in all cases of functional constipation is not supported by the current evidence. X-rays expose children to ionizing radiation, and their routine use can lead to unnecessary radiation exposure and increased healthcare costs.<sup>(11)</sup>

- Exclusion Criteria**
- Patients in the [Bowel Management Program](#)
  - Children who have other underlying medical conditions including, but not limited to:
    - Congenital heart disease
    - Cystic fibrosis
    - Hirschsprung's disease
    - Short bowel syndrome
    - Spina bifida
    - History of spinal or abdominal tumors
    - Known dysmotility syndromes
    - Children currently undergoing chemotherapy or radiation
    - Children with history of abdominal surgery
    - Anorectal malformations

- Inclusion Criteria**
- All Children  $\geq 1$  year old

**Functional Constipation ED**



- DIAGNOSTIC CRITERIA FOR CONSTIPATION**
- At least 2 criteria present (symptoms present for at least 2 weeks)
- $< 2$  defecations per week
  - At least 1 episode of incontinence per week after the acquisition of toileting skills
  - History of excessive stool retention
  - History of painful or hard bowel movements
  - Presence of a large fecal mass in the rectum
  - History of large-diameter stools that may obstruct the toilet

- FECAL IMPACTION**
- History of no stool passage  $>$  several days
  - History of encopresis
  - Stool in rectum on digital rectal exam or in the descending colon/rectum on imaging
  - Palpable abdominal stool mass on physical exam
  - Disimpaction is necessary before initiation of maintenance therapy

**TREATMENT PER RECTUM**

Age	Treatment	Medication	Dose
$< 1 - 2$ year(s)	1st and 2nd Line	Glycerin pediatric suppository	$\frac{1}{2}$ - 1 suppository if no stool in the previous 24 hrs.
$> 2$ yrs	1st and 2nd Line Treatment	Fleet enema (Sodium Phosphate)***	2 - 4 yrs: $\frac{1}{2}$ pediatric enema (33 mL) 5 - 11 yrs: 1 pediatric enema (66 mL) $\geq 12$ yrs: 1 adult enema (133 mL)
		Saline Mineral Oil Glycerin (SMOG) enema	10 mL/kg/dose (Max 300 mL/day)

- Consider mineral oil enema before Fleets to soften stool  
 - \*\*\* Do not repeat Sodium phosphates (Fleet's) enema without bowel movement in between doses;  
 - Increased risk of toxicity and death exists in those patients that received more than 1 dose without a bowel movement in between doses.  
 - \*\*\*Do not use sodium phosphate (Fleet) enema in patients with severe renal impairment.  
 - 1st and 2nd Line Rectal Treatment Inpatient (depending on if admit from ED or not).

- DISCHARGE CRITERIA**
- Improved symptoms, tolerating PO and/or + BM

- RED FLAGS:**
1. Delayed passage of meconium (first meconium passed after 48 hours of life)
  2. Symptom onset  $< 1$  month
  3. Persistent abdominal distention, vomiting
  4. Bloody diarrhea
  5. Bilious emesis
  6. Family history Hirschsprung's disease
  7. Failure to thrive
  8. Tight rectum gripping finger; explosive stool and air from rectum upon withdrawal examining finger
  9. Midline dimple, tuft of hair over lower back
  10. Lower limb weakness, motor delay
  11. Signs of systemic illness: fever, mouth sores, joint pain, rash
  12. Weight loss
- 1-8 Concern for Hirschsprung, 7 Malabsorption



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- Inclusion Criteria**
- All Children  $\geq 1$  year old

