

crohn's colitis

Name of Clinical Care Pathway

Health Maintenance

Objective

Prevent the development of other diseases and monitor for adverse effects of therapy

Patient Population

Individuals diagnosed with inflammatory bowel disease (IBD)

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These clinical decision support tools were developed by Canadian experts in IBD, based on their interpretation of current evidence and considerations specific to Canadian healthcare. International guidelines from Europe and the United States are available. However, these may reflect regional factors not directly applicable in Canada.

PACE Inflammatory Bowel Disease Clinical Care Pathways

Abbreviations

5-ASA	5-Aminosalicylic acid
ALP	Alkaline phosphatase
anti-HBs	Hepatitis B surface antibody
anti-TNF	Anti-tumor necrosis factor
BMI	Body mass index
CBC	Complete blood count
CCP	Clinical Care Pathway
COVID-19	Coronavirus disease 2019
DEXA	Dual-energy X-ray absorptiometry
EN	Erythema nodosum
FCP	Fecal calprotectin
GAD-7	Generalized Anxiety Disorder-7
GI	Gastrointestinal
HPV	Human papillomavirus
HS	Hidradenitis suppurativa
IBD	Inflammatory bowel disease
IBD-AID	Inflammatory Bowel Disease-Anti-Inflammatory Diet
IBDQ	Inflammatory Bowel Disease Questionnaire
JAK	Janus kinase
LFTs	Liver function tests
MMR	Measles, mumps, and rubella
MRCP	Magnetic resonance cholangiopancreatography
NMSC	Non-melanoma squamous cell cancer
PAP	Papanicolaou
PBC	Primary biliary cirrhosis
PCV13	13-valent pneumococcal conjugate vaccine
PCV20	20-valent pneumococcal conjugate vaccine
PG	Pyoderma gangrenosum
PHQ-9	Patient Health Questionnaire-9
PPSV23	23-valent pneumococcal polysaccharide vaccine
PROMs	Patient-reported outcome measures
PSC	Primary sclerosing cholangitis
SCD	Specific carbohydrate diet
TB	Tuberculosis
Td	Tetanus and diphtheria
Tdap	Tetanus, diphtheria, and pertussis
TNF	Tumor necrosis factor
VTE	Venous thromboembolism

Highlights from this CCP

IBD patients are at increased risk of infections, metabolic bone disease, certain malignancies, and mental health disorders secondary to their illness while on immunomodulatory therapy. Many of the infections can be prevented if patients are routinely monitored.

Introduction

This CCP provides guidance to clinicians on comprehensive health maintenance in patients with IBD.

Primary care providers:

Annual routine review by primary care provider:

Primary care providers are expected to coordinate annual screenings, ensure vaccination guidelines, and arrange counselling and nicotine replacement therapy for smoking cessation.

1. Vaccination:

Refer to the [Vaccination Guide](#) (Link)

- Review complete vaccination status annually.
- No live vaccines once on immunosuppressive therapy.
- Recommended vaccines
 - Influenza (annual, inactivated)
 - COVID-19: Up-to-date immunization per national schedule
 - Pneumococcal: PCV20 once, OR PCV13 then PPSV23 sequence if already started
 - Hepatitis B: Check anti-HBs; vaccinate if non-immune; consider high-dose schedule
 - Hepatitis A: If non-immune or travel/exposure risk.
 - Shingrix (non-live recombinant):
 - All patients ≥50 years OR
 - ≥18 years if on JAK inhibitors, steroids, or combination immunosuppression.
 - HPV vaccine: Up to age 45; recommended for all immunosuppressed individuals
 - Td/Tdap every 10 years
 - Consider MMR/varicella immunity check before immunosuppression; vaccinate if non-immune and safe

2. Annual screening:

- Annual dermatology exam for melanoma and non-melanoma cancer, especially with thiopurines or anti-TNF.

