

**Quality  
Standards**

# Heavy Menstrual Bleeding

Care for Adults and Adolescents  
of Reproductive Age

**Health Quality  
Ontario**

*Let's make our health system healthier*

 **Ontario**  
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.**

## Table of Contents

About Quality Standards	1
How to Use Quality Standards	1
About This Quality Standard	2
Scope of This Quality Standard	2
Why This Quality Standard Is Needed	2
Principles Underpinning This Quality Standard	3
How We Will Measure Our Success	3
Quality Statements in Brief	4
<b>Quality Statement 1: Comprehensive Initial Assessment</b>	<b>6</b>
<b>Quality Statement 2: Shared Decision-Making</b>	<b>9</b>
<b>Quality Statement 3: Pharmacological Treatments</b>	<b>12</b>
<b>Quality Statement 4: Endometrial Biopsy</b>	<b>14</b>
<b>Quality Statement 5: Ultrasound Imaging</b>	<b>17</b>
<b>Quality Statement 6: Referral to a Gynecologist</b>	<b>19</b>
<b>Quality Statement 7: Endometrial Ablation</b>	<b>22</b>
<b>Quality Statement 8: Acute Heavy Menstrual Bleeding</b>	<b>25</b>
<b>Quality Statement 9: Dilation and Curettage</b>	<b>28</b>
<b>Quality Statement 10: Offering Hysterectomy</b>	<b>31</b>

TABLE OF CONTENTS CONTINUED

<b>Quality Statement 11:</b> Least Invasive Hysterectomy	33
<b>Quality Statement 12:</b> Treatment for Fibroids Causing Heavy Menstrual Bleeding	36
<b>Quality Statement 13:</b> Bleeding Disorders in Adolescents	39
<b>Quality Statement 14:</b> Treatment of Anemia and Iron Deficiency	41
Acknowledgements	44
References	45
About Health Quality Ontario	46

# 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 statements 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.

## 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](mailto:qualitystandards@hqontario.ca)**.

# 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 improvement in the way that care for heavy menstrual bleeding is currently provided in Ontario. This quality standard 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.<sup>1</sup>

## Why This Quality Standard Is Needed

Heavy menstrual bleeding affects up to 30% of women of reproductive age. It can be debilitating and persistent, and can ultimately have a negative impact on a person's quality of life.<sup>1</sup> 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.<sup>1</sup> Rare complications associated with heavy menstrual bleeding include hypovolemic shock,<sup>2</sup> acute ischemic stroke, retinopathy, and venous sinus thrombosis.<sup>3</sup>

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 variation across the LHINs in the age-adjusted rates of hysterectomies for cancer and for prolapse.

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 share in decision-making about their 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 the cause of the heavy menstrual bleeding, its impact on their quality of life, their other health conditions, their desire for future fertility, and the cost of treatment.<sup>1</sup>

## 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

A limited number of overarching objectives are set for this quality standard; these objectives have been mapped to performance indicators 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 hysterectomies among patients with heavy menstrual bleeding, by LHIN (to show regional variation in the use of this treatment option)

In addition, each quality statement within this quality standard is accompanied by one or more indicators to measure the successful implementation of the statement.

# Quality Statements in Brief

## 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) during their initial assessment.

## QUALITY STATEMENT 2:

### **Shared Decision-Making**

---

Patients with heavy menstrual bleeding are provided with information on 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.

## QUALITY STATEMENT 3:

### **Pharmacological Treatments**

---

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

## QUALITY STATEMENT 4:

### **Endometrial Biopsy**

---

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

## QUALITY STATEMENT 5:

### **Ultrasound Imaging**

---

Patients with heavy menstrual bleeding who have suspected structural abnormalities based on a pelvic exam, or who have tried pharmacological treatment but have not had significant improvement in their symptoms, are offered an ultrasound of their uterus.

## 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.

## QUALITY STATEMENT 7:

### **Endometrial Ablation**

---

Patients with heavy menstrual bleeding who do not wish to preserve their fertility are offered endometrial ablation. In the absence of structural abnormalities, patients have access to non-resectoscopic endometrial ablation techniques.



