

This primary care pathway was co-developed by primary and specialty care and includes input from multidisciplinary teams from all five zones. It is intended to be used in conjunction with specialty advice services, when required, to support care within the medical home.

EXPANDED DETAILS

Pathway Primer

- Recent updates to this pathway were made March 2025; see Pathway Update Notes for details.
- This clinical pathway provides primary care providers with guidance on evidence-based diagnosis, investigations, and management and appropriate referral of abnormal uterine bleeding in post-menarchal adults with a uterus. The Society of Obstetricians and Gynecologists of Canada (SOCG) generally recommend that treatment of AUB should start with medical management, followed by the least invasive surgical interventions to achieve results for patients [1]. This principle is also reiterated in a Choosing Wisely Canada recommendation that surgical interventions should be avoided for abnormal uterine bleeding until medical management (including progesterone intra-uterine system) has been offered and either declined or found unsuccessful [2].
- Normal cyclical menstrual bleeding refers to a regular menses that occurs at an interval of 24-38 days in a premenopausal patient [1]. Abnormal uterine bleeding (AUB) is bleeding that occurs outside of the normal 24-38
 day pattern. Post-menopausal bleeding is defined as bleeding occurring in a person with uterus who is both
 older than 40 years of age and has a new onset of bleeding after one year of amenorrhea. See Provincial
 Post-Menopausal Bleeding Primary Care Clinical Pathway for information on managing this condition.
- Abnormal uterine bleeding is a common condition that affects many people with a uterus, who are of
 reproductive age, and it can result in significant health and economic burdens. For example, a 2007
 systematic review on AUB assessed the prevalence of heavy bleeding, one type of AUB, at between 10% to
 30% in women of reproductive ages [3].

1. History

A thorough patient history and physical examination will, in most cases, identify the cause(s) of abnormal uterine bleeding and provide direction for investigation and management. Recognition of diverse gender identities of patients is important. Use pronouns and names appropriate to the patient's gender identity and use gender-inclusive language throughout the interaction.

. Evaluate the bleeding pattern, including quantity and timing

- Do cycles occur between 24-38 days apart? Cycles may vary in length month to month, but a normal cycle will average between 24-38 days in length.
- o Is there bleeding between cycles?
- o Is the amount of bleeding enough to soak a protective product per hour?
- o Is there bleeding with intercourse?

• Consider differential diagnosis (non-gynecological sources)

- o Rule out urinary or bowel as the source for bleeding.
- Assess use of hormonal contraception to determine if lack of adherence may be contributing to bleeding or if there have been recent changes to hormonal contraception prescription regime.

· Assess pregnancy risk and sexual activity

- All pre- or peri-menopausal patients with abnormal bleeding should have a pregnancy test if there is potential for pregnancy.
- For patients older than 40 years with a history of amenorrhea for > 1 year and have a new episode of bleeding, consult the Provincial Post-Menopausal Bleeding Primary Care Clinical Pathway.

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• Review the risk factors for gynecological cancers [1]:

Endometrial Cancer Risk Factors

The average age for women with endometrial cancer is 61 years, but 5% - 30% of cases can occur in premenopausal women [1]. Women younger than 50 years of age can share many of the same risk factors for endometrial cancer as older women.

- o Age > 40 years
- Obesity (BMI > 30 kg/m²)
- Nulliparity
- o PCOS (polycystic ovarian syndrome)
- Irregular cycles
- o Diabetes
- Lynch syndrome or HNPCC (hereditary non-polyposis colorectal cancer) the most common hereditary form of colorectal cancer
- o Current tamoxifen use
- Unopposed estrogen exposure

Cervical Cancer Risk Factors

- Suboptimal cervical screening
- o Multiparity
- HPV infection
- Sexual activity:
 - Becoming sexually active at a young age (especially younger than 18 years old)
 - Multiple sexual partners
 - Having one partner who is considered high risk (someone with HPV infection or who has many sexual partners)
- o Weakened immune system
- o Chlamydia infection
- o Long-term use of oral contraceptives
- o Family history of cervical cancer

Ovarian Cancer Risk Factors

- Hereditary
 - Family history of ovarian cancer
 - Personal history of breast cancer
 - Alteration in BRCA1 or BRCA2
 - Lynch syndrome
- o Reproductive
 - Advanced age
 - Nulligravity
 - Infertility
- $\circ \quad \text{Hormonal} \quad$
 - Early age at menarche
 - Late age at natural menopause
 - Hormone replacement therapy
 - Estrogen
 - Androgens

- Inflammatory
 - Perineal talc exposure
 - Endometriosis
 - Pelvic inflammatory disease
- o Lifestyle
 - Obesity
- Geography
 - Extremes in latitude

2. Assessment

The physical examination should identify evidence of systemic conditions or anatomical causes of bleeding.

