### **Chronic Constipation Primary Care Pathway**

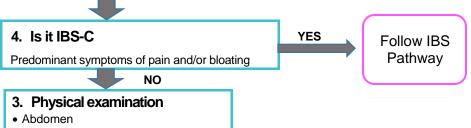
#### 1. Diagnostic criteria

Presence of at least 2 symptoms for at least 3 of the last 6 months:

- ≤ 3 spontaneous bowel movements per week
- Hard or lumpy stool (Bristol type 1-2) for > 25% of defecations
- Straining during > 25% of defecations
- Sensation of incomplete evacuation for > 25% of defecations
- Sensation of anorectal blockage for > 25% of defecations
- Manual maneuvers needed to facilitate > 25% of defecations

## 2. Medical history

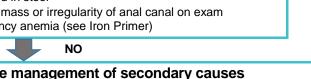
- Duration and progression of symptoms the trend is key
- Frequency of bowel movements
- Symptoms of abdominal pain, bloating, and/or distention
- Precipitating events (change in diet, fluid intake, travel, physical activity, new medication
- Past use of laxatives or other agents
- Factors that may indicate defecatory dysfunction (traumatic perineal injury, sense of "blockage" at the outlet, having to rotate or "wiggle" on the toilet to pass stool)



Digital anorectal

#### 5. Alarm features

- Family history (first-degree relative) of colorectal cancer
- Unintended weight loss (> 5% over 6-12 months)
- Sudden or progressive change in bowel habits
- Visible blood in stool
- Suspicious mass or irregularity of anal canal on exam
- Iron deficiency anemia (see Iron Primer)



Refer for consultation/ endoscopy

9. If unsatisfactory response to management consider GI referral for consultation



#### 6. Optimize management of secondary causes

- Medication history, including OTCs and supplements
- · Underlying medical conditions, limited physical activity, attention to diet/fluid intake, bowel regimen (especially in the elderly)

#### 7. Baseline investigations

There is little evidence to support routine investigations

- CBC (if no recent result)
- Glucose, creatinine, calcium/albumin, TSH, celiac disease screen
- Abdominal radiograph (may be useful in elderly)

#### 8. Management

- Education, reassurance, and expectations management
- · Fibre and fluids
- Physical activity
- Laxatives
  - Bulk Forming, Osmotics, Stimulants
- Linaclotide
- Prucalopride
- Probiotics

Management "failure" is subjective. Suggest at least 3-6 months of titrated, multi-pronged therapy that mixes various treatment approaches to improve symptoms.



YES

This primary care pathway was co-developed by primary and specialty care and includes input from multidisciplinary teams. It is intended to be used in conjunction with specialty advice services, when required, to support care within the medical home. Wide adoption of primary care pathways can facilitate timely, evidence-based support to physicians and their teams who care for patients with common low-risk GI conditions and improve appropriate access to specialty care, when needed.

#### CHRONIC CONSTIPATION PATHWAY PRIMER

- Chronic constipation is a common gastrointestinal disorder, affecting approximately 3-27% of the general population. Prevalence increases with age and is more common among women.
- Chronic constipation is most often a functional bowel disorder caused by a number of physiologic factors, including motility, secretion, and sensation abnormalities.
  - Symptoms and possible patterns of defecation include difficulty with defecation (straining) and/or unsatisfactory, incomplete, or infrequent evacuation for longer than 3 months.
  - Abdominal pain and/or bloating may be present in patients with chronic constipation, but it is not the major symptom. Predominant abdominal pain and/or bloating is more consistent with Irritable Bowel Syndrome - Constipation predominant (IBS-C), a diagnosis for which symptoms and treatment significantly overlap with chronic constipation.
    - ☐ For additional information about IBS-C, refer to the IBS pathway.
- The diagnosis of chronic constipation can often be made based on symptoms alone.
  - Given the mostly benign nature of constipation, diagnostic colonoscopy under age 50 is not recommended in the absence of alarm features<sup>1</sup>.