Admit from ED

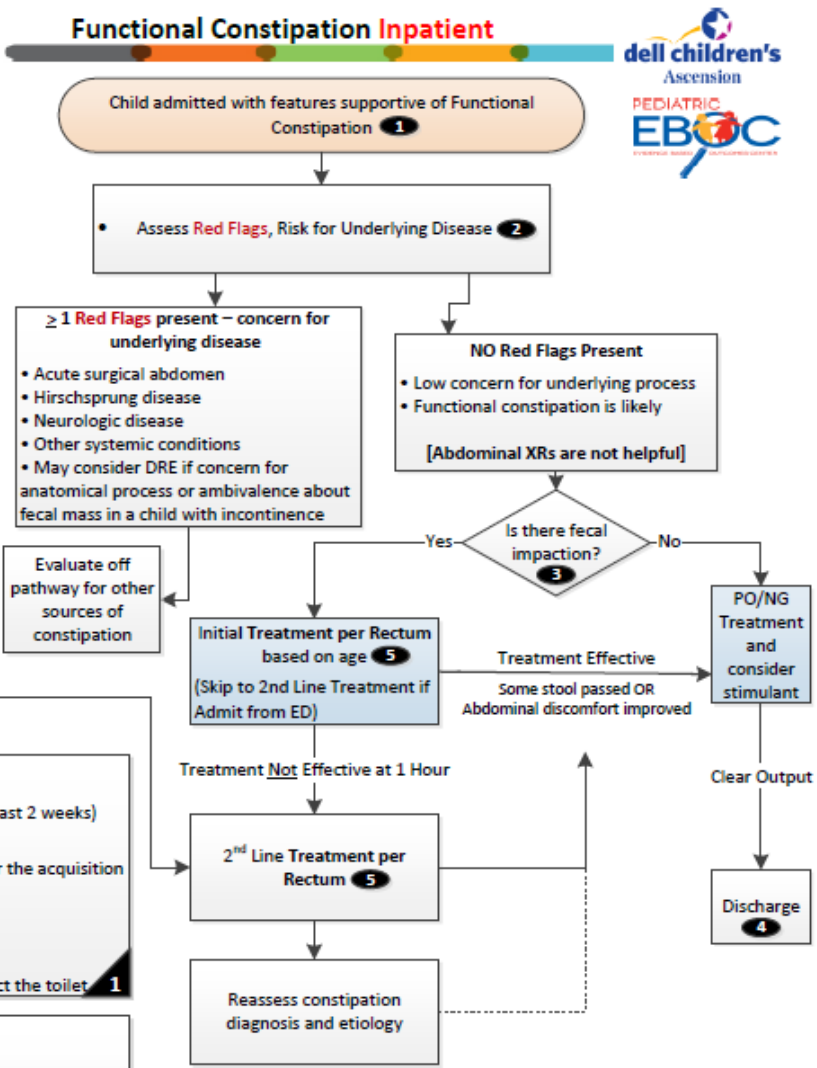
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 - 1st and 2nd Line Rectal Treatment Inpatient (depending on if admit from ED or not).



- DISCHARGE CRITERIA**
- Effluent is clear for at least 3 separate BM, patient is tolerating ORT, and symptoms have improved

- RED FLAGS:**
1. Delayed passage of meconium (first meconium passed after 48 hours of life)
  2. Symptom onset  $< 1$  month
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**Methods**

**Existing External Guidelines/Clinical Pathways**

Existing External Guideline/Clinical Pathway	Organization and Author	Last Update
Children's Hospital of Philadelphia Functional Constipation <a href="#">Inpatient Pathway</a> and <a href="#">ED Pathway</a>	<a href="#">CHOP</a>	02/2020
Johns Hopkins All Children's Hospital Constipation Clinical Pathway	<a href="#">John Hopkins All Children's Hospital</a>	09/2020
Children's Hospital Colorado ED/UC Pathway	<a href="#">Children's Hospital Colorado</a>	08/2017
Constipation Clinical Practice Guideline Diagnosis and Treatment in the ED	<a href="#">Children's Healthcare of Atlanta</a>	03/2022
Constipation - Evidence Based Practice	<a href="#">Children's Mercy Kansas City</a>	02/2021

Any published clinical guidelines have been evaluated for this review using the **AGREE II criteria**. The comparisons of these guidelines are found at the end of this document. **AGREE II criteria** include evaluation of: Guideline Scope and Purpose, Stakeholder Involvement, Rigor of Development, Clarity of Presentation, Applicability, and Editorial Independence.

**Review of Relevant Evidence: Search Strategies and Databases Reviewed**

Search Strategies	Document Strategies Used
Search Terms Used:	Constipation, Functional Constipation,
Years Searched - All Questions	No specified limit
Language	English
Age of Subjects	Less than 18 years
Search Engines	Google Scholar, PubMed, Cochrane Library
EBP Web Sites	Cochrane Collaborative
Professional Organizations	American Academy of Pediatrics Choosing Wisely.org <a href="https://publications.aap.org/">https://publications.aap.org/</a> <a href="https://gikids.org/constipation/">https://gikids.org/constipation/</a>
Joint Commission	
Government/State Agencies	None
Other	

**Evidence Found with Searches**

Check Type of Evidence Found	Summary of Evidence – All Questions	Number of Articles Obtained
<input checked="" type="checkbox"/>	Systematic Reviews	6
<input checked="" type="checkbox"/>	Meta-analysis articles	1
<input type="checkbox"/>	Randomized Controlled Trials	
<input type="checkbox"/>	Non-randomized studies	
<input checked="" type="checkbox"/>	Review articles	2
<input type="checkbox"/>	Government/State agency regulations	
<input checked="" type="checkbox"/>	Professional organization guidelines, white papers, etc..	1
<input type="checkbox"/>	Other: Delphi study; Consensus paper	1

**Evaluating the Quality of the Evidence**

The GRADE criteria were used to evaluate the quality of evidence presented in research articles reviewed during the development of this guideline. The table below defines how the quality of evidence is rated and how a strong versus a weak recommendation is established.

