Quality Standards

Heavy Menstrual Bleeding
Care for Adults and Adolescents of Reproductive Age

October 2016

Let’s make our health system healthier

Health Quality Ontario
Summary

This quality standard addresses care for people of reproductive age who have heavy menstrual bleeding, regardless of the underlying cause. The quality standard includes both acute and chronic heavy menstrual bleeding, and applies to all care settings. It does not apply to people with non-menstrual bleeding or with heavy menstrual bleeding occurring within 3 months of a pregnancy, miscarriage, or abortion.

About Quality Standards

Health Quality Ontario, in collaboration with clinical experts, patients, residents, and caregivers across the province, is developing quality standards for Ontario.

Quality standards are concise sets of statements that will:

- Help patients, residents, families, and caregivers know what to ask for in their care
- Help health care professionals know what care they should be offering, based on evidence and expert consensus
- Help health care organizations measure, assess, and improve their performance in caring for patients

The recommendations in this quality standard do not override the responsibility of health care professionals to make decisions with patients, after considering each patient’s unique circumstances.
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How to Use Quality Standards

Quality standards inform clinicians and organizations about what high-quality health care looks like. They are based on the best available evidence.

They also include indicators to help clinicians and organizations assess the quality of care they are delivering, and to identify gaps and areas for improvement. These indicators measure process, structure, and outcomes.

In addition, tools and resources to support clinicians and organizations in their quality improvement efforts accompany each quality standard.

For more information on how to use quality standards, contact qualitystandards@hqontario.ca.
About Health Quality Ontario

Health Quality Ontario is the provincial advisor on the quality of health care. We are motivated by a single-minded purpose: **Better health for all Ontarians.**

Who We Are

We are a scientifically rigorous group with diverse areas of expertise. We strive for complete objectivity, and look at things from a vantage point that allows us to see the forest and the trees. We work in partnership with health care providers and organizations across the system, and engage with patients themselves, to help initiate substantial and sustainable change to the province’s complex health system.

What We Do

We define the meaning of quality as it pertains to health care, and provide strategic advice so all the parts of the system can improve. We also analyze virtually all aspects of Ontario’s health care. This includes looking at the overall health of Ontarians, how well different areas of the system are working together, and, most importantly, patient experience. We then produce comprehensive, objective reports based on data, facts, and the voices of patients, caregivers, and those who work each day in the health system. As well, we make recommendations on how to improve care using the best evidence. Finally, we support large scale quality improvements by working with our partners to facilitate ways for health care providers to learn from each other and share innovative approaches.

Why It Matters

We recognize that, as a system, we have much to be proud of, but also that it often falls short of being the best it can be. Plus certain vulnerable segments of the population are not receiving acceptable levels of attention. Our intent at Health Quality Ontario is to continuously improve the quality of health care in this province regardless of who you are or where you live. We are driven by the desire to make the system better, and by the inarguable fact that better has no limit.
About This Quality Standard

Scope of This Quality Standard

This quality standard includes 14 quality statements addressing areas that were identified by Health Quality Ontario’s Heavy Menstrual Bleeding Quality Standard Advisory Committee as having high potential for quality improvement in the way that care for heavy menstrual bleeding is currently provided in Ontario. It focuses on adults and adolescents of reproductive age presenting with either acute or chronic heavy menstrual bleeding in any care setting, regardless of the underlying cause of the bleeding. However, it does not cover the management of cancer or endometriosis once diagnosed. This quality standard does not apply to people who are pregnant or postmenopausal, or who have had a delivery, miscarriage, or abortion in the past 3 months.

In this quality standard, we consider heavy menstrual bleeding to mean excessive menstrual blood loss that interferes with people’s physical, social, emotional, or material quality of life. It can occur alone or in combination with other symptoms.

Why This Quality Standard Is Needed

Heavy menstrual bleeding affects up to 30% of women of reproductive age and can be debilitating, persistent, and ultimately have a negative impact on a person’s quality of life. Fatigue due to iron deficiency anemia and worry about the bleeding may lead people to miss work or withdraw from social activities they previously enjoyed. Rare complications associated with heavy menstrual bleeding include hypovolemic shock, acute ischemic stroke, retinopathy, and venous sinus thrombosis.

The quality of care for heavy menstrual bleeding varies across Ontario. For example, the age-adjusted rate of hysterectomies for people with heavy menstrual bleeding varies more than 10-fold across the 14 local health integration networks (LHINs) (2013/2014 data from the Discharge Abstract Database and the National Ambulatory Care Reporting System). This suggests that patients have inequitable access to the variety of medical and surgical treatment options for heavy menstrual bleeding. In contrast, there is only a small amount of variation in the age-adjusted rates of hysterectomies for cancer and for prolapse across the LHINs.

Based on evidence and expert consensus, the 14 quality statements that make up this standard provide guidance on high-quality care, with accompanying indicators to help health care professionals and organizations measure the quality of the care they provide.

Helping patients actively engage with clinicians in making treatment choices is also a focus of this quality standard. There is no single “best treatment” for all cases of heavy menstrual bleeding. The most appropriate treatment for an individual patient will depend on personal factors such as their other health conditions, their desire for future fertility, the cost of treatment, and its impact on their quality of life.
Principles Underpinning This Quality Standard

This quality standard is underpinned by the principles of respect and equity.

People with heavy menstrual bleeding should receive services that are respectful of their rights and dignity and that promote self-determination.