Checklist to guide in-clinic review of your patient with Chronic Constipation		
	Diagnostic criteria: Presence of at least 2 of these symptoms for at least 3 of the last 6 months	
	<ul> <li>≤ 3 spontaneous bowel movements per week</li> <li>Straining during &gt; 25% of defecations</li> <li>Sensation of anorectal blockage &gt; 25% of the time</li> <li>Hard or lumpy stools (Bristol type 1-2) &gt; 25% of the time</li> <li>Sensation of incomplete evacuation &gt; 25% of the time</li> <li>Manual maneuvers needed to facilitate defecation</li> </ul>	
	Complete detailed medical history (see algorithm Box 2).	
	☐ Complete detailed abdominal and anorectal examination.	
	Confirm absence of alarm features (see algorithm Box 5).  If alarm features are identified, refer for specialist consultation.	
	Identification and adjustment of medication and lifestyle factors that may cause/contribute to constipation.	
	Complete baseline investigations confirming no underlying condition is causing constipation (see algorithm Box 7).	
	If unsatisfactory response to management (see algorithm Box 8), consider using an advice service before referring. Otherwise, continue care in the Patient Medical Home.	

#### **EXPANDED DETAILS**

#### 1. Diagnostic criteria

- The diagnosis of chronic constipation is based on more than stool frequency. It includes the presence of at least 2 symptoms for at least 3 of the last 6 months.

  - o Hard or lumpy stool for > 25% of defecations (Type 1-2 on the Bristol Stool Chart)
  - Straining during > 25% of defecations
  - Sensation of incomplete evacuation for > 25% of defecations
  - Sensation of anorectal blockage for > 25% of defecations

-

Last Updated: July 2023

choosingwiselycanada.org/gastroenterology

- Manual maneuvers needed to facilitate > 25% of defecations
- A careful history and personal concerns are important to understand challenges and impact of the condition on the patient's quality of life.
- Chronic constipation can be classified as primary, secondary, or related to defecatory dysfunction. Determining the difference does not influence management.
  - Primary chronic constipation can be sub-classified into normal-colonic transit times ("idiopathic") and slow-colonic transit times.
  - Secondary chronic constipation is the result of extrinsic factors such as underlying medical conditions or, more commonly, medications (see <u>Table 1</u> and <u>Table 2</u> below).
    - Examples of underlying systemic illness include: scleroderma (rare), neurologic causes (e.g. Parkinson's disease), metabolic causes (e.g. diabetes), mechanical obstruction (e.g. diverticular stricture, colon cancer).
    - Mechanical or structural causes of constipation (e.g. mass, stricture) are relatively rare and can usually be discerned by history, red flags, blood work (anemia), or physical findings (mass) on abdominal and/or anorectal exams.
    - There is no long-term increase in prevalence of colorectal cancer in patients with chronic constipation. A sudden and persistent/progressive change in bowel habit that is refractory to treatment may warrant further investigation with colonoscopy. Stable chronic constipation of > 1 year in duration is unlikely to be caused by colon cancer.
  - o **Defecatory dysfunction** (aka pelvic floor dyssynergia) can be challenging to diagnose.
    - This condition may be related to discoordination of the pelvic floor muscles and their innervation, but is often multifactorial and incompletely understood.
    - Complete evaluation requires specialty input, with possible tests, including anal manometry and defecography.

#### 2. Medical history

Patient history should include:

- Duration and progression of symptoms (longstanding and stable vs. more recent onset and worsening).
   The trend is key.
- Frequency of bowel movements.
- Associated symptoms of abdominal pain, bloating, and/or distention.
- Precipitating events such as changes in diet, fluid intake, travel, physical activity, and/or medications introduced around symptom onset.
- Laxatives or other agents tried or used in the past, noting type, duration, and combination of agents tried. This helps discern undertreated chronic constipation from treatment resistant cases.
- Factors that may indicate defecatory dysfunction such as:
  - History of traumatic perineal injury (e.g. traumatic vaginal delivery, significant perineal tears, episiotomy, assault).
  - Persistent and severe sense of incomplete evacuation.
  - Sense of "blockage" at the outlet.
  - Having to rotate or "wiggle" on the toilet in order to pass stool.

#### Is it IBS-C?

If the assessment identifies predominant symptoms of pain and/or bloating, refer to the IBS pathway.

#### 4. Physical examination

- Abdomen: noting distention, focal discomfort, palpable mass, inguinal lymphadenopathy
- Digital anorectal examination: noting stricture, rectal mass or irregularity of anal canal, or prolapse

#### 5. Alarm features

If any of the following alarm features are identified, refer for consultation/endoscopy. Include any and all identified alarm features in the referral to ensure appropriate triage.

- Family history (first-degree relative) of colorectal cancer
- Unintended weight loss (> 5% over 6-12 months)
- Sudden or progressive change in bowel habits
- · Visible blood in stool
- Suspicious mass or irregularity of anal canal on physical exam
- Iron deficiency anemia (see Iron Primer)

#### 6. Optimize management of secondary causes

Chronic constipation is often caused or compounded by secondary causes (see Table 1 and Table 2 below).