**QUALITY STATEMENT 8:**

**Acute Heavy Menstrual Bleeding**

---

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

**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.

**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.

**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 method possible.

**QUALITY STATEMENT 12:**

**Treatment for Fibroids Causing Heavy Menstrual Bleeding**

---

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

**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.

**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.

# 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) during 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.<sup>1</sup> 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 it interferes with their life and normal functioning.<sup>1</sup>

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 suggests thyroid disease<sup>1,4</sup>
- **Hormone testing<sup>1</sup> and ferritin testing<sup>1,4</sup>**—Iron supplementation for anemia can be started without ordering a serum ferritin. Ferritin should not be ordered during an initial assessment unless iron deficiency without anemia is suspected; see **Statement 14** 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,<sup>1,4</sup> *and* who screen positive using a structured bleeding assessment tool

## What This Quality Statement Means

### For Patients

At your initial assessment, your family doctor or nurse practitioner should ask you about your bleeding and how it affects your life, do a pelvic exam, and ask you to get blood and urine tests.

### For Clinicians

Ensure you perform a detailed history, gynecological exam, complete blood count, and pregnancy test (if pregnancy is possible) during the initial assessment. Heavy menstrual bleeding should be considered a problem if your patient feels their bleeding is too heavy and 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.

**Sources:** National Institute for Health and Care Excellence, 2007<sup>1</sup> | Society of Obstetricians and Gynaecologists of Canada, 2013<sup>4</sup> | Southern California Permanente Medical Group, 2013<sup>2</sup>

## DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

---

### Detailed history

The history should address the following<sup>1,2,4</sup>:

- Details about the bleeding
- Symptoms of anemia and iron deficiency (e.g., restless leg syndrome, hair loss, fatigue)
- Sexual and reproductive history
- Desire for future fertility
- Impact on quality of life, including social and sexual functioning
- 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)

## 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 (if pregnancy is possible)**

- 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 (if pregnancy is possible)
- Data source: local data collection

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

## Shared Decision-Making

Patients with heavy menstrual bleeding are provided with information on 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.

### Background

Shared decision-making involves a partnership between the clinician and the patient.<sup>1</sup> 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.<sup>1</sup> To facilitate informed shared decision-making about treatment, clinicians should provide

patients with accurate information about the range of normal menstrual bleeding and all potential treatment options for the patient's specific case.<sup>1</sup> Patients should receive information on the treatment objectives, side effects, risks, impact on fertility, and anticipated out-of-pocket costs of all potential treatment options.

**Source:** National Institute for Health and Care Excellence, 2007<sup>1</sup>

## What This Quality Statement Means

### For Patients

You should decide what treatment you prefer after discussing all the options with your health care professional. You should be told about any side effects, risks, effects on your ability to get pregnant, and out-of-pocket costs.

### For Clinicians

Provide patients with information on all potential treatment options and help them make a decision consistent with their values and preferences.

### For Health Services

Ensure systems, processes, policies, and resources are in place such that patients have access to their treatment of choice.

## 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 calculated 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

# 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.<sup>1,4</sup>

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.

**Sources:** National Institute for Health and Care Excellence, 2007<sup>1</sup> | Society of Obstetricians and Gynaecologists of Canada, 2013<sup>4</sup>  
| Society of Obstetricians and Gynaecologists of Canada, 2015<sup>5</sup>



## What This Quality Statement Means

### For Patients

Your health care professional should discuss with you options for hormonal and non-hormonal medication.

### 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.

## 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

### DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

#### Non-hormonal pharmacological options

The following non-hormonal options can be used to treat heavy menstrual bleeding<sup>1,4</sup>:

- Tranexamic acid
- Non-steroidal anti-inflammatory drugs (NSAIDs)

**Note:** NSAIDs also help relieve symptoms of dysmenorrhea.<sup>1</sup>

#### Hormonal pharmacological options

The following hormonal options can be used to treat heavy menstrual bleeding:

- Levonorgestrel-releasing intrauterine system<sup>1</sup>
- Combined hormonal contraceptives<sup>1,4</sup>
- High-dose continuous progestins<sup>4,5</sup>

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<sup>5</sup>:

- Gonadotropin-releasing hormone analogues<sup>1,4,5</sup>
- Selective progesterone-receptor modulators<sup>5</sup>

# Endometrial Biopsy

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

## Background

Endometrial biopsy is a minimally invasive procedure that provides information about abnormalities of the endometrial cells.<sup>1,2,4</sup>

If a patient with heavy menstrual bleeding exhibits risk factors for endometrial cancer or

hyperplasia, they require an endometrial biopsy to confirm or rule out these conditions. Clinicians should assess the contributing risk factors for endometrial cancer when deciding to recommend an endometrial biopsy.

