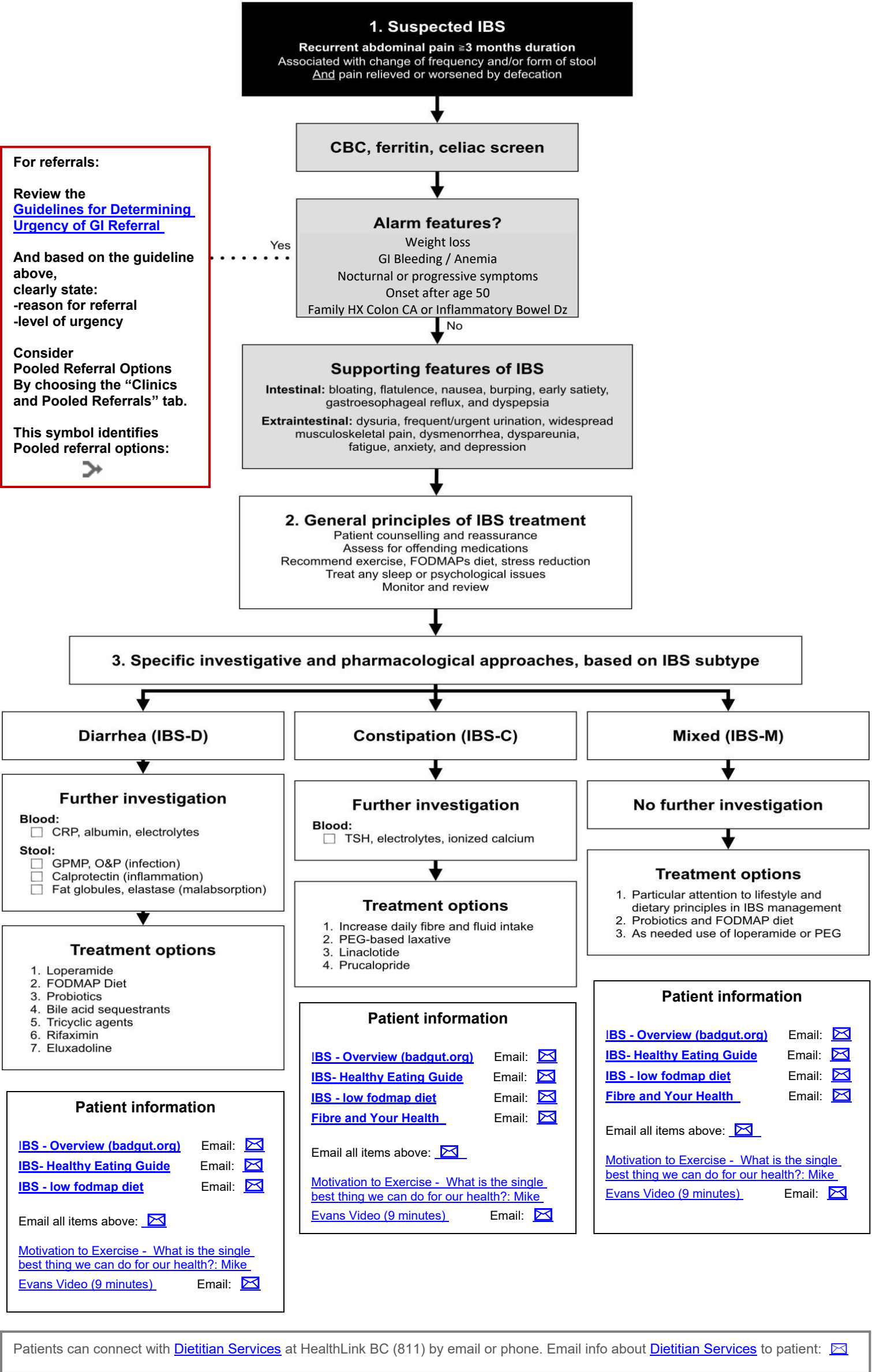




Principles and Specifics of IBS Management by Subtype

All subtypes of IBS	
Exercise	Moderate to vigorous exercise for 20-60 minutes 3-5x per week
Soluble Fibre	Use in IBS remains controversial, as may be beneficial in some but detrimental in others. Reasonable to try psyllium husk one-half to one tablespoon daily. Insoluble fibre like bran is not beneficial.
Probiotics	Bifidobacterium infantis (Align®) 1 capsule/d (\$40/mo.) Lactobacillus plantarum 229v (TuZen®) 1-2 capsules/d (\$40-80/mo.)
Antispasmodics	Peppermint oil (0.2 to 0.275mL caps, enteric coated) 2 capsules BID (\$20-25/mo.) Hyoscine Butylbromide (Buscopan®) 10mg TID-QID (\$25-40/mo.) Dicyclomine hydrochloride (Bentylol®) 20mg TID-QID (\$25-40/mo.) Pinaverium Bromide (Dicetel®) 50-100mg TID (\$50-75/mo.) Trimebutine (Modulon®) 100-200mg TID (\$40-80/mo.) All prescribed antispasmodic medications should be fully discussed with the patient in terms of specific risks and side effects and appropriateness of use in context of their full medical history
Antidepressants	Nortriptyline or amitriptyline 10-25 mg qhs, dose escalate by 10-25 mg/wk May require 25-150mg/d (\$20-60/mo.); usually takes 2-3 mos. for peak effect Particularly useful in patients with diarrhea and pain predominance or sleep issues/anxiety/depression Use with caution in patients at risk of prolonged QT; note somnolence and anticholinergic side effects Latest IBS technical review <u>does not</u> endorse use of SSRIs
Complementary Therapies	Psychological treatments Mindfulness-based stress reduction (www.thebreathproject.org) Hypnotherapy Accupuncture Yoga
Diarrhea-Predominant IBS	
Antidiarrheals	Loperamide (Imodium®) 2-4mg BID (\$25-50/mo. OTC) Cholestyramine powder (Olestyr® \$0.40/g), OR colestipol (Colestid® \$0.25/g) tablets or powder, OR colesevelam (Lodalis® \$1.80/g) tablets or powder, each 1-4g po OD-TID Especially useful post-cholecystectomy. Advise regarding timing with other medications to avoid interaction; if long term use, risk of fat soluble vitamin deficiencies Eluxadoline (Viberzi®) 75-100mg BID with food (\$130/mo)
FODMAPs	Canadian Digestive Health Foundation cdhf.ca/bank/document_en/32-fodmaps.pdf
Gluten Avoidance	Nonceliac gluten sensitivity
Antibiotics	Rifaximin (Xaxine®) 550mg 3x/daily for 2 weeks which costs approximately \$300
Constipation-Predominant IBS	
PEG-based Laxatives	Mira-Lax® or Lax-a-Day® 17-34g/d (\$25-50/mo.)
Prokinetics	Linaclotide (Constella®) 290µg/d 30 minutes before breakfast (\$160/mo.) Prucalopride (Resotran®) 2mg/d, 4 week trial (\$120/mo.)

Enhanced Primary Care Pathway: IBS

1. Focused summary of IBS relevant to primary care