- · Review medication history
  - o Focus on those associated with time of onset of constipation
  - o Don't forget to ask about OTC medications and supplements
- Chronic constipation in older adults can be challenging to assess and treat. Secondary causes are common in the elderly and may include:
  - o Underlying medical conditions
  - Medications that predispose to chronic constipation
  - Limited physical activity
  - o Less control of, or attention to, diet and fluid intake
  - o Failure to maintain a bowel regimen or recognize the call to defecate

Table 1. Common medications to consider as secondary causes

Class	Common Culprits
Antacids	calcium containing salts such as CaCO₃ (Tums®)
Anticholinergics	antihistamines (diphenhydramine), antispasmodics (scopolamine), antidepressants (e.g. TCAs), oxybutynin, tolterodine
Anticonvulsants	phenytoin
Anti-diarrheal agents	loperamide, lomotil, bismuth subsalictylate (Pepto Bismol®)
Antiemetics	5-HT3 antagonists (e.g. Ondansetron), dimenhydrinate
Antihypertensives	calcium channel blockers
Antiparkinsonian agents	levodopa, carbidopa, amantadine, benztropine, triheyphenidyl
Antipsychotics	clozapine, quetiapine, olanzapine
Bile acid sequestrants	cholestyramine, colestipol
Bisphosphonates	zolendronic acid
Iron and calcium supplements	
NSAIDs	
Opioids	
Vinca alkaloids	vincristine

Table 2. Common medical conditions/physiological states to consider as secondary causes

Medical conditions / physiological states to consider as secondary causes		
Anorexia nervosa	Hypercalcemia and hypocalcemia	Multiple sclerosis
Autonomic neuropathy	Hyperparathyroidism	Obesity

Last Updated: July 2023 Page 4 of 13

Cerebrovascular disease	Hypomagnesemia and hypokalemia	Parkinson's disease
Cognitive impairment / Stroke	Hypothyroidism	Pregnancy
Depression	Lupus	Renal dysfunction
Diabetes mellitus	Muscular dystrophies	

#### 7. Baseline Investigations

- There is little evidence to support routine investigations for chronic constipation.
- Patient history, medication review, and physical examination should guide the use of select laboratory tests, particularly in the presence of new symptoms or alarm features.
  - o CBC should be tested, if not performed recently.
  - Ferritin and/or transferrin saturation should be ordered if iron deficiency anemia is suspected (see Iron Primer).
  - Consider glucose, creatinine, calcium/albumin, TSH, and/or a celiac disease screen for assessment of secondary causes.
  - An abdominal radiograph may be useful in elderly patients with episodic diarrhea and fecal incontinence to evaluate the possibility of severe constipation with overflow and reduce risk of erroneous prescription of antidiarrheals.

#### 8. Management

Consider a multi-disciplinary approach to management, including pharmacist, dietitian, physiotherapist, nursing, and/or geriatric resources, as appropriate and available.

Management "failure" is subjective. Suggest at least 3-6 months of titrated, multi-pronged therapy that mixes various treatment approaches to improve symptoms.

various deadness approaches to improve symptoms.			
	Treatment options (non-pharmacological)		
Modification of lifestyle factors is the first-line approach to symptomatic constipation. Patients gain comfort in knowing that altered bowel function often improves with simple interventions. Dietary modifications (high fibre diet and fluid supplementation) are recommended as initial management.			
Patient education, reassurance, and management of expectations	<ul> <li>Reassure patients that there is a wide range of what is considered to be normal bowel function Normal bowel movements can be anywhere from 3 times/day to once every 2–3 days</li> <li>Variability of stool form and frequency can be expected         <ul> <li>Normal stool form is considered to be Type 3-4 on the Bristol Stool Chart</li> </ul> </li> <li>Encourage patients to incorporate time for a bowel routine. Ignoring the urge for a bowel movement can cause the stool to become hard and dry, making it difficult to pass.</li> <li>Patient adherence to principles of constipation treatment tends to be low, so they often need frequent monitoring, reinforcement, and encouragement.</li> <li>Most individuals with constipation do not require extensive investigations.</li> <li>Colonoscopy rarely helps to explain motility disorders and should be avoided in the absence of alarm features.</li> </ul>		
	Total fibre: Adults are recommended to consume 14 g/1000 kcal of fibre per day. Suggest		
	about 21-38 g/day for most adults.		
	Two types of fibre:		
Fibre and fluids	<ul> <li>Insoluble fibre is found in wheat bran, the skin of fruits, and many raw vegetables. It adds bulk to the stool and contributes greatly to daily total fibre requirements. It may not add therapeutic health benefits like soluble fibre.</li> </ul>		
	<ul> <li>Soluble fibre is found in psyllium, oats, barley, fruit, and seeds. It absorbs water in the intestine to form a viscous gel that thickens the stool and stimulates peristalsis.</li> </ul>		