**Sources:** National Institute for Health and Care Excellence, 2007<sup>1</sup> | Society of Obstetricians and Gynaecologists of Canada, 2013<sup>4</sup>  
| Southern California Permanente Medical Group, 2013<sup>2</sup>

## What This Quality Statement Means

### For Patients

You may need an endometrial biopsy, a procedure to take a tissue sample from your uterus to look for abnormal cells or an overgrowth of the lining.

### 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.

### DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

---

#### Risk factors for endometrial cancer<sup>1,2,4</sup>:

- Age
  - Older than 40 years
- Nature of the bleeding
  - Bleeding that does not improve with pharmacological treatment
  - Persistent intermenstrual bleeding
- Other risk factors for endometrial cancer
  - Chronic anovulation
  - Obesity
  - Prolonged exposure to unopposed estrogens or tamoxifen
  - Diabetes
  - Nulliparity
  - Early menarche
  - Family history of endometrial cancer

## Quality Indicators

### Process Indicators

#### Percentage of patients with heavy menstrual bleeding who had an endometrial biopsy

- Denominator: number of patients with heavy menstrual bleeding
- Numerator: number of patients in the denominator who had endometrial biopsies (exclude biopsies done within a month of endometrial ablation, to exclude non-diagnostic biopsies)
- Data sources: local data collection; for system level, Ontario Health Insurance Plan claims database, Discharge Abstract Database, National Ambulatory Care Reporting System

**Note:** The purpose of this indicator is to measure the overall rate of endometrial biopsies and variation across the province. It is not intended to show whether endometrial biopsies are being done appropriately.

#### Proportion of women with heavy menstrual bleeding with risk factors for endometrial cancer or hyperplasia who did not have an endometrial biopsy

- Denominator: number of patients with heavy menstrual bleeding who have risk factors for endometrial cancer or hyperplasia
  - Risk factors: age older than 40 years, bleeding that does not improve with pharmacological treatment, chronic anovulation, persistent intermenstrual bleeding, obesity, prolonged exposure to unopposed estrogens or tamoxifen, diabetes, nulliparity, early menarche, family history of endometrial cancer
- Numerator: number of patients in the denominator who did not have an endometrial biopsy
- Data source: local data collection

## Ultrasound Imaging

Patients with heavy menstrual bleeding who have suspected structural abnormalities based on a pelvic exam, or who have tried pharmacological treatment but have not had significant improvement in their symptoms, are offered an ultrasound of their uterus.

### 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.<sup>4</sup>

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.<sup>4</sup>

If further investigations are needed, the clinician may consider saline-infused hystero-graphy, hysteroscopy, or magnetic resonance imaging.<sup>1</sup>

**Sources:** National Institute for Health and Care Excellence, 2007<sup>1</sup> | Society of Obstetricians and Gynaecologists of Canada, 2013<sup>4</sup>

## What This Quality Statement Means

### For Patients

You may need an ultrasound of your uterus to look at its size or shape. An ultrasound uses sound waves to take pictures.

### For Clinicians

Ultrasound is the first-line imaging technique for patients with heavy menstrual bleeding. Do a pelvic exam before considering ultrasound. 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 ultrasound of the uterus 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

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

## 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 being referred to a gynecologist, patients with heavy menstrual bleeding should receive a comprehensive initial assessment (see **Statement 1** for details), be offered a trial of pharmacological therapy (see **Statement 3**), and be offered ultrasound of the uterus 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 will decrease the wait time for the start of treatment and for specialist consultation and will provide the gynecologist with vital information to help identify the cause of the bleeding. Specialists should see referred patients within 3 months of referral.

**Source:** Advisory committee consensus

## What This Quality Statement Means

### For Patients

Before referring you to a gynecologist, your family doctor or nurse practitioner should do a full assessment and offer you a prescription to relieve your symptoms. If referred, you should receive an appointment within 3 months.

### 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 a gynecologist
- Numerator: number of patients in the denominator who were seen by the gynecologist within 3 months of referral
- Data source: local data collection



## PROCESS INDICATORS CONTINUED

**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 a 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 (if pregnancy is possible)
- Data source: local data collection

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

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

# Endometrial Ablation

Patients with heavy menstrual bleeding who do not wish to preserve their fertility 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.<sup>1</sup> 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.<sup>6</sup> Patients who chose endometrial ablation require contraception for the rest of their childbearing years.<sup>6</sup>

Non-resectoscopic endometrial ablation techniques —also known as second-generation techniques—

use a variety of energy sources to non-selectively destroy the endometrial lining.<sup>6</sup> 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.<sup>6</sup> All patients considering endometrial ablation should have access to non-resectoscopic endometrial ablation techniques.<sup>1</sup>

**Sources:** National Institute for Health and Care Excellence, 2007<sup>1</sup> | Society of Obstetricians and Gynaecologists of Canada, 2013<sup>4</sup> | Society of Obstetricians and Gynaecologists of Canada, 2015<sup>6</sup>

## What This Quality Statement Means

### For Patients

If you never want to get pregnant, your gynecologist may offer an endometrial ablation, which removes the lining of the uterus. This procedure makes pregnancy unsafe for you, so you will need to use contraception for the rest of your childbearing years.