People with heavy menstrual bleeding should receive services that are respectful of their gender identity, sexual orientation, socioeconomic status, housing, age, background (including self-identified cultural, ethnic, and religious background), and disability.

A high-quality health system is one that provides good access, experience, and outcomes for all Ontarians no matter where they live, what they have, or who they are.

How We Will Measure Our Success

Each quality statement within this quality standard is accompanied by one or more indicators to measure the successful implementation of the statement. In addition to indicators for specific statements, a small number of health outcome indicators have been selected to measure the success of this quality standard as a whole:

- Percentage of patients with heavy menstrual bleeding who reported being satisfied with symptom control
- Percentage of patients with heavy menstrual bleeding who reported that their health care professional always or often involves them in decisions about their care and treatment
- Percentage of patients with heavy menstrual bleeding who had unplanned emergency department visits for heavy menstrual bleeding
- Rate of regional variation of hysterectomies in patients with heavy menstrual bleeding
Quality Statements in Brief

[Quality Statements in Brief to be inserted once statements are finalized, before going to design]
Quality Statement 1: Comprehensive Initial Assessment

Patients with symptoms of heavy menstrual bleeding have a detailed history taken, gynecological exam, complete blood count test, and pregnancy test (if pregnancy is possible) at their initial assessment.

Background

Taking a detailed history and performing a physical exam will help to establish the cause of the heavy menstrual bleeding, direct further investigations, and guide management options. The comprehensive initial assessment can be performed over several visits. It is not recommended that patients routinely be asked to measure their blood loss. Heavy menstrual bleeding should be considered a problem if the patient believes that it interferes with their life and normal functioning.

The following laboratory tests should not routinely be part of the initial assessment:

- **Thyroid testing**—This should be done only when the history or physical examination is suggestive of thyroid disease.
- **Hormone testing** and **ferritin testing**—Iron supplementation for anemia can be started without ordering a serum ferritin. Ferritin should not be ordered during an initial assessment unless you suspect iron deficiency without anemia; see Statement 4 for indications for ordering a serum ferritin test.
- **Testing for coagulation disorders**—This should only be considered in patients who have a history of heavy menstrual bleeding since menarche, a history of abnormal bleeding from other sites, or a family history of abnormal bleeding, and who screen positive using a structured bleeding assessment tool.

Definitions Used Within This Quality Statement

**Detailed history**

The history should address the following:

- Details about the bleeding
- Symptoms of anemia and iron-deficiency (e.g., restless leg syndrome, hair loss)
- Sexual and reproductive history
- Impact on social and sexual functioning
- Impact on quality of life
- Symptoms suggestive of systemic causes of bleeding such as hypothyroidism or coagulation disorders
- Associated symptoms such as vaginal discharge or odour, pelvic pain or pressure
- Co-morbid conditions such as hormonally dependent tumours, thromboembolic disease, or cardiovascular problems that could influence treatment options
- A list of medications including over-the-counter and natural or herbal remedies
- Personal history of, or risk factors for, endometrial or colon cancer (see Statement 4 for risk factors for endometrial cancer)

What This Quality Statement Means

**For Patients**

At your initial assessment, your health care professional should ask you questions about your health. For example, your health care professional should ask you about your symptoms and...
how they affect your life, and also about other aspects of your health that might affect your treatment options. They should also conduct a pelvic exam and ask you to get a blood and urine test.

**For Clinicians**
Ensure you perform a detailed history, gynecological exam, complete blood count, and pregnancy test (if pregnancy is possible) at the initial assessment. Heavy menstrual bleeding should be considered a problem if your patient feels that their bleeding is too heavy and that it interferes with their life and normal functioning.

**For Health Services**
Ensure systems, processes, and resources are in place to assist clinicians with the comprehensive initial assessment of patients with heavy menstrual bleeding.

**Quality Indicators**

**Process Indicator**

*Percentage of patients with heavy menstrual bleeding who had a comprehensive initial assessment for heavy menstrual bleeding, including a detailed history, complete blood count, gynecological exam, and pregnancy test*

- Denominator: number of patients with heavy menstrual bleeding
- Numerator: number of patients with heavy menstrual bleeding who have the required comprehensive initial assessment within 3 months of their first visit, including:
  - Detailed history
  - Complete blood count
  - Gynecological exam
  - Pregnancy test
- Data source: local data collection

**Note:** The indicator can be reported as an overall percentage and by each listed component.

**Sources**

- National Institute for Health and Care Excellence, 2007
- Society of Obstetricians and Gynaecologists of Canada, 2013
- Southern California Permanente Medical Group, 2013
Quality Statement 2: Shared Decision-Making

Patients with heavy menstrual bleeding are provided with all potential treatment options and are supported in making an informed decision on the most appropriate treatments for them, based on their values, preferences, and goals, including their desire for future fertility. Patients receive information on the treatment objectives, side effects, risks, impact on fertility, and anticipated out-of-pocket costs of all potential treatment options.

Background

Shared decision-making involves a partnership between the clinician and the patient. The health care professional brings clinical expertise to the discussion while the patient brings knowledge about the impact the heavy menstrual bleeding is having on their life and about their goals for treatment. To facilitate informed shared decision-making about treatment, clinicians should provide patients with accurate information about all potential treatment options for their condition.

What This Quality Statement Means

For Patients
You should select your preferred treatment after discussing all treatment options with your health care professional. You should be told how each treatment works and about any side effects, risks, effects on your ability to get pregnant in the future, and any out-of-pocket costs to you.

For Clinicians
Provide patients with information on all potential treatment options, including those that may be more challenging to access.