	<ul> <li>There is a dose-response relationship between fibre plus fluid intake and stool output. This is important to quantify, as patients whose fibre and fluid intake is inadequate are most likely to benefit from this intervention. Fibre acts as a sponge, so it is important to <b>combine</b> fluid and fibre. Increased fluid intake on its own will only result in increased urination.</li> </ul>
	Soluble fibre supplementation:
	<ul> <li>May provide symptom relief for patients with IBD, IBS, constipation, and diarrhea. The therapeutic goal is 5-10 g/day of soluble fibre from foods and supplements including:</li> </ul>
	1 tbsp. psyllium husk or powder supplement - 3.0 grams
	2 tbsp. ground flaxseed - 1.8 grams
	• 1/2 cup kidney beans - 2.8 grams
Fibre and fluids	• 1 pear - 2.2 grams
cont'd	General care:
	<ul> <li>Increasing fibre intake may result in negative side-effects that can be minimized or avoided.</li> </ul>
	<ul> <li>Slowly increase fibre to prevent gas, abdominal pain, and bloating. Start with a third of a dose and determine tolerance.</li> </ul>
	<ul> <li>Drink additional fluid (water) to compliment a high fibre diet. Inadequate fluid may lead to constipation, hardening of stool, bloating, and abdominal pain.</li> </ul>
	<ul> <li>Caution soluble fibre intake for people with, or at risk of, a bowel obstruction or narrowing of the esophagus, stomach, or intestine.</li> </ul>
	<ul> <li>Fibre supplements may reduce or delay absorption of certain medications.</li> </ul>
	See Patient Resources section for more information on fibre supplementation.
	Ensure adequate fluids: 2 L/day for females, 3 L/day for males
	20+ minutes of physical activity/day, aiming for 150 min/week is known to be an effective strategy for stress reduction.
Physical activity	Physical activity also improves defecation patterns and colonic transit time.
	See the Canadian 24-Hour Movement Guidelines.

Treatment options (pharmacological)		
	Evidence: Effective for prevention and treatment of constipation.	
	<ul> <li>Mechanism of action: By absorbing water in the intestine to form a viscous liquid which increases fecal mass and stimulates.</li> </ul>	
	<ul> <li>Place in therapy: Can be safely used for long-term therapy but must be taken with adequate fluids. Patients with pelvic floor dysfunction and slow transit constipation may respond poorly to fibre supplementation.</li> </ul>	
	Adverse effects: Abdominal cramping, bloating, flatulence.	
	Do not take within 2 hours of taking other medications.	
Bulk-forming laxatives	Take with plenty of fluids (at least 250 mL) to prevent esophageal obstruction and/or fecal impaction.	
	Recommended Medications	
	<ul> <li>Psyllium (Metamucil®) - Start with lower dose and titrate to effect, following product instructions (~\$20/month, not covered by insurance).</li> </ul>	
	Methylcellulose (Citrucel®) - 2 caplets once daily QID. Onset of action 12-72 hours. Less bloating and flatulence than other agents. (\$10-40/month).	
	Calcium Polycarbophil (Prodiem®) - 2 caplets once daily QID. Less bloating and flatulence than other agents. (\$5-20/month)	
	• Inulin (Benefibre®) – 1-2 tsp daily TID. Onset of action 24-48 hours. (\$10-20/month)	