### For Clinicians

Offer endometrial ablation as one of the first-line treatment options 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

## Acute Heavy Menstrual Bleeding

Patients presenting acutely with uncontrolled heavy menstrual bleeding receive interventions to stop the bleeding, therapies to rapidly correct severe anemia, and 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.<sup>4</sup> Interventions to stop the bleeding include pharmacological therapies,<sup>2,4</sup> intracavitary tamponade,<sup>2</sup> dilation and curettage with hysteroscopy,<sup>2,4</sup> resectoscopic endometrial ablation,<sup>2,4</sup> uterine artery occlusion,<sup>2,4</sup> and hysterectomy.<sup>2,4</sup> Hysterectomies in the acute setting should be a last resort due to the risks associated with surgery in patients with acute anemia.<sup>2,4</sup>

First-line therapy to correct severe anemia (a hemoglobin level of 90 g/L or lower) is intravenous iron. Red blood cell transfusion using the least number of units required is recommended when 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.

## What This Quality Statement Means

### For Patients

If your bleeding is suddenly extremely heavy, your health care professional will try to stop it with medication or a procedure. You may also be given iron intravenously or a blood transfusion. You should have a follow-up appointment near your next period.

### 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 to treat the bleeding.

### 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.

**Sources:** Advisory committee consensus (follow-up appointments) | Society of Obstetricians and Gynaecologists of Canada, 2013<sup>4</sup> | Southern California Permanente Medical Group, 2013<sup>2</sup>

### DEFINITIONS USED WITHIN THIS QUALITY 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.<sup>4</sup>

## Quality Indicators

### Process Indicator

**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), 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 (i.e., to allow time for one or more subsequent menstrual cycles) 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 sources: local data collection; for system level, Discharge Abstract Database, National Ambulatory Care Reporting System

## 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.<sup>1</sup> 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.<sup>2</sup> See **Statement 8** for additional guidance on treating acute heavy menstrual bleeding.

**Sources:** National Institute for Health and Care Excellence, 2007<sup>1</sup> | Southern California Permanente Medical Group, 2013<sup>2</sup>



## What This Quality Statement Means

### For Patients

You should only receive dilation and curettage (D&C) if you have very severe bleeding and if medications did not slow it. D&C removes abnormal tissue from the lining of your uterus. If you have a D&C, hysteroscopy (a procedure to look at the inside of your uterus) should be done at the same time.

### For Clinicians

Use dilation and curettage only for patients presenting 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 heavy menstrual bleeding who underwent elective (i.e., inappropriate) dilation and curettage**

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

#### **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

## 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 potential complications of the surgery and the effects that a hysterectomy may have on a patient's sexual feelings, fertility, bladder function, ovarian function, need for future treatments, and psychological well-being.<sup>1</sup>

**Source:** National Institute for Health and Care Excellence, 2007<sup>1</sup>

## What This Quality Statement Means

### For Patients

If you are considering a hysterectomy, you should be offered the choice of other treatments, including medications and less invasive procedures.

### 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, and psychological well-being, as well as potential complications of the surgery.

### For Health Services

Ensure systems, processes, and resources are in place such that all patients have access to all appropriate 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

## Least Invasive Hysterectomy

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

### Background

If a patient chooses hysterectomy as treatment for heavy menstrual bleeding, they should be offered the least invasive method possible, to minimize complications and recovery time.<sup>1,4</sup> Both vaginal and laparoscopic approaches are less invasive than open abdominal hysterectomy and are associated

with reduced morbidity and length of stay in hospital.<sup>1,4</sup> 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.