For Health Services
Ensure systems, processes, policies, and resources are in place such that patients have access to their treatment of choice regardless of the insurance coverage they have.

Quality Indicators

Process Indicators

Percentage of patients with heavy menstrual bleeding who reported that they received information from their health care professional about treatment options, including information on treatment objectives, side effects, risks, impact on fertility, and potential out-of-pocket costs of each option

- Denominator: number of patients with heavy menstrual bleeding
- Numerator: number of patients with heavy menstrual bleeding who reported that they received information from their health care professional about their treatment options, including information on:
  - treatment objectives
  - side effects
  - risks
  - impact on fertility
  - potential out-of-pocket costs
• Data source: local data collection

   **Note:** The indicator can be reported as an overall percentage and by each listed component.

**Percentage of patients with heavy menstrual bleeding who reported that they received their preferred treatment option**

• Denominator: number of patients with heavy menstrual bleeding
• Numerator: number of patients with heavy menstrual bleeding who reported that they received their preferred treatment option
• Data source: local data collection

**Source**

• National Institute for Health and Care Excellence, 2007

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*Draft—do not cite. Report is a work in progress and could change following public consultation.*
Quality Statement 3: Pharmacological Treatments

Patients with heavy menstrual bleeding are offered a choice of non-hormonal and hormonal pharmacological treatment options.

Background

A variety of pharmacological treatment options are available for people with heavy menstrual bleeding. These can be grouped into hormonal and non-hormonal treatments, with each category having special considerations for patients.\textsuperscript{1,4} Patients should be aware of the potential out-of-pocket costs of these options, since many drugs for heavy menstrual bleeding are not publicly funded or covered under private insurance plans.

Definitions Used Within This Quality Statement

**Non-hormonal pharmacological options**
The following non-hormonal options can be used to treat heavy menstrual bleeding\textsuperscript{1,4}:
- Tranexamic acid
- Non-steroidal anti-inflammatory drugs (NSAIDs)

*Note:* NSAIDs also help relieve symptoms of dysmenorrhea.\textsuperscript{1}

**Hormonal pharmacological options**
The following hormonal options can be used to treat heavy menstrual bleeding:
- Levonorgestrel-releasing intrauterine system\textsuperscript{1}
- Combined hormonal contraceptives\textsuperscript{1,4}
- High-dose continuous progestins\textsuperscript{4,5}

Patients with fibroids associated with heavy menstrual bleeding can try any of the above medications as well as the following two additional options that may be effective in shrinking fibroids and reducing associated bleeding symptoms\textsuperscript{5}:
- Gonadotropin-releasing hormone analogues\textsuperscript{1,4,5}
- Selective progesterone-receptor modulators\textsuperscript{5}

What This Quality Statement Means

**For Patients**
Your health care professional should offer you options for hormonal and non-hormonal medication to treat your heavy menstrual bleeding. They should also give you information about each option and about any out-of-pocket costs to you, so you can make an informed decision about your treatment.

**For Clinicians**
Ensure you provide patients with information on all available pharmacological options. Make patients aware of the potential out-of-pocket costs, since many of these treatments are not publicly funded or covered under private insurance plans. Inform patients that if they do not see results in 3 to 6 months they should come back for a follow-up appointment to reassess their treatment plan.
For Health Services
Ensure systems, processes, and resources are in place such that patients have access to their pharmacological treatment of choice regardless of the insurance coverage they have.

Quality Indicators

Process Indicator

Percentage of patients with heavy menstrual bleeding whose medical records indicate they were offered a choice of pharmacological treatments (hormonal and non-hormonal options)

- Denominator: number of patients with heavy menstrual bleeding
- Numerator: number of patients with heavy menstrual bleeding whose medical records indicate they were offered a choice of pharmacological treatments (hormonal and non-hormonal options)
- Data source: local data collection

Sources

- National Institute for Health and Care Excellence, 2007\(^1\)
- Society of Obstetricians and Gynaecologists of Canada, 2013\(^4\)
- Society of Obstetricians and Gynaecologists of Canada, 2015\(^5\)
Quality Statement 4: Endometrial Biopsy

Patients with heavy menstrual bleeding who exhibit risk factors for endometrial cancer or endometrial hyperplasia undergo an endometrial biopsy.

Background

Endometrial biopsy is a minimally invasive procedure that provides information about abnormalities of the endometrial cells. If a patient exhibits risk factors for endometrial cancer or hyperplasia, they require an endometrial biopsy to confirm or rule out these conditions. The procedure will not identify focal lesions of the endometrium. Clinicians should assess the contributing risk factors for endometrial cancer when deciding to recommend an endometrial biopsy.

Definitions Used Within This Quality Statement

Risk factors for endometrial cancer:\n\- Age older than 40 years\n\- Bleeding that does not improve with pharmacological treatment\n\- Chronic anovulation\n\- Persistent intermenstrual bleeding\n\- Obesity\n\- Prolonged exposure to unopposed estrogens or tamoxifen\n\- Diabetes\n\- Nulliparity\n\- Early menarche\n\- Family history of endometrial cancer

What This Quality Statement Means

For Patients
You may need an endometrial biopsy, which is a procedure to remove a sample of the tissue from your uterus and test it to see if you have cancer.

For Clinicians
Ensure your patient has an endometrial biopsy if they have risk factors for endometrial cancer or hyperplasia.