	Evidence: Osmotic laxatives such as polyethylene glycol (PEG) or lactulose are considered appropriate management for chronic constipation.
	Mechanism of action: Poorly-absorbable or non-absorbable sugars that draw water into the bowel to loosen stool and increase frequency.
Osmotic laxatives	<ul> <li>Place in therapy: PEG should be considered first line for the treatment of chronic constipation.         Compared to lactulose, PEG results in greater improvements in stool frequency and form, relieves abdominal pain, and reduces the need for additional laxatives. Magnesium citrate, magnesium hydroxide, magnesium sulfate, and sodium phosphates are less frequently recommended.<sup>2</sup></li> <li>Adverse effects: Flatulence, diarrhea, nausea, abdominal pain, bloating.</li> </ul>
	Recommended Medications
	Polyethylene glycol (PEG 3350) - Start with 17 g at night dissolved in 250 mL of liquid. Titrate to effect or max 34 g/day. Onset of action 48-96 hours. Safe for long-term use. (\$25-50/month).
	Lactulose - 15-30 mL daily TID. Onset of action 24—48 hours. (\$10-20/month).
	Milk of Magnesia (various brands) - Follow instructions on product. Onset of action 30 min—3 hours. Avoid in renal failure due to risk of hypermagenesemia. Decreases absorption of quinolones and tetracyclines (administer at separate times). <sup>3</sup> (\$10-20/month).
	Evidence: May be used for opioid-induced constipation or short term relief.
	Mechanism of action: Increase secretory and propulsive activity in the intestine by altering electrolyte transport in the gut mucosa.
	Place in therapy: Second-line therapy reasonable for short-term use. <sup>3</sup> Prescribe for a limited duration only as long-term safety has not been established and can cause electrolyte disturbances such as hypokalemia and hyponatremia.
Stimulant laxatives	Adverse effects: Commonly associated with abdominal cramping and diarrhea. Habituation may become an issue.
	Recommended Medications
	Bisacodyl (Dulcolax®) - PO: 5-10 mg daily or PRN, PR: 10 mg daily or PRN. Onset 6-12 hours (PO), 15 min-1 hr (PR).
	Sennosides (Senokot®) - 2-4 tablets PO at bedtime (max 8 tabs/day). Onset 6-12 hours. Discolours urine/feces.
	Mechanism of action: A guanylate cyclase agonist which increases chloride and bicarbonate secretion from enterocytes, and increases intestinal transit. May decrease visceral pain by reducing pain-sensing nerve activity. <sup>2</sup>
Linaclotide (Constella®)	Place in therapy: As the cost is relatively high, linaclotide should be used when responses to traditional laxatives such as PEG and bisacodyl have failed. <sup>3</sup>
	Adverse effects: Diarrhea, upper abdominal pain.
	Dose: 72-145 mcg daily 30 minutes before the first meal of the day (\$40-80/month).
	Evidence: Shown to be effective in idiopathic constipation, there is less evidence of the effect of prucalopride in IBS-C. Has not been studied for use in men. <sup>2</sup>
Prucaloprida	Mechanism of action: Through 5-HT4 receptor agonism, leading to prokinetic activity.
Prucalopride (Resotran®)	Prucalopride is best reserved for initiation by a clinician with experience in treating chronic constipation when conventional laxatives from at least 2 different classes fail to adequately relieve symptoms.
	Adverse effects: Nausea, diarrhea, abdominal pain, headache.
L	I

<sup>&</sup>lt;sup>2</sup> CPS [Internet]. Ottawa (ON): Canadian Pharmacists Association; c2015 [cited 2021 June 10]. Available from: <a href="https://www.e-therapeutics.ca">www.e-therapeutics.ca</a>.

 $_3$  DynaMed. Constipation in Adults. EBSCO Information Services. Accessed June 14, 2021. <u>https://www-dynamed-com.ahs.idm.oclc.org/condition/constipation-in-adults</u>

Prucalopride (Resotran®) cont'd	<ul> <li>For constipation: 2 mg PO daily. Reduce dose to 1 mg PO daily if (\$120/month):         <ul> <li>&gt; 65 years old</li> <li>CrCl &lt; 30 mL/min</li> <li>Severe hepatic impairment</li> </ul> </li> <li>Discontinue therapy if no benefit provided with 4 weeks of treatment.</li> </ul>
	Evidence: Data to support clinical effectiveness of probiotics for chronic constipation is limited and costs may be prohibitive. Decisions regarding use of probiotics for these indications should be shared between the patient and provider.      Mechanism of action: Postulated that creating and maintaining a healthy gut microflora can
	help improve normal gut function. <sup>5</sup> • The most effective probiotic strain is unknown. Patients should be encouraged to select products that are licensed by Health Canada's Natural and Non-prescription Health Products Database. Refer to the Clinical Guide to Probiotic Products Available in Canada – Probiotic Applications in
Problotics	Adult Health Chart for up to date evidence. These strains have the most evidence to support benefits (a one month trial is reasonable). Probiotics have not been conclusively shown to improve symptoms of IBS. <sup>4</sup>
	Recommended Strains with the Most Evidence
	<ul> <li>Activia® - 1 serving/day (\$64/month)</li> <li>BioGaia® Protectis Chew tab - 1 tablet/2x day (\$60/month)</li> <li>Visbiome® - 1-4 sachets daily (\$99-396/month)</li> </ul>

#### 9. When to refer for consultation and/or endoscopy

- If alarm features are identified
- If investigations reveal a positive celiac disease screen
- If recommended strategies have not led to satisfactory treatment or management of symptoms
- Provide as much information as possible on the referral form, including identified alarm feature(s), important findings, and treatment/management strategies trialed with the patient.