**Source:** National Institute for Health and Care Excellence, 2007<sup>1</sup>

## 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.

### 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 120 g/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.

# Treatment for Fibroids Causing Heavy Menstrual Bleeding

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

## Background

Fibroids are one of the primary causes of heavy menstrual bleeding.<sup>5</sup> Uterine artery embolization, myomectomy, and hysterectomy are effective options for patients with symptomatic fibroids.<sup>1,5</sup> Myomectomy and uterine artery embolization should be considered conservative treatment options in selected patients who have been counselled on the potential risks and benefits of each option.<sup>5</sup> 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).<sup>5</sup>

Prior to any procedural 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.<sup>5</sup>

**Sources:** National Institute for Health and Care Excellence, 2007<sup>1</sup> | Society of Obstetricians and Gynaecologists of Canada, 2013<sup>4</sup> | Society of Obstetricians and Gynaecologists of Canada, 2015<sup>5</sup>



## What This Quality Statement Means

### For Patients

If fibroids (non-cancerous growths) are causing your heavy menstrual bleeding, you should be offered a uterine artery embolization, myomectomy, or hysterectomy. Uterine artery embolization 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 treatment options to all patients with heavy menstrual bleeding related to fibroids. Ensure patients 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 procedure.

### For Health Services

Ensure systems, processes, and resources are in place such that patients have access to uterine artery embolization, myomectomy, and hysterectomy as treatment options for fibroids causing heavy menstrual bleeding. Ensure clinicians are aware of specialists 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 the following 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:
  - Uterine artery embolization
  - Myomectomy
  - Hysterectomy
- Data source: local data collection

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

## 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.<sup>4</sup> 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, clinicians should use a structured bleeding assessment tool to also ask about bruising, nose bleeds, frequent gum bleeding, blood in urine, and a family history of bleeding symptoms.<sup>2</sup> Additional laboratory evaluations are necessary if the patient has a positive screen for inherited coagulopathy.<sup>2</sup>

**Sources:** Society of Obstetricians and Gynaecologists of Canada, 2013<sup>4</sup> | Southern California Permanente Medical Group, 2013<sup>2</sup>

## What This Quality Statement Means

### For Patients

If you are an adolescent, you should be asked about your bleeding history and perhaps 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 your patient screens 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

### 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.<sup>7</sup>

# 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. In addition, dietary counselling may be considered.

All patients who have anemia (hemoglobin concentration below 120 g/L in a non-pregnant

menstruating patient<sup>8</sup>), 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, or 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.<sup>9</sup>

**Source:** Advisory committee consensus

## What This Quality Statement Means

### For Patients

If you have low iron or anemia (low red blood cell count), you should be advised to take iron pills. You may need iron in liquid form through a needle (intravenously).

### For Clinicians

If your patient has iron deficiency anemia from heavy menstrual bleeding, treat them with iron: first oral, then intravenous. 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.

### 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)<sup>9</sup>
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 procedure<sup>9</sup>
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 pregnancies<sup>10</sup>

## Quality Indicators

### Process Indicators

#### **Percentage of patients with heavy menstrual bleeding diagnosed with anemia or iron deficiency who were treated with iron, by delivery method (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, by delivery method:
  - Oral
  - Intravenous
- Data source: local data collection

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

#### **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 sources: local data collection; for system level, Ontario Health Insurance Plan claims database, Discharge Abstract Database

# Acknowledgements

## Advisory Committee

Health Quality Ontario thanks the following individuals for their generous, voluntary contributions of time and expertise to help create this quality standard:

### **Adrian Brown (co-chair)**

Associate Professor, Department of Obstetrics and Gynaecology, University of Toronto, Chief of Obstetrics and Gynaecology and Medical Program Director, Maternal Newborn Program, North York General Hospital

### **Catherine Caron (co-chair)**

Family Practice Physician and Assistant Professor, Women's Health Clinic at the Bruyère Family Medicine Centre, University of Ottawa

### **Jeannie Callum**

Director of Transfusion Medicine, Clinical Pathology, Sunnybrook Health Sciences Centre

### **Elizabeth David**

Vascular Interventional Radiologist, Sunnybrook Health Sciences Centre

### **Sheila Dunn**

Research Director and Associate Professor, Department of Family & Community Medicine, Women's College Hospital, University of Toronto

### **Mary Johnston**

Emergency Physician, Assistant Professor, Queensway Carlton Hospital and Children's Hospital of Eastern Ontario, University of Ottawa

### **Frances Kilbertus**

Associate Professor, Family Medicine, Northern Ontario School of Medicine

### **Lisa McCarthy**

Pharmacy Scientist, Pharmacist, Women's College Hospital and Leslie Dan Faculty of Pharmacy, University of Toronto

### **Christine Miller**

Nurse Practitioner, Lakehead Nurse Practitioner-Led Clinic

### **Ally Murji**

Obstetrician and Gynecologist, Assistant Professor, Mount Sinai Hospital, University of Toronto