For Health Services
Ensure systems, processes, and resources are in place such that patients are able to receive an endometrial biopsy if they exhibit risk factors for endometrial cancer. This includes access to skilled professionals capable of performing a biopsy, the equipment required to do so, and the laboratories required to test the samples once obtained.

Quality Indicators

Process Indicator

Percentage of endometrial biopsies done among patients with heavy menstrual bleeding who do not have the listed risk factors for endometrial cancer or hyperplasia
Denominator: number of patients with heavy menstrual bleeding who have none of the risk factors for endometrial cancer or hyperplasia (see the full list of risk factors above) Excluding patients who underwent endometrial ablation within 3 months of biopsy

Numerator: number of patients in the denominator who had an endometrial biopsy

Data source: local data collection (the indicator can be measured using administrative data, but some of the risk factors cannot be identified through those sources)

**Note:** This indicator measures the unnecessary use of endometrial biopsy for heavy menstrual bleeding.

**Sources**

- National Institute for Health and Care Excellence, 2007¹
- Society of Obstetricians and Gynaecologists of Canada, 2013⁴
- Southern California Permanente Medical Group, 2013²
Quality Statement 5: Ultrasound Imaging

Patients with heavy menstrual bleeding who have suspected structural abnormalities on their gynecological exam, or who have tried pharmacological treatment but have not had significant improvement in their symptoms, are offered imaging of the uterus by ultrasound.

Background

Imaging of the uterus by ultrasound is indicated if the clinician suspects that a patient with heavy menstrual bleeding has structural abnormalities within the pelvis that require further investigation.\(^4\)

If imaging is needed, a lower abdominal ultrasound is typically followed by transvaginal ultrasound to visualize the uterine cavity. Transabdominal pelvic evaluation alone may be more appropriate in patients who are not sexually active.\(^4\) If further investigations are needed, the clinician may consider saline-infused hysterography, hysteroscopy, or magnetic resonance imaging.\(^1\)

What This Quality Statement Means

For Patients
You may need an ultrasound of your uterus to see if there is something unusual about its size or shape that is causing your heavy menstrual bleeding. An ultrasound is a test that uses sound waves to take pictures inside the body.

For Clinicians
Ultrasound is the first-line imaging technique for people with heavy menstrual bleeding. Do a pelvic exam before considering imaging. Your patient is a candidate for ultrasound if, based on the pelvic exam, you suspect structural abnormalities that need further investigation. If you’ve done a pelvic exam and do not suspect a structural abnormality, but your patient is not improving with pharmacological treatment, it is acceptable to order an ultrasound.

For Health Services
Ensure systems, processes, and resources are in place such that all patients, have access to appropriate uterine imaging when needed.

Quality Indicators

Process Indicator

Percentage of patients with heavy menstrual bleeding who have ultrasound imaging of the uterus and did not have a pelvic or gynecological exam in the preceding year

- Denominator: number of patients with heavy menstrual bleeding who had ultrasound imaging of the uterus
- Numerator: number of patients in the denominator who did not have a pelvic or gynecological exam in the 12 months before ultrasound imaging
- Data source: local data collection; for system level, Discharge Abstract Database and Ontario Health Insurance Plan claims database
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Draft—do not cite. Report is a work in progress and could change following public consultation.

Note: This indicator measures the inappropriate use of ultrasound for heavy menstrual bleeding.

Sources

- National Institute for Health and Care Excellence, 2007
- Society of Obstetricians and Gynaecologists of Canada, 2013
- Southern California Permanente Medical Group, 2013
Quality Statement 6: Referral to a Gynecologist

Patients with heavy menstrual bleeding have a comprehensive initial assessment and pharmacological treatments offered prior to referral to a gynecologist. Once the referral has been made, patients are seen by the gynecologist within 3 months.

Background

Before transferring a patient with heavy menstrual bleeding to a gynecologist, primary care providers should perform a comprehensive initial assessment (see Statement 1 for details), consider initiating a trial of pharmacological therapy (see Statement 3), and order imaging if indicated (see Statement 5). Some patients may not want to try a pharmacological treatment, but these options should be offered to every patient. Taking these steps before referral will ensure appropriate use of specialist resources, provide the gynecologist with vital information to help identify the cause of the bleeding, and decrease the wait time for the start of treatment and for specialist consultation. Specialists should see referred patients within 3 months of referral.

What This Quality Statement Means

For Patients
Before referring you to a gynecologist, your primary care provider should ask you in detail about your symptoms and how they affect your life, and also about other aspects of your health that might affect your treatment options. They should also conduct a pelvic exam and ask you to have a blood and urine test. You should be offered a prescription for medications to relieve your symptoms before you see the gynecologist, and you should receive an appointment within 3 months of being referred.

For Clinicians
Primary care providers: Always do a comprehensive initial assessment before considering referral to a gynecologist. The combination of results from the history, physical exam including pelvic exam, laboratory tests, and imaging (as indicated) should be shared with the gynecologist before they see the patient.

Gynecologists: Ensure you see the patient within 3 months of receiving the referral.

For Health Services
Ensure systems, processes, and resources are in place such that all patients have access to a gynecologist, if needed, within 3 months of referral by their primary care provider.