#### Still concerned about your patient?

The primary care physician is typically the provider who is most familiar with their patient's overall health and knows how they tend to present. Changes in normal patterns, or onset of new or worrisome symptoms, may raise suspicion for a potentially serious diagnosis, even when investigations are normal and typical alarm features are not present.

There is evidence to support the importance of the family physician's intuition or "gut feeling" about patient symptoms, especially when the family physician is worried about a sinister cause such as cancer. A meta-analysis examining the predictive value of gut feelings showed that the odds of a patient being diagnosed with cancer, if a GP recorded a gut feeling, were 4.24 times higher than when no gut feeling was recorded.

When a "gut feeling" persists in spite of normal investigations, and you decide to refer your patient for specialist consultation, document your concerns on the referral with as much detail as possible.

<sup>4</sup> Su, G. L., Ko, C. W., Bercik, P., Falck-Ytter, Y., Sultan, S., Weizman, A. V., & Morgan, R. L. (2020). AGA Clinical Practice Guidelines on the Role of Probiotics in the Management of Gastrointestinal Disorders. *Gastroenterology*.

<sup>5</sup> Natural Medicines Comprehensive Database. Therapeutic Research Centre 2020. [Internet]. [Cited: 2020] Available from: naturaldatabase.therapeuticresearch.com/

<sup>&</sup>lt;sup>6</sup> Friedemann Smith, C., Drew, S., Ziebland, S., & Nicholson, B. D. (2020). Understanding the role of General Practitioners' gut feelings in diagnosing cancer in primary care: A systematic review and meta-analysis of existing evidence. *British Journal of General Practice*, 70(698), e612-e621.

#### **PRIMERS**

#### **Iron Primer**

Evaluation of measures of iron storage can be challenging. Gastrointestinal (occult) blood loss is a common cause of iron deficiency and should be considered as a cause when iron deficiency anemia is present. Menstrual losses should also be considered.

There are two serological tests to best evaluate iron stores (ferritin, transferrin saturation) - neither of which are perfect.

The first step is to evaluate ferritin:

- If the ferritin is low, it is diagnostic of iron deficiency with high specificity (98% specificity).
- Ferritin is an acute phase reactant which may be elevated in the context of acute inflammation and infection. If ferritin is normal or increased, and you suspect it may be acting as an acute phase reactant, order a transferrin saturation test (see below).
  - However, if the ferritin is > 100 µg/L and there is no concurrent significant chronic renal insufficiency, iron deficiency is very unlikely - even in the context of acute inflammation/infection.

The second step is to evaluate transferrin saturation:

- The transferrin saturation is a calculated ratio using serum iron and total iron binding capacity. Serum iron alone does not reflect iron stores.
- Low values (< 10%) demonstrate low iron stores in conjunction with a ferritin < 100 μg/L.</li>

In the absence of abnormal iron indices, anemia may be from other causes other than GI (occult) blood loss (e.g. bone marrow sources, thalassemia, and sickle cell anemia).

#### **BACKGROUND**

#### **About this Pathway**

- Digestive health primary care pathways were originally developed in 2015 as part of the Calgary Zone's Specialist LINK initiative. They were co-developed by the Department of Gastroenterology and the Calgary Zone's specialty integration group, which includes medical leadership and staff from Calgary and area Primary Care Networks, the Department of Family Medicine, and Alberta Health Services.
- The pathways were intended to provide evidence-based guidance to support primary care providers in caring for patients with common digestive health conditions within the Patient Medical Home.
- Based on the successful adoption of the primary care pathways within the Calgary Zone, and their impact on timely access to quality care, in 2017 the Digestive Health Strategic Clinical Network (DHSCN) led an initiative to validate the applicability of the pathways for Alberta and to spread availability and foster adoption of the pathways across the province.
- This pathway has been expanded to other provinces and has been reviewed by gastroenterology and the endoscopy group at the Thunder Bay Regional Health Sciences Centre

#### **Authors & Conflict of Interest Declaration**

This pathway was reviewed and revised under the auspices of the DHSCN in 2020 by a multi-disciplinary team led by family physicians and gastroenterologists.