Recommendation	
<b>Strong</b>	Desirable effects clearly outweigh undesirable effects or vice versa
<b>Weak</b>	Desirable effects closely balanced with undesirable effects
Type of Evidence	
<b>High</b>	Consistent evidence from well-performed RCTs or exceptionally strong evidence from unbiased observational studies
<b>Moderate</b>	Evidence from RCTs with important limitations (e.g., inconsistent results, methodological flaws, indirect evidence, or imprecise results) or unusually strong evidence from unbiased observational studies
<b>Low</b>	Evidence for at least 1 critical outcome from observational studies, from RCTs with serious flaws or indirect evidence
<b>Very Low</b>	Evidence for at least 1 critical outcome from unsystematic clinical observations or very indirect evidence

**Addendum 1:**

**Table 1: Alarm Symptoms in Children/Red Flags**

<b>Alarm signs and symptoms in constipation</b>
Delayed passage of meconium (first meconium passed after 48 hours of life)
Constipation onset < 1 month
Persistent/severe abdominal distention, vomiting
Bloody diarrhea/blood in the stool in the absence of anal fissures
Bilious emesis
Ribbon stools
Family history Hirschsprung's disease
Failure to thrive
Tight rectum gripping finger; explosive stool and air from rectum upon withdrawal examining finger
Midline dimple, tuft of hair over lower back
Lower limb weakness, motor delay
Signs of systemic illness: fever, mouth sores, joint pain, rash
Weight loss
Fever
Abnormal thyroid gland
Decreased lower extremity strength/tone/reflex
Sacral dimple
Anal Scars
Extreme fear during anal inspection
Abnormal position of anus or gluteal cleft deviation
Anal fissures or haematoma
Abnormal thyroid gland - Eczema

**Addendum 2:**

**Functional Constipation Bowel Management Program**

**INPATIENT PROVIDER RESOURCES**

- *When/How to Consult Bowel Management for Existing Patients*
  - Inpatient: The Pediatric Surgery team should be consulted if there is concern for obstruction or questions related to the bowel management of patients that are *followed by the outpatient Bowel Management Program*.
- *When/How to Consult Bowel Management for New Patients*
  - Outpatient referral should be initiated if the patient meets any of the below criteria. Referral is accessed in Compass depart: Dr Ankur Rana or Dr Dani Gonzalez Austin Pediatric Surgery 1301 Barbara Jordan. Blvd Ste. 400, 78723.
- *Who to Consult for Patients who DO NOT Meet Criteria for Bowel Management Program*
  - If the patient does not meet the criteria for Bowel Management consultation then consultation with inpatient or outpatient Gastroenterology is recommended.

**DEFINITION**

The Bowel Management Team provides an intensive, individualized outpatient program to treat fecal incontinence. There are a variety of conditions that benefit from a bowel management program including those with anorectal malformations, colonic motility issues, Hirschsprung's disease, spine anomaly, and severe functional constipation refractory to medical management.

**CRITERIA FOR OUTPATIENT REFERRAL TO THE BOWEL MANAGEMENT PROGRAM**

1. 2 or more emergency department visits requiring enemas in the ED, and/or admission for po/NG Golytely cleanout.
2. Prolonged constipation with failure of medical management with Gastroenterology involvement
3. Inpatient admission requiring surgical disimpaction.
4. Patients with anorectal malformations, Hirschsprung's disease, spine anomalies, colonic motility issues, and prolonged, severe functional constipation who are not otherwise managed by a pediatric surgeon or gastroenterologist.

**EVALUATION AND MANAGEMENT OF THE BOWEL MANAGEMENT PATIENT WITH FUNCTIONAL CONSTIPATION**

Patients with functional constipation, who are followed by the outpatient Bowel management team, should have abdominal pain workup for alternate differentials based on the discretion of the ED physician. The workup requires abdominal X-rays to evaluate stool burden and fecal impaction. If fecal impaction is confirmed by x-ray, then the patient has failed outpatient management and will require admission to PCRS with po/NG Golytely clean out and enemas as per inpatient guidelines until the effluent is clear. These patients will also need an abdominal x-ray to confirm emptying of the colon prior to discharge. They should be advised to email or call the bowel management team for outpatient follow-up.

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EBOC Project Owner: Hetal Gadhia, MD

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**Functional Constipation EBOC Team:**

Hetal Gadhia, DO FAAP

Priya Jacob, MD MPH

Lynn Thoreson, DO

Anees Siddiqui, MD

Ankur Rana, MD

Amy Gann, APRN

Sheryl Yanger, MD

Cheryl Scardino, RN

Anna Pitts, MD

Shivani Patel, RN, CPD

Baylie Morua, RN, CPD

Becca Mielke, RN

Gabriela Arceo, Pharm D

Hai quyen Tran, Pharm D

Mary Karr, Pharm D

Carmen Garudo, EBOC PM

**EBOC Committee:**

Lynn Thoreson, DO

Sarmistha Hauger, MD

Patty Click, RN

Sujit Iyer, MD

Tory Meyer, MD

Nilda Garcia, MD

Meena Iyer, MD

Amanda Puro, MD

Lynsey Vaughan, MD

Cassandra Campbell, MSN RN

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