Quality Indicators

Process Indicators

Percentage of patients with heavy menstrual bleeding who were seen by a gynecologist within 3 months of referral

- Denominator: number of patients with heavy menstrual bleeding who were referred to gynecologist
- Numerator: number of patients in the denominator who were seen by the gynecologist within 3 months of referral
- Data source: local data collection
Percentage of patients with heavy menstrual bleeding who were seen by a gynecologist and who had a comprehensive initial assessment prior to referral (including detailed history, complete blood count, gynecological exam, and pregnancy test if indicated)

- Denominator: number of patients with heavy menstrual bleeding who were seen by gynecologist
- Numerator: number of patients in the denominator who had a comprehensive initial assessment prior to referral including:
  - Detailed history
  - Complete blood count
  - Gynecological exam
  - Pregnancy test
- Data source: local data collection

Percentage of patients with heavy menstrual bleeding who were seen by a gynecologist and who had pharmacological treatment to address heavy menstrual bleeding offered prior to referral

- Denominator: number of patients with heavy menstrual bleeding who were seen by gynecologist
- Numerator: number of patients in the denominator who had pharmacological treatment to address heavy menstrual bleeding offered prior to referral
- Data source: local data collection

Source

- Advisory committee consensus
Quality Statement 7: Endometrial Ablation

Patients with heavy menstrual bleeding are offered endometrial ablation. In the absence of structural abnormalities, patients have access to non-resectoscopic endometrial ablation techniques.

Background

Endometrial ablation is an effective treatment option for patients with heavy menstrual bleeding and a normal uterine cavity. Patients who choose to have endometrial ablation require endometrial sampling to rule out cancer before the procedure; testing for cancer becomes difficult once the endometrial lining is destroyed.

Non-resectoscopic endometrial ablation techniques—also known as second-generation techniques—use a variety of energy sources to non-selectively destroy the endometrial lining. These are the ablation methods of choice. These techniques are preferred as they require shorter surgical time and less specialized training and are easier to perform. They can be performed in an outpatient setting with local or conscious sedation, and result in fewer complications related to fluid overload and uterine perforation. All patients considering endometrial ablation should have access to non-resectoscopic endometrial ablation techniques.

What This Quality Statement Means

For Patients
Your gynecologist may suggest you have an endometrial ablation. If so, you should receive information on each of the available techniques for this procedure. This is a procedure that removes the lining of the uterus to reduce the amount of blood when you menstruate.

For Clinicians
Provide information and offer endometrial ablation as a first-line treatment option for heavy menstrual bleeding. If your patient chooses this option, first perform endometrial sampling. Non-resectoscopic techniques done without general anesthetic are the methods of choice for endometrial ablation.

For Health Services
Ensure systems, processes, and resources are in place such that all patients have access to non-resectoscopic endometrial ablation techniques. Ensure clinicians are aware of gynecologists who accept referrals for endometrial ablation.

Quality Indicators

Process Indicators

Percentage of patients with heavy menstrual bleeding who had endometrial ablation, by type of ablation (any, resectoscopic, non-resectoscopic)

- Denominator: number of patients with heavy menstrual bleeding
- Numerator: number of patients with heavy menstrual bleeding who had endometrial ablation, by type of ablation:
  - Any
Resectoscopic
- Non-resectoscopic
- Data sources: local data collection, Ontario Health Insurance Plan claims database, Discharge Abstract Database

**Note:** Each type of ablation should be calculated separately as well as the overall rate.

**Percentage of patients with heavy menstrual bleeding who had endometrial ablation and who had endometrial sampling within 3 months before the procedure**

- Denominator: number of patients with heavy menstrual bleeding who had endometrial ablation
- Numerator: number of patients in the denominator who had endometrial sampling within 3 months before the procedure, including the day of the procedure
- Data sources: local data collection, Ontario Health Insurance Plan claims database, Discharge Abstract Database

**Sources**

- National Institute for Health and Care Excellence, 2007
- Society of Obstetricians and Gynaecologists of Canada, 2013
- Society of Obstetricians and Gynaecologists of Canada, 2015
Quality Statement 8: Acute Heavy Menstrual Bleeding

Patients presenting acutely with uncontrolled heavy menstrual bleeding receive interventions to stop the bleeding, receive therapies to rapidly correct severe anemia, and have an outpatient follow-up appointment with a health care professional at or immediately following their next period (roughly 4 weeks).

Background

Patients presenting with acute heavy menstrual bleeding should be managed promptly to minimize morbidity and reduce the likelihood of requiring blood transfusions. Interventions to stop the bleeding include pharmacological therapies, intracavitary tamponade, dilation and curettage with hysteroscopy, resectoscopic endometrial ablation, uterine artery occlusion, and hysterectomy. Hysterectomies in the acute setting should be a last resort due to the risks associated with surgery in patients with acute anemia.

Therapies to correct severe anemia (a hemoglobin level of 90 g/L or lower) are recommended. First-line therapy is intravenous iron. Red blood cell transfusion using the least number of units required is recommended only if the patient has serious symptoms of anemia such as hypotension, chest pain, syncope, or tachycardia.

A follow-up appointment scheduled to correlate with the patient’s next period is important as it allows health care professionals to assess whether the problem is ongoing and to review the efficacy of any medications started in the hospital.

Definitions Used Within This Statement

Acute heavy menstrual bleeding
An episode of heavy menstrual bleeding, not related to pregnancy, that is of sufficient quantity to require immediate intervention to prevent further blood loss.

What This Quality Statement Means

For Patients
If your menstrual bleeding is suddenly extremely heavy, so heavy that you need to go to the emergency department, your health care professionals will try to stop your bleeding. If necessary, you will be given red blood cells or medications that help your body create more red blood cells to replace the ones you lost though bleeding. Once you are out of the hospital and back home, you should have a follow-up appointment booked for you around your next period to see how you are doing.