- Providing Trauma-Informed Care is critical. Providers are encouraged to refer to the Canadian Public Health Association Guide for providing trauma informed exams.
- . It is highly recommended that patients should receive a pelvic exam, including inspection of external genitalia, speculum and bimanual exams.
- Examine the external genitalia for ulcers or atrophic tissue, which could be the source of the bleeding.
 - o If ulcers are present, initiate an urgent referral to gynecology for biopsy and medical management. A biopsy can be taken by the primary care provider if skilled in this area.
- Inspect and palpate internally for abnormalities such as fibroids, masses or cervical polyps. If concerning lesion or mass present, initiate an urgent referral to gynecology for biopsy and medical management. A biopsy can be taken by the primary care provider if skilled in this area.

3. Red Flags

- · Patient looks unwell
- Tachycardia/ hypotension
- Flooding through >1 high protection product consistently per hour (pad/ tampon/ menstrual cup)
- Fever

If red flags are present or the patient is medically unstable, call RAAPID for an urgent referral to gynecology for immediate hospital evaluation, or call 911.

4. Investigations

- If the patient is due, include a PAP test (TOP Cervical Cancer Screening Guideline).
- If there is intermenstrual, post-coital bleeding or vaginal discharge, initiate testing for:
 - Chlamydia
 - Gonorrhea
 - o Trichomonas
 - o Bacterial vaginosis
 - Yeast
- If STI testing is positive, treat as per provincial guidelines (Alberta STI Treatment Guidelines).
- Rule out and/or manage pregnancy:
 - Perform a sensitive urine or serum pregnancy test if there is any possibility of pregnancy.
 - If the patient has a positive pregnancy test and is bleeding, ensure the pregnancy is viable and intrauterine with a pelvic ultrasound.
 - If the pregnancy is NOT viable and intrauterine and the patient is stable, link to early pregnancy loss clinic, if available or local hospital. You can search the Alberta Referral Directory to find an early pregnancy loss clinic in your zone.
 - o If this is a possible ectopic pregnancy or the patient is bleeding heavily or is medically unstable, call RAAPID for referral to gynecology.

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- CBC/ Ferritin: For all stable patients, consider ordering a CBC/Ferritin. Treat as appropriate:
 - o Follow the Using Blood Wisely Guidelines when considering a transfusion
 - Follow the Iron deficiency anemia pathway

Endometrial biopsy:

- o Consider performing if the patient is > 40 years old with risk factors for endometrial cancer and is experiencing irregular periods for > 3-6 months at a time.
- Refer to a primary care physician with expertise in endometrial biopsy or to gynecology for biopsy if necessary.
- Free Androgen Index: Consider the addition of Free Androgen Index testing if the patient has historical features of polycystic ovarian syndrome. There is no utility to requesting FSH/ LH/ estradiol or progesterone levels [2].
- . Thyroid testing: Thyroid functioning testing is not indicated unless there are clinical findings suggestive of an index of suspicions of thyroid disease [1].
- Coagulation disorders: Testing for coagulation disorders should only be considered in women with heavy bleeding since menarche or who have a family history/personal history of abnormal bleeding [1].
- Transvaginal pelvic ultrasound: For all stable patients, perform transvaginal pelvic ultrasound to rule out uterine structural causes for abnormal bleeding (e.g., polyp).
 - o You can refer to the Canadian Public Health Association Guide for providing trauma informed exams.
 - o If a transvaginal pelvic ultrasound is not available or appropriate for the patient, please complete a trans abdominal ultrasound.

5. Management

For all stable patients attempt medical therapy. Ensure no contraindications prior to prescribing:

• Non-Hormonal options:

- NSAIDS with menses (e.g., Ibuprofen ® 400mg po q6h x5 days or naproxen 500mg po BID x5 days).
- o Tranexamic acid with menses: 1000mg po QID or 1500mg PO TID x 5 days with menses, taken with food.