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- Prostate cancer: Follow national age-appropriate screening recommendations
- PAP smears in immunocompromised women for cervical cancer*
- Oral health
- Ophthalmologic examination
- Routine breast examination

..Refer to local health authority guidelines for individualized screening recommendations.

3. Lifestyle and prevention:

- Behavioral health
 - Screen annually for depression and anxiety (e.g., PHQ-9, GAD-7).
 - Refer to psychotherapy or psychiatry when indicated. Assess coping, fatigue, and social support.
- Smoking
 - Strongly advise cessation, especially in Crohn's disease.
 - Offer pharmacotherapy and counselling.
- Alcohol & cannabis
 - Counsel moderate use; avoid during active liver disease.
- Exercise
 - Encourage regular aerobic and resistance training.
- Sleep & stress
 - Evaluate for sleep disorders.
 - Stress-management resources.

4. Reproductive & sexual health:

- Review fertility, menstrual patterns, contraceptive needs.
- Pre-conception counselling (optimize disease remission before conception).
- Discuss medication safety during pregnancy and lactation, and refer patients to their GI specialist for guidance. If the patient is on potentially unsafe medication, recommend appropriate contraception until therapy is reviewed and adjusted by the IBD specialist.

5. Additional IBD-associated risks:

- **Cardiovascular risk**
 - Assess cardiovascular risk annually, including blood pressure, lipid profile, and diabetes risk.
 - Reassess risk following prolonged corticosteroid exposure or initiation of JAK inhibitors.
 - Manage modifiable risk factors in accordance with national cardiovascular prevention guidelines.
- **Venous thromboembolism (VTE)**
 - Recognize IBD as an independent risk factor for VTE, particularly during active disease.

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- Ensure pharmacologic VTE prophylaxis during hospitalization, unless contraindicated.
- Reassess VTE risk during moderate–severe flares, especially in patients receiving corticosteroids or JAK inhibitors.
- **Fatigue**
 - Screen routinely for fatigue as part of symptom and quality-of-life assessment.
 - Evaluate reversible contributors, including active inflammation, anemia, micronutrient deficiencies, sleep disturbance, and mood disorders.
 - Address fatigue using a multidisciplinary approach when persistent.

IBD specialist

1. **Assess:** Symptoms, stool frequency, bleeding, abdominal pain, urgency, weight, fatigue.
2. **Assess:** Quality-of-life and disability screening (IBDQ or PROMs if available).
3. **Assess:** Extraintestinal manifestations, screen at least annually for the following, and make the appropriate referrals, as needed:
 - Arthritis/arthralgia: Axial spondyloarthritis (refer to rheumatology if stiffness > 30 min, inflammatory back pain).
 - Primary sclerosing cholangitis (PSC), Primary biliary cirrhosis (PBC) - (check ALP/LFTs; MRCP if suspected); refer to hepatology if appropriate.
 - Ocular symptoms: Iritis/Uveitis/episcleritis (annual ophthalmologic exam or sooner if symptoms).
 - Dermatologic: Erythema nodosum (EN), pyoderma gangrenosum (PG), hidradenitis suppurativa (HS), other symptoms (dermatitis, psoriasis, acne, etc) (refer to dermatology).
 - Kidney stones, gallstones.
 - Risk of Osteoporosis.
 - Perianal/fistulizing disease (refer to surgery as needed).
4. **Colon dysplasia screening:** Patients with colonic disease for > 8 years should undergo colonoscopy every 1-3 years. Refer to [Colonic Dysplasia/Cancer Surveillance protocol \(Link\)](#).
5. **Diet and nutritional assessment:** Screen for malnutrition, sarcopenia, restrictive diets, and food insecurity.
6. **Special considerations**
 - Post-operative / stricturing disease: Low-fibre guidance when needed.
 - Iron deficiency: Determine whether from inflammation vs malabsorption.