For Clinicians
When a patient presents with acute heavy menstrual bleeding, stabilize and manage them in a way that minimizes the need for blood transfusions. Ensure the patient has a follow-up outpatient appointment booked within 4 weeks, at or immediately following their next period, to assess whether the problem is ongoing and to review the efficacy of any medications started in the hospital.
For Health Services

Ensure systems, processes, and resources are in place such that patients have access to all options to stop acute bleeding, receive rapid resuscitation, and start appropriate anemia treatment while in hospital. Ensure resources are available to enable timely follow-up appointments.

Quality Indicators

Process Indicators

Percentage of patients who have an outpatient follow-up visit with a health care professional within 4 weeks of leaving the hospital for an unplanned emergency department visit or hospital admission for heavy menstrual bleeding

- Denominator: number of patients who had an unplanned emergency department visit or hospitalization for heavy menstrual bleeding
- Numerator: number of patients in the denominator who had an outpatient follow-up visit with a health care professional within 4 weeks of leaving hospital
- Data sources: local data collection; for system level, Ontario Health Insurance Plan claims database (OHIP), Discharge Abstract Database (DAD), and National Ambulatory Care Reporting System (NACRS)

Note: Follow-up appointments should be scheduled to coincide with the patient’s next period, which is estimated to be within 4 weeks. OHIP, DAD, and NACRS at system level can measure follow-up with a physician but cannot capture follow-up appointments with other health care professionals.

Outcome Indicator

Percentage of patients who had an unplanned emergency department visit for heavy menstrual bleeding within 60 days after an initial emergency department visit or hospital discharge for heavy menstrual bleeding

- Denominator: number of patients who had unplanned emergency department visit or hospital discharge for heavy menstrual bleeding
- Numerator: number of patients in the denominator who had an unplanned emergency department visit for heavy menstrual bleeding within 60 days after the initial visit or hospital discharge
- Data source: local data collection; for system level, Discharge Abstract Database and National Ambulatory Care Reporting System

Sources

- Advisory committee consensus (follow-up appointments)
- Society of Obstetricians and Gynaecologists of Canada, 2013
- Southern California Permanente Medical Group, 2013

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Quality Statement 9: Dilation and Curettage

Patients with heavy menstrual bleeding do not receive dilation and curettage unless they present acutely with uncontrolled bleeding and medical therapy is ineffective or contraindicated.

Background

Dilation and curettage has historically been used as a treatment and/or diagnostic tool for both acute and chronic heavy menstrual bleeding. Unfortunately, the benefits of this procedure are temporary.¹ When dilation and curettage is performed, simultaneous hysteroscopy should also be performed to decrease the incidence of missed lesions (e.g., polyps) that may contribute to or be the cause of the acute heavy menstrual bleeding.² See Statement 8 for additional guidance on treating acute heavy menstrual bleeding.

What This Quality Statement Means

For Patients
You should only receive dilation and curettage (also called a D&C) if you have very severe bleeding that caused you to seek help urgently, and if medications are not slowing down the bleeding. D&C is a procedure to remove unneeded or abnormal tissue from the lining of the uterus. If you have a D&C, you should also receive a hysteroscopy—a procedure that allows your doctor to examine the inside of your uterus at the same time.

For Clinicians
Use dilation and curettage only for patients presenting to the emergency department with acute heavy menstrual bleeding where medications are not working to suppress the bleeding. In these cases, use simultaneous hysteroscopy to visualize lesions that may be causing the bleeding.

For Health Services
Ensure systems, processes, and resources are in place such that patients do not receive dilation and curettage for investigation or treatment of heavy menstrual bleeding unless absolutely necessary to treat acute heavy menstrual bleeding unresponsive to medical intervention.

Quality Indicators

Process Indicators

Percentage of patients with non-acute heavy menstrual bleeding who underwent dilation and curettage

- Denominator: number of patients with non-acute heavy menstrual bleeding
- Numerator: number of patients with non-acute heavy menstrual bleeding who underwent dilation and curettage
- Data sources: Ontario Health Insurance Plan claims database, Discharge Abstract Database

Note: See the definition of acute heavy menstrual bleeding (Statement 8) to define the non-acute population.
Percentage of patients with acute heavy menstrual bleeding who underwent dilation and curettage and who also had a hysteroscopy

- Denominator: number of patients with acute heavy menstrual bleeding who had dilation and curettage
- Numerator: number of patients in the denominator who had a hysteroscopy during the same procedure
- Data source: local data collection

Sources

- National Institute for Health and Care Excellence, 2007
- Southern California Permanente Medical Group, 2013
Quality Statement 10: Offering Hysterectomy

Patients with heavy menstrual bleeding are offered hysterectomy only after a documented discussion about other treatment options, or after other treatments have failed.

Background

In most cases, hysterectomy should not be a first-line treatment for heavy menstrual bleeding. The clinician should initiate a discussion with the patient about the effects that a hysterectomy may have on a patient’s sexual feelings, fertility, bladder function, ovarian function, need for future treatments, psychological well-being, and potential surgical complications.

What This Quality Statement Means

For Patients
If you are considering a hysterectomy (surgery to remove your uterus), you should first be offered the choice of other treatments, including drugs and less invasive surgical options. Your health care professional should tell you about all the possible risks and benefits of having a hysterectomy.

For Clinicians
If your patient is considering a hysterectomy, ensure you have a detailed discussion about the effects that a hysterectomy may have on their sexual feelings, fertility, bladder function, ovarian function, need for future treatments, psychological well-being, and potential surgical complications.