Hormonal options:

- o Progesterone-only methods:
 - Levonorgestrel-releasing IUD (referral to gynecology or GP with IUD experience), or
 - Progesterone 100-200 mg PO OD at bedtime daily, or
 - Norethindrone 2.5 to 10 mg orally once a day or 5 to 10 days, or
 - Dienogest 2mg PO daily, or
 - Medroxyprogesterone acetate 5mg or 10 mg daily for 5 to 10 days.
- o Combined contraceptive to decrease the amount of bleeding:
 - Monophasic oral pill, patch or ring.
 - Note contraindications: History of or current VTE, CAD/ cerebrovascular disease, breast cancer, other estrogen- dependent malignancy, known or suspected pregnancy, benign or malignant liver tumor/disease, smoking and > 35 years old, uncontrolled hypertension, or migraines with focal neurologic symptoms.

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Intermenstrual bleeding or post-coital bleeding

For women with regular monthly cycles (24-38 days) who experience bleeding in between cycles or after sexual intercourse:

- Complete a screening for STIs and treat if positive, according to provincial guidelines (STI Treatment Guidelines).
- For a normal ultrasound and structural/infectious causes ruled out, attempt medical therapy. Ensure no contraindications prior to prescribing:
 - o 3 to 6 months of oral monophasic contraceptive pill/ring/patch
 - o 3 to 6 months of a progesterone-only method
- If the cervix is friable, treat for mucopurulent cervicitis (STI Treatment Guidelines). If symptoms persist, refer to gynecology for management.

Ultrasound findings

- If a polyp or submucosal fibroid is present, or there is a large fibroid (> 5cm) or multiple fibroids, ensure medical therapy is established and complete an initial referral to gynecology.
- If concerning lesion or mass present, initiate an urgent referral to gynecology for biopsy and medical management. A biopsy can be taken by the primary care provider if skilled in this area.

Endometrial biopsy findings

- If endometrial biopsy was indicated, patient is > 40 years old with risk factors for endometrial cancer and is experiencing irregular periods for > 3-6 months at a time, then please complete.
- If endometrial biopsy is unable to be completed or insufficient tissue obtained refer to gynecology.
- Hyperplasia without atypia
 - o Ensure progesterone treatment has been established (levonorgestrel IUD or progesterone 200mg PO QHS). Bleeding should stop within 3 to 6 months. If bleeding persists, refer to gynecology.
 - o Repeat endometrial sampling is indicated in 3 to 6 months to ensure resolution of endometrial hyperplasia even if bleeding has ceased. If IUD is in place, endometrial sampling can be completed. Consider referral to gynecology if collection of repeat endometrial sampling support is needed.
- Hyperplasia with atypia or malignancy
 - o If sampling suggests hyperplasia with atypia or endometrial carcinoma, make an urgent referral to gyne-ONCOLOGY (Gynecological Oncology).

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6. Advice Options

Severe bleeding or medical instability (i.e., soaking through a protective product per hour or abnormal vital signs). This patient needs to be directed to hospital through RAAPID for on-call gynecologist or 911.

Zone	Program	Online Request	Phone Number		
Urgent Telephone					
All Zones	RAAPID (+) RAAPID Rideral, Access, Advice, Placement, Internation & Destination	N/A	North: 1-800-282-9911 or 780-735-0811 South: 1-800-661-1700 or 403-944-4486		
Non-Urgent Electronic					
Calgary, Central, North, South	Netcare eReferral eReferral		N/A		
Non-Urgent Telephone					
Edmonton, North	ConnectMD	Online Request	1-844-633-2263		
Calgary	Specialist Link Specialist Link Connecting Primary and Specially Care	Online Request	403-910-2551		

You can request non-urgent advice at any point when uncertain about medications, next steps in treatment, investigations, or resources available.

7. Referral Process

Referral pathways are guidelines to help referring providers know what information, labs and diagnostic imaging are required with their referral to a specialty.

Referral pathways are co-designed with Primary and Specialty Care, AHS Operations, and patients to ensure the right amount of information is included throughout the referral process to triage the patient as quickly as possible.