#### **Pathway Review Process**

Primary care pathways undergo scheduled review every three years, or earlier, if there is a clinically significant change in knowledge or practice. The next scheduled review is June 2023.

#### **Copyright Information**



This work is licensed under a <u>Creative Commons Attribution-Non-commercial-Share Alike 4.0 International</u> license. You are free to copy, distribute, and adapt the work for non-commercial purposes, as long as you attribute the work to Alberta Health Services and Primary Care Networks and abide by the other license terms. If you alter, transform, or

build upon this work, you may distribute the resulting work only under the same, similar, or compatible license. The license does not apply to content for which the Alberta Health Services is not the copyright owner.

#### **Disclaimer**

This pathway represents evidence-based best practice, but does not override the individual responsibility of healthcare professionals to make decisions appropriate to their patients using their own clinical judgment given their patients' specific clinical conditions, in consultation with patients/alternate decision makers. The pathway is not a substitute for clinical judgment or advice of a qualified healthcare professional. It is expected that all users will seek advice of other appropriately qualified and regulated healthcare providers with any issues transcending their specific knowledge, scope of regulated practice or professional competence.

#### PROVIDER RESOURCES

#### **Advice Options**

The Ontario eConsult program is a secure web-based tool that allows physician or nurse practitioner timely access to specialist advice for all patients and often eliminates the need for an in-person specialist visit.:

- To sign up use your ONEID and get same day access, go to <a href="https://otnhub.ca">https://otnhub.ca</a> visit the OTNhub sign up page <a href="https://otnhub.ca/signup-info">https://otnhub.ca</a>
- For physicians without a ONEID, you can register for one through your CPSO Member Portal. If you are a nurse practitioner or need assistance getting a ONEID please email us at eConsultCOE@toh.ca.

#### References

Bharucha, A. E., Dorn, S. D., Lembo, A., & Pressman, A. (2013). American Gastroenterological Association medical position statement on constipation. *Gastroenterology*, 144(1), 211-217. gastrojournal.org/article/S0016-5085(12)01545-4/pdf

Camilleri, M., Ford, A. C., Mawe, G. M., Dinning, P. G., Rao, S. S., Chey, W. D., ... & Chang, L. (2017). Chronic Constipation. Nature Reviews Disease Primers, 3, 17095.

Drossman, D. A., & Hasler, W. L. (2016). Rome IV—functional GI disorders: disorders of gut-brain interaction. *Gastroenterology*, 150(6), 1257-1261. gastrojournal.org/issue/S0016-5085(15)X0019-9

Jamshed, N., Lee, Z. E., & Olden, K. W. (2011). Diagnostic approach to chronic constipation in adults. *American Family Physician*, 84(3), 299-306.

Hayat, U., Dugum, M., & Garg, S. (2017). Chronic constipation: update on management. *Cleveland Clinic Journal of Medicine*, *84*(5), 397-407.

Schuster, B. G., Kosar, L., & Kamrul, R. (2015). Constipation in older adults: stepwise approach to keep things moving. *Canadian Family Physician*, *61*(2), <u>152-158. cfp.ca/content/61/2/152.full.pdf+html</u>

CFPlus Additional Info\_cfp.ca/content/suppl/2015/02/10/61.2.152.DC1/Constipation in older adults.pdf

Serra, J., Pohl, D., Azpiroz, F., Chiarioni, G., Ducrotté, P., Gourcerol, G., ... & Rogler, G. (2020). European society of neurogastroenterology and motility guidelines on functional constipation in adults. *Neurogastroenterology & Motility*, 32(2), e13762.

Sundbøll, J., Thygesen, S. K., Veres, K., Liao, D., Zhao, J., Gregersen, H., & Sørensen, H. T. (2019). Risk of cancer in patients with constipation. *Clinical Epidemiology*, *11*, 299.

Tse, Y., Armstrong, D., Andrews, C. N., Bitton, A., Bressler, B., Marshall, J., & Liu, L. W. (2017). Treatment algorithm for chronic idiopathic constipation and constipation-predominant irritable bowel syndrome derived from a Canadian national survey and needs assessment on choices of therapeutic agents. *Canadian Journal of Gastroenterology and Hepatology*, 2017. hindawi.com/journals/cjgh/2017/8612189/

Wald, A. (2016). Constipation: advances in diagnosis and treatment. <i>The Journal of the American Medical Association</i> , 315(2), 185-191. jamanetwork.com/journals/jama/fullarticle/2481010		
Resources		
Poverty: A Clinical Tool for Primary Care Providers (AB)	cep.health/media/uploaded/PovertyflowAB-2016-Oct-28.pdf	
Nutrition Guidelines: Household Food Insecurity	ahs.ca/assets/info/nutrition/if-nfs-ng-household-food-insecurity.pdf	