Irritable bowel syndrome is a common symptom complex characterized by **chronic abdominal pain and abnormal bowel function** in absence of organic cause. These key features of IBS can be widely variable in severity and may remit and recur, often being affected by dietary factors and various stressors. **Relief or worsening of abdominal discomfort related to bowel movement** is a defining feature. Bowel dysfunction includes frequent bowel movements, fecal urgency and even incontinence, altered stool form (hard/lumpy or loose/watery), incomplete evacuation, straining at stool, and passage of copious mucus.

IBS is frequently associated with other gastrointestinal symptoms including bloating, flatulence, nausea, burping, early satiety, gastroesophageal reflux, and dyspepsia. Extra-intestinal symptoms also frequently occur in IBS patients including dysuria and frequent, urgent urination, widespread musculoskeletal pain, dysmenorrhea, dyspareunia, fatigue, anxiety, and depression.

Diagnostic criteria for IBS (e.g. Rome IV) were developed for uniformity of patient recruitment in clinical trials. In clinical practice, such criteria only provide a framework for assessing patients with suspected IBS; indeed these criteria alone are far better for ruling out IBS than ruling it in.

The confident diagnosis of IBS relies on presence of foundational symptoms, recognition of intestinal and extra-intestinal symptoms and psychological stressors that support the IBS diagnosis, detailed medical history and physical examination as well as judicious use of investigations to identify red flag features and exclude organic conditions that mimic IBS.

Treatment of IBS involves initial reassurance, dietary, psychological, behavioral interventions, pharmacotherapy based on dominant symptoms, and scheduled patient clinical review, reappraisal, support, and guidance.

2. Checklist to guide your in-clinic review of this patient with IBS symptoms

- | |
|---|
| ☐ Rome IV criteria for IBS: Recurrent abdominal pain ≥ 1 day per week in the last three months related to defecation or associated with change of frequency and/or form (appearance) of stool . |
| ☐ Absence of red flag features (bleeding, anemia, weight loss, nocturnal or progressive symptoms, onset after age 50) |
| ☐ No family history of inflammatory bowel disease, colorectal cancer, or celiac disease |

Enhanced Primary Care Pathway: IBS

3. Links to additional resources for patients

Canadian Digestive Health Foundation **Understanding Irritable Bowel Syndrome**
<http://www.cdhf.ca/en/disorders/details/id/12>

UpToDate® – *Beyond the Basics* Patient Information about **IBS** (freely accessible)
http://www.uptodate.com/contents/irritable-bowel-syndrome-beyond-the-basics?source=search_result&search=ibs&selectedTitle=2%7E150