To ensure referring providers have referral information at their fingertips, referral pathways may link to clinical pathways when available. AHS manages referral pathways and extensive work is ongoing as part of the <u>Alberta Surgical Initiative</u>. If you have questions or want to know more about the referral pathway development process, please email <u>access.ereferral@ahs.ca</u>.

- Urgent Referral Call gynecologist on call via RAAPID or call 911.
- For all referrals to gynecology please ensure to follow the <u>Provincial Gynecology</u>, <u>Adult Referral Pathway</u>.
- For hyperplasia with atypia or malignancy, send referral to Gyne-Oncology (Gynecological Oncology):
 - o Calgary: Send referral to the Arthur J.E. Child Comprehensive Cancer Care Centre
 - Edmonton: Send referral to the Cross Cancer Institute New Patient appointment office
- Alberta Referral Directory is also a helpful resource for all referral information.

BACKGROUND

About this pathway

- This pathway was initially developed under the auspices of the Calgary Zone Department of Gynecology in 2020 by a multidisciplinary team led by family physicians and gynecologists.
- · Condition-specific clinical pathways are intended to offer evidence-based guidance to support primary care providers in caring for patients with a range of clinical conditions.

Authors and conflict of interest declaration

- In March 2023, in collaboration with gynecologists, primary care physicians, patient and family advisors, and the Provincial Pathways Unit (PPU), the Calgary Zone pathway was reviewed and revised in order to make it a provincial primary care clinical pathway for use in Alberta.
- Names of participating reviewers and their conflict-of-interest declarations are available on request.

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Pathway review process, timelines

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 May 2027. However, we welcome feedback at any time. Please provide your feedback here or email comments to albertapathways@primarycarealberta.ca.

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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.

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PROVIDER RESOURCES

Resources	Link
TOP Guideline – Cervical Cancer Screening	actt.albertadoctors.org/CPGs/Lists/CPGDocumentList/ Cervical-Cancer-Screening-Summary.pdf
Alberta STI Treatment Guidelines	open.alberta.ca/publications/treatment-guidelines-for-sti-2018
SOGC Clinical Practice Guideline No. 292 - Abnormal Bleeding in Pre-Menopausal Women	jogc.com/article/S1701-2163(18)30117-8/abstract
Choosing Wisely Canada – Recommendations from the Society of Obstetricians and Gynecologists of Canada	choosingwiselycanada.org/obstetrics-and-gynaecology

PATIENT RESOURCES

This section is intended to list resources that primary care providers may find useful to share with patients to help support self-management and care in the medical home.

Resources	Link
Patient Pathway on MyHealth Alberta > A webpage and two PDF formats are available to allow for easy printing, download, or scanning a QR code with the patient's smart phone for more information at their convenience.	Your Journey with Abnormal Uterine Bleeding: myhealth.alberta.ca/HealthTopics/abnormal-uterine-bleeding-pathway/Documents/abnormal-uterine-bleeding-pathway-summary.pdf
MyHealth Alberta > Health Information & Topics> Abnormal Uterine Bleeding. Information on causes, symptoms, treatments and resources for women with abnormal uterine bleeding.	myhealth.alberta.ca/health/pages/ conditions.aspx?Hwid=aa76597
Menstrual Diary to Monitor Premenstrual Symptoms (available from MyHealth Alberta). Print off a paper-based diary to track your menstrual cycle, along with symptoms and other factors pertinent to your health.	myhealth.alberta.ca/health/Pages/ conditions.aspx?hwid=aa151402

REFERENCES

PATHWAY UPDATE NOTES

March 2025

• Gynecology-Oncology referral information updated

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^[1] Sing, S, Best, C, Dunn, S et al. SOGC Clinical Practice Guideline No. 292 – Abnormal Uterine Bleeding in Pre-Menopausal Women. *J Obstet Gynaecol Can.* 2018;40(5):e391-e415

^[2] Choosing Wisely. Society of Obstetricians and Gynecologists of Canada: *Nine Things Physicians and Patients Should Question*. Choosing Wisely Canada; 2019. https://choosingwiselycanada.org/obstetrics-and-gynaecology

^[3] Liu, Z, Doan, QV, Blumenthal, P and Dubois, RW. A Systematic Review Evaluating Health-Related Quality of Life, Work Impairment, and Health-Care Costs and Utilization in Abnormal Uterine Bleeding. Value in Health. 2007;10(3):183-194.