#### **PATIENT RESOURCES**

#### Information

	Description	Website
	General information on constipation (Canadian Digestive Health Foundation)	cdhf.ca/digestive-disorders/constipation/
h	Constipation in Adults (UpToDate® — Beyond the Basics Patient information)	uptodate.com/contents/constipation-in-adults-beyond-the-basics

# Your Pathway for Managing Chronic Constipation (adults)

#### What is chronic constipation?

- Chronic constipation means constipation that lasts for a long time (months or years) or keeps coming back over a long period of time.
- It can have many causes.
- Many people will have symptoms of chronic constipation at some point in their lives.
- Usually cared for by healthcare providers in your family doctor's office.

### What is the chronic constipation patient pathway?

It is a map for you and your healthcare providers to follow. It makes sure the care you are getting for chronic constipation is safe and helpful in managing your symptoms.

You and your healthcare providers may modify the pathway to best suit your healthcare needs.

If symptoms cannot be managed over time, you and your healthcare providers may decide a referral to a specialist would be helpful.

#### 1. Check your symptoms

Do you have 2 or more of the following symptoms for at least 3 of the last 6 months?

- Less than 3 stools per week
- · Hard or lumpy stool
- Straining during bowel movements
- Feel like you are unable to get all your stool out
- Feel like something is blocking your stool from coming out

### 2. Make lifestyle changes to manage your symptoms (see over for details)

- Make time in your day for bowel movements; don't ignore the urge
- Make sure you get plenty of water daily
- Increase your fibre intake
- Try to get at least 20 minutes of physical activity daily. Aim for 150 minutes each week

#### 3. Tests that may be done

- Blood tests
- Other tests are rarely needed

### Tell your healthcare providers if you have these symptoms:

- Family history of colon cancer
- Sudden change in bowel habits
- Stool that is black in colour or has blood in it
- Losing weight without meaning to

Talk to your healthcare providers if your symptoms don't improve, get worse, or keep interfering with your everyday activities

Once you find something that works for you, stick with it.

You may need to keep trying other options to find what works best to manage your symptoms.



#### 4. Medicine that may be tried

- Many options can be used to promote bowel movements and improve your symptoms
- Talk with your healthcare providers about what medicines may be right for you

Last Updated: July 2023 Page 12 of 13

# What do I need to know about my symptoms and chronic constipation?

### Working through the chronic constipation patient pathway can take several months:

- Your healthcare provider(s) will ask you questions about your health and do a physical exam. They will also review any medicines you are taking.
- They may suggest certain tests to learn more about possible causes of your symptoms.
- They will talk with you about possible lifestyle habits that may be causing your symptoms and how you can make changes that could help you feel better.
- You may find it helpful to write down your symptoms and bowel routine. You and your healthcare provider(s) can make a plan to help manage your symptoms using this information.
- Together, you may decide to try certain dietary changes and/or medicines to help in treating your symptoms.
- You may use medicines for a short amount of time (or possibly longer) depending on whether your symptoms improve.

#### To manage your symptoms, try to:

- Get at least 20 minutes of physical activity daily. Aim for 150 minutes each week (e.g. walking, biking, gardening, stairs, or your favourite sports).
- Choose high fibre foods like vegetables, fruits, whole grains, nuts, seeds, and legumes (e.g. beans, peas, and lentils).
- Consider using a fibre supplement (e.g. psyllium, inulin).
- Drink plenty of water throughout the day.

#### Seeing a specialist is only recommended if:

- Your symptoms continue or get worse after following treatment and management options in the chronic constipation pathway.
- You and your healthcare providers identify concerning symptoms or test results.

### You can find more information in the great resources below:

- Canadian Digestive Health Foundation cdhf.ca
  - \* search Constipation

### Write any notes or questions you may have here:







This is general information and does not replace the advice of a health professional. AHS does not make any representation or warranty as to the accuracy, reliability, completeness, or applicability of the information. AHS disclaims liability for the use of this information and claims arising thereof.

© 2021 Alberta Health Services, Digestive Health Strategic Clinical Network. <a href="https://creativecommons.org/licenses/by-nc-sa/4.0/">https://creativecommons.org/licenses/by-nc-sa/4.0/</a>. The license does not apply to Alberta Health Services logos, trademarks, or content for which AHS is not the copyright owner.

Last Updated: July 2023 Page 13 of 13