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- Assess vitamin D 25-OH level. If deficient or insufficient, refer to [the Vitamin D](#) protocol.
- Avoid restrictive diets (e.g., SCD, IBD-AID) without dietitian supervision.
- Consider enteral nutrition in Crohn's (when avoiding steroids).
- If ileal disease or post-surgery, monitor vitamin B12 and iron annually.
- Provide educational materials.
- Refer to a dietitian/nutritionist as appropriate.

7. Special situations

- Older adults (>60 yrs)
 - Higher infection and malignancy risk: choose safest therapies.
 - Vaccinations strongly emphasized.
- Adolescents/young adults
 - Transition-of-care planning.
 - HPV vaccine catch-up.
- Post-operative patients
 - Surveillance of recurrence (e.g., Rutgeerts score for Crohn's ileal resection).
 - Smoking cessation is critical.

8. Monitoring for patients on 5-ASA

- Annual renal function
- Urinalysis

9. Monitoring for patients on immunomodulatory therapy

All patients should receive age-appropriate vaccination before initiation of immune suppression therapy. Female patients should have cervical screening (PAP smear)* and routine breast examination.

- Patients should undergo skin examination for non-melanoma squamous cell cancer (NMSC).
- Attenuated virus vaccines must be avoided. Refer to the [Vaccination Guide](#).

**Refer to local health authority guidelines for individualized screening recommendations.*

Monitoring for patients on Thiopurines

- Patients on thiopurines should have complete blood count and liver function tests quarterly.
- Lymphoma awareness: Consider the signs and symptoms below:
 - Painless swelling in the lymph nodes in the neck, under the arm or in the groin
 - Unexplained fevers
 - Night sweats
 - Unexplained weight loss
 - Itchy skin

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Monitoring for patients on Methotrexate

- CBC & LFTs every 1–3 months.
- Folic acid supplementation.

10. Advanced therapy

- Test for tuberculosis (TB) before starting advanced therapy. Refer to the [Induction of Advanced Therapy](#) protocol.
 - TB risk assessment once per year and consider re-testing if:
 - Contact with TB
 - Travel to TB-endemic region
- Cancer awareness consider the signs and symptoms below:
 - Unexplained fevers
 - Night sweats
 - Unexplained weight loss
- Monitoring for patients on JAK inhibitors
Lipid profile 8–12 weeks after initiating therapy with JAK Inhibitors then annually.
Assess for risk of thrombosis using the [Caprini Score for Venous Thromboembolism \(2005\)](#). Shingles vaccination if required should ideally be administered prior to starting therapy.

11. Risk assessment (review annually)

- Cumulative steroid exposure (>3 months continuous or repeated courses)
- Low BMI, malnutrition, or sarcopenia
- Amenorrhea or hypogonadism
- Post-menopausal status
- First-degree family history of osteoporosis or fragility fracture
- Active inflammation or long-standing disease
- Ileal disease, extensive small bowel resection, or ileal pouch–anal anastomosis
- Laboratory monitoring:
 - Vitamin D (25-OH) and calcium (with albumin correction) at baseline and periodically
- Address secondary contributors (e.g., hypogonadism, thyroid disease) as clinically indicated

12. Bone mineral density

- Obtain DEXA if ANY of the following are present:
 - Systemic steroid use >3 months
 - Prior chronic steroid exposure (≥ 1 year within the past 2 years)
 - Post-menopausal women (regardless of disease activity)
 - Amenorrhea
 - Malnutrition or sarcopenia
 - First-degree family history of osteoporosis
 - Ulcerative colitis with ileal pouch–anal anastomosis

- Management:
 - Vitamin D repletion per national guidelines
 - Optimize dietary calcium intake (or supplement if inadequate)
 - Counsel on weight-bearing and resistance exercise
 - Minimize steroid exposure; use steroid-sparing therapy when possible
 - Consider endocrinology referral for osteoporosis or fragility fracture

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crohn's colitis

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