For Health Services
Ensure systems, processes, and resources are in place such that all patients have access to all appropriate surgical procedures and treatment options, not only hysterectomy.

Quality Indicators

Process Indicator

Percentage of patients with heavy menstrual bleeding who had a hysterectomy and who had a documented discussion about other treatment options

- Denominator: number of patients with heavy menstrual bleeding who had a hysterectomy
- Numerator: number of patients in the denominator who had a documented discussion about other treatment options
- Data source: local data collection

Source

- National Institute for Health and Care Excellence, 2007
Quality Statement 11: Least Invasive Hysterectomy

Patients with heavy menstrual bleeding who have chosen to have a hysterectomy have it performed by the least invasive route possible.

Background

If a patient chooses hysterectomy as treatment for heavy menstrual bleeding, the least invasive method should be offered to patients to minimize complications and recovery time. Both vaginal and laparoscopic approaches are less invasive than open abdominal hysterectomy and are associated with reduced morbidity and length of stay in hospital. Prior to the surgery, management of anemia is recommended with oral or intravenous iron to optimize the patient’s hemoglobin level to greater than 120 g/L.

What This Quality Statement Means

For Patients
If you choose a hysterectomy, you should be offered the type of surgery that is safest for you. If you have anemia before this surgery, you should be advised to take iron pills or receive intravenous iron to get you ready for the operation. Anemia is a condition caused by having too few healthy red blood cells in your body.

For Clinicians
If your patient elects to have a hysterectomy, always use the least invasive method possible. If your patient has a hemoglobin level of less than 120 g/L, use oral or intravenous iron to get their hemoglobin above 120g/L before surgery.

For Health Services
Ensure systems, processes, and resources are in place such that patients have access to the least invasive options possible for hysterectomy, and that physicians have the training and equipment necessary to use newer and less invasive techniques such as vaginal and laparoscopic approaches versus abdominal hysterectomies.

Quality Indicators

Process Indicators

Proportion of hysterectomies among patients with heavy menstrual bleeding that are performed as vaginal, laparoscopic, or abdominal

- Denominator: number of patients with heavy menstrual bleeding who had a hysterectomy
- Numerator: number of patients in the denominator who had a hysterectomy, by method:
  - Vaginal
  - Laparoscopic
  - Abdominal
- Data sources: Discharge Abstract Database, Ontario Health Insurance Plan claims database
Percentage of patients with heavy menstrual bleeding who had a hysterectomy and who had a preoperative hemoglobin concentration higher than 120 g/L

- Denominator: number of patients with heavy menstrual bleeding who had a hysterectomy
- Numerator: number of patients in the denominator who had a preoperative hemoglobin level higher than 120 g/L
- Data source: local data collection

Note: When auditing, ensure you use the patient’s hemoglobin level most recent to the surgery.

Source

- National Institute for Health and Care Excellence, 2007¹
Quality Statement 12: Surgical Procedures for Fibroids Causing Heavy Menstrual Bleeding

Patients with heavy menstrual bleeding related to fibroids are offered uterine artery embolization, myomectomy, and hysterectomy as surgical treatment options.

Background

Fibroids are one of the primary causes of heavy menstrual bleeding. Uterine artery embolization, myomectomy, and hysterectomy are effective surgical options for patients with symptomatic fibroids. Myomectomy and uterine artery embolization should be considered conservative surgical treatment options in selected patients who have been counselled on the potential risks and benefits of each option. For patients who do not wish to preserve fertility and have been counselled about the risks and benefits of hysterectomy, this treatment can be offered (see Statements 10 and 11 for details).

Prior to any surgical intervention for fibroids, anemia management with oral or intravenous iron is recommended to optimize the patient’s hemoglobin level to greater than 120 g/L. Gonadotropin-releasing hormone analogues or selective progesterone-receptor modulators can be used to suppress menstruation and facilitate minimally invasive approaches.

What This Quality Statement Means

For Patients

If you have heavy menstrual bleeding caused by fibroids, you should be offered three options for surgical treatment: uterine artery embolization, myomectomy, or hysterectomy. Uterine artery embolization is a procedure that shrinks the fibroids by blocking their blood supply. Myomectomy is surgery to remove the fibroids. Hysterectomy is surgery to remove your uterus.

For Clinicians

Offer uterine artery embolization, myomectomy, and hysterectomy as surgical treatment options to all patients with heavy menstrual bleeding related to fibroids. Ensure they have all the information they need to make an informed choice. If your patient has a hemoglobin level of less than 120 g/L, use oral or intravenous iron to raise their hemoglobin above 120 g/L before the operation.

For Health Services

Ensure systems, processes, and resources are in place such that patients have access to uterine artery embolization, myomectomy, and hysterectomy as procedural treatment options for fibroids causing heavy menstrual bleeding. Ensure clinicians are aware of gynecologists who accept referrals for these procedures.

Quality Indicators

Process Indicator

Percentage of patients with heavy menstrual bleeding who had a diagnosis of fibroids and who were offered a choice of three surgical procedures: uterine artery embolization, myomectomy, and hysterectomy
• Denominator: number of patients with heavy menstrual bleeding who had a diagnosis of fibroids
• Numerator: number of patients in the denominator who were offered a choice of the following procedures:
  o Uterine artery embolization
  o Myomectomy
  o Hysterectomy
• Data source: local data collection

Note: This indicator can be reported as an overall percentage and by each listed procedure.