4. Clinical flow diagram with expanded detail

This AHS Calgary Zone pathway incorporates the most current evidence-based clinical guidelines for diagnosis and management of IBS, from both Gastroenterology and Primary Care literature:

Drossman DA and Hasler WL. Rome IV—Functional GI disorders: Disorders of gut-brain interaction
Gastroenterology 2016;150:1257-61
[http://www.gastrojournal.org/issue/S0016-5085\(15\)X0019-9](http://www.gastrojournal.org/issue/S0016-5085(15)X0019-9)

Weinberg *et al.* AGA Institute Guideline on the pharmacological management of irritable bowel syndrome.
Gastroenterology 2015;147:1146-8
[http://www.gastrojournal.org/article/S0016-5085\(14\)01089-0/abstract](http://www.gastrojournal.org/article/S0016-5085(14)01089-0/abstract)

Kuritzky L. Individualizing Pharmacologic Management of Irritable Bowel Syndrome.
J Fam Pract. 2015;64:S16-21.
<http://admin.imng.com/fileadmin/qhi/jfp/pdfs/CME - Hot Topics IBS article 2.19.16.pdf>

Wilkins *et al.* Diagnosis and management of IBS in adults.
American Family Physician 2012;86:419-426
<http://www.aafp.org/afp/2012/0901/p419.html>

The algorithm above is a best-practice clinical care pathway for management of irritable bowel syndrome in the primary care medical home, which includes a flow diagram and expanded explanation of treatment options.

Flow Diagram: IBS Diagnosis and Management - Expanded Detail

- 1. Diagnosis of IBS** is based on Rome IV criteria (2016) of abdominal pain related to defecation and associated with change in stool frequency or form. IBS requires very little initial laboratory investigation – CBC, ferritin, and celiac disease screen according to most guidelines. The fecal immunochemical test (FIT) has not been validated for investigation of IBS-like symptoms; ordering FIT in this circumstance is inappropriate. Anemia or other red flag features increase the likelihood of organic disease and mandate referral to GI. Absence of red flags, however, does not completely exclude the possibility of organic disease. Various other intestinal and extraintestinal features often co-exist with IBS and provide support to the diagnosis. It is estimated that unrecognized organic disorders will be present in about 15% of patients who meet Rome IV criteria and do not have alarm features. The most common diseases that are mislabeled as IBS are celiac disease, Crohn's disease, and microscopic colitis. **If C-reactive protein is ≤ 0.5 mg/dL, the probability of IBD is $\leq 1\%$. Fecal calprotectin can help distinguish IBS from IBD, but presently the test is done at cost to patients (~\$90).** GI cancers are very unlikely in patients that meet usual criteria for IBS.

A detailed medical history and physical examination should be performed at presentation to assess for a multitude of other conditions that mimic IBS. A careful review of medications should be performed to identify ones that may be causing GI side effects (e.g. PPI, ASA/NSAIDs, laxatives/antacids, iron/calcium/magnesium supplements, calcium channel blockers, antidepressants, opioids, diuretics, herbal products).

- 2. General principles of IBS treatment.** All patients with IBS will benefit from lifestyle and dietary modifications, and this may be all that is required in those with mild or intermittent symptoms that do not affect quality of life. Key to long-term effective management of IBS is to provide patient reassurance of the initial diagnosis IBS and offer points of reassessment and reappraisal to establish a therapeutic relationship. Connecting patients with resources for diet, exercise, stress reduction, and psychological counseling is important. Screen for and treat any underlying sleep or mood disorder.
- 3. Specific approaches based on IBS subtype.** There are three clinical phenotypes of IBS: diarrhea-predominant (IBS-D), constipation-predominant (IBS-C), and mixed pattern alternating diarrhea and constipation (IBS-M). Categorizing IBS by dominant GI symptom guides focused use of a few additional investigations (particularly in IBS-D), but also guides specific treatment approaches. Use of pharmaceuticals in IBS is generally reserved for those who have not adequately responded to dietary and lifestyle interventions, or in those with moderate or severe symptoms that impair quality of life.

Pain and bloating is a defining feature of IBS and, in some patients, these features are severe or frequent enough to affect quality of life. Antispasmodics may be beneficial in managing or aborting acute episodes of pain, and patients often take reassurance in having these on-demand treatments available. For chronic IBS pain, tricyclic antidepressants have shown benefit, and may have added benefits in those patients with mood or sleep issues.

In absence of alarm features, what would prompt referral for GI consultation and possible colonoscopy? Colonoscopy may be helpful in patients with diarrhea predominance who have persistent symptoms or limited benefit from usual treatments. This is mainly to assess for Crohn's disease and microscopic colitis. In patients with constipation predominance or alternating diarrhea and constipation, colonoscopy is very unlikely to yield relevant findings.