### **Diana Poulsen**

Lived Experience Advisor, Professor of Art History, Fanshawe College, and Systems Integrator, S&E Manufacturing

### **Rebecca Rich**

Resident Physician, Obstetrics and Gynaecology, Clinical Epidemiology, University of Toronto

### **Jacqueline Rivier**

Program Coordinator, Bruyère Continuing Care

### **Magdalena Turlejski**

Lived Experience Advisor, Healthcare Improvement Program, Accreditation Canada



# References

1. National Institute for Health and Care Excellence. Heavy menstrual bleeding: clinical guideline [Internet]. London (UK): The Institute; 2007 [cited 2016 Jan]. Available from: <http://www.nice.org.uk/guidance/cg44/chapter/1-recommendations>.
2. Southern California Permanente Medical Group. Acute uterine bleeding unrelated to pregnancy: a Southern California Permanente Medical Group practice guideline. *Perm J* [Internet]. 2013 [cited 2016 Jan]; 17(3):43-56. Available from: [https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3783080/pdf/permj17\\_3p0043.pdf](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3783080/pdf/permj17_3p0043.pdf)
3. Nelson A. Managing acute heavy menstrual bleeding. *Contemporary OB/GYN* [Internet]. 2014 [cited 2016 Jan]; 59(1):1-5. Available from: <http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=103949561&site=eds-live>
4. Society of Obstetricians and Gynaecologists of Canada. Abnormal uterine bleeding in pre-menopausal women. *J Obstet Gynaecol Can* [Internet]. 2013 [cited 2016 Jan]; 35(5):473-9. Available from: <http://sogc.org/wp-content/uploads/2013/07/gui292CPG1305E.pdf>
5. Society of Obstetricians and Gynaecologists of Canada. The management of uterine leiomyomas. *J Obstet Gynaecol Can* [Internet]. 2015 Feb [cited 2016 Jan]; 37(2):157-81. Available from: <http://sogc.org/wp-content/uploads/2015/02/gui318CPG1502ErevB1.pdf>
6. Society of Obstetricians and Gynaecologists of Canada. Clinical practice guideline: endometrial ablation in the management of abnormal uterine bleeding. *J Obstet Gynaecol Can* [Internet]. 2015 [cited 2016 Feb]; 37(4):362-76. Available from: <http://sogc.org/wp-content/uploads/2015/04/GUI322CPG1504E2.pdf>
7. World Health Organization. Maternal, newborn, child and adolescent health [Internet]. 2016. [cited 2016 Sep]. Available from: [http://www.who.int/maternal\\_child\\_adolescent/topics/adolescence/dev/en/](http://www.who.int/maternal_child_adolescent/topics/adolescence/dev/en/)
8. World Health Organization. Worldwide prevalence of anaemia 1993-2005 [Internet]. Geneva (Switzerland): The Organization; 2008 [cited 2016 Apr]. Available from: [http://apps.who.int/iris/bitstream/10665/43894/1/9789241596657\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/43894/1/9789241596657_eng.pdf)
9. BCGuidelines.ca. Iron deficiency—investigation and management [Internet]. Vancouver (BC): British Columbia Ministry of Health Services; 2010 [cited 2016 Apr]. Available from: <http://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines/iron-deficiency>
10. Schonewille H, Honohan Á, van der Watering L, Hudig F, te Boekhorst P, Koopman-van Gemert A, et al. Incidence of alloantibody formation after ABO-D or extended matched red blood cell transfusions: a randomized trial (MATCH study). *Transfusion (Paris)* [Internet]. 2015 [cited 2016 Apr]; 56(2):311-20. Available from: <http://dx.doi.org/10.1111/trf.13347>

# 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 voice 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.

## Looking for more information?

Visit our website at [hqontario.ca](http://hqontario.ca) and contact us at [qualitystandards@hqontario.ca](mailto:qualitystandards@hqontario.ca) if you have any questions or feedback about this guide.

**Health Quality Ontario**

130 Bloor Street West, 10th Floor  
Toronto, Ontario  
M5S 1N5

**Tel:** 416-323-6868

**Toll Free:** 1-866-623-6868

**Fax:** 416-323-9261

**Email:** [qualitystandards@hqontario.ca](mailto:qualitystandards@hqontario.ca)

**Website:** [hqontario.ca](http://hqontario.ca)

ISBN 978-1-4606-9638-5 (Print)  
ISBN 978-1-4606-9639-2 (PDF)

© Queen's Printer for Ontario, 2017