Sources
• National Institute for Health and Care Excellence, 2007
• Society of Obstetricians and Gynaecologists of Canada, 2013
• Society of Obstetricians and Gynaecologists of Canada, 2015
Quality Statement 13: Bleeding Disorders in Adolescents

Adolescents with heavy menstrual bleeding are screened for risk of inherited bleeding disorder using a structured assessment tool.

Background

Almost half of adolescents presenting with heavy menstrual bleeding at or closely following menarche have an underlying bleeding disorder. Clinicians should ask if the patient has had heavy menstrual bleeding since menarche and if they have had postpartum hemorrhage, surgery-related bleeding, or bleeding associated with dental work. If the patient answers “yes” to any of the above questions, using a structured bleeding assessment tool clinicians should also ask about bruising, nose bleeds, frequent gum bleeding, blood in urine, and a family history of bleeding symptoms. Additional laboratory evaluations are necessary if the patient has a positive screen for inherited coagulopathy.

Definitions Used Within This Quality Statement

Adolescents
Adolescence is the period of human growth and development that occurs after childhood and before adulthood. For the purpose of this quality standard, we define this as ages 10 to 19 years.

What This Quality Statement Means

For Patients
If you are an adolescent with heavy menstrual bleeding, you should receive a detailed questionnaire about your bleeding history and you may be asked to have extra blood tests.

For Clinicians
If your patient is an adolescent presenting with heavy menstrual bleeding at or close to menarche, use a structured bleeding assessment tool to screen for risk of inherited bleeding disorders. If they screen positive using this tool, consult with a hematologist and test your patient for bleeding disorders.

For Health Services
Ensure systems, processes, and resources are in place such that patients have access to hematological consultation if needed and the laboratory facilities to test for bleeding disorders.

Quality Indicators

Process Indicator
Percentage of patients with heavy menstrual bleeding aged 10 to 19 years who are screened for risk of inherited bleeding disorder

- Denominator: number of patients with heavy menstrual bleeding aged 10 to 19 years
- Numerator: number of patients in the denominator who are screened for risk of inherited bleeding disorder
- Data source: local data collection
Sources

- Society of Obstetricians and Gynaecologists of Canada, 2013
- Southern California Permanente Medical Group, 2013
Quality Statement 14: Treatment of Anemia and Iron Deficiency

Patients with heavy menstrual bleeding who have been diagnosed with anemia or iron deficiency are treated with oral and/or intravenous iron.

Background

Patients presenting with heavy menstrual bleeding are at an increased risk of developing anemia and iron deficiency due to the excessive blood loss they experience each month. Anemia and iron deficiency need to be treated to improve the patient’s mental and physical functioning and prevent the need for transfusion.

All patients who have anemia (hemoglobin concentration below 120 g/L in a non-pregnant menstruating patient8), a low mean cell volume, a low red blood cell count, and a clear history of bleeding should be treated with iron but do not need a ferritin test. However, if patients with anemia do not respond to oral iron, their ferritin should be tested. Patients who are not anemic but exhibit symptoms of iron deficiency, such as restless legs, fatigue, and hair loss, should also have a ferritin test. Ferritin levels below 15 mcg/L are diagnostic of iron deficiency and levels of 15 to 50 mcg/L are strongly suggestive of iron deficiency.9

Definitions Used Within This Quality Statement

Interventions to manage anemia and iron deficiency

Anemia and iron deficiency should be treated with oral or intravenous iron, in the following order:

1. Oral iron for a minimum of 3 months to correct hemoglobin level and treat symptoms of iron deficiency (fatigue, cognitive impairment, exercise intolerance, restless legs)9

2. Intravenous iron for patients with severe anemia (hemoglobin concentration of less than 90 g/L), severe symptoms of anemia, patients unresponsive or intolerant to oral iron, or patients in need of rapid correction prior to an operative procedure9

3. Transfusion only if the patient is suffering from serious side effects such as hypotension, chest pain, syncope, or tachycardia. Transfusion is associated with adverse events including a 1-in-13 risk of alloimmunization that can complicate future pregnancies10

What This Quality Statement Means

For Patients

If you have low iron or a low red blood cell count, you should be advised to start taking iron pills. If the pills don’t work or they make you feel sick, you may need to receive intravenous iron. Intravenous (or IV) iron is given directly into the blood stream, through a vein.

For Clinicians

If your patient has iron deficiency anemia from heavy menstrual bleeding, treat them with iron in the following order: oral iron and then intravenous iron. Use transfusion only if the patient is suffering from serious side effects such as hypotension, chest pain, syncope, or tachycardia.
For Health Services
Ensure systems, processes, and resources are in place such that patients with heavy menstrual bleeding have equal access to all options to correct their iron deficiency anemia. Ensure clinicians have access to the appropriate laboratory tests for their patients and to protocols to avoid unnecessary transfusions in this population.

Quality Indicators

Process Indicators

Percentage of patients with heavy menstrual bleeding diagnosed with anemia or iron deficiency who were treated with iron (oral or intravenous)

- Denominator: number of patients with heavy menstrual bleeding diagnosed with anemia or iron deficiency
- Numerator: number of patients in denominator treated with iron (oral or intravenous)
- Data source: local data collection

Percentage of patients with heavy menstrual bleeding diagnosed with anemia who had a blood transfusion

- Denominator: number of patients with heavy menstrual bleeding who had anemia
- Numerator: number of patients in the denominator who had a blood transfusion
- Data source: local data collection; for system level, Ontario Health Insurance Plan claims database and Discharge Abstract Database

Source

- Advisory committee consensus
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Advisory Committee

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