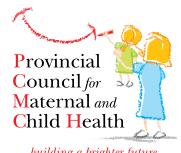


Vaginal Birth After Caesarean

Care for People Who Have Had a Caesarean Birth and Are Planning Their Next Birth

Health Quality Ontario





building a brighter future

Summary

This quality standard addresses care for people who have had a Caesarean birth and are planning their next birth. It focuses on care for people who are pregnant with one baby who is head-down and at full term. The primary goals of this quality standard are to improve access to safe vaginal birth after Caesarean delivery and promote informed shared decision-making. Achieving these objectives is also expected to increase Ontario's rate of planned vaginal births after Caesarean over time.

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About Quality Standards

Health Quality Ontario, in collaboration with clinical experts, patients, residents, and caregivers across the province, is developing quality standards for Ontario. This quality standard was also developed in partnership with the Provincial Council for Maternal and Child Health.

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 for aspects of care that have been deemed a priority for quality improvement in the province. 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 processes, structures, 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 This Quality Standard

Scope of This Quality Standard

The scope of this quality standard extends from postpartum counselling after a Caesarean birth through antenatal and intrapartum care during the next pregnancy and birth.

The guidance provided in this quality standard on pregnancy care focuses on people with a previous Caesarean birth who are pregnant with one baby that is head-down and at full term (> 37 weeks), who are receiving pregnancy care from any type of health care professional. People with more than one previous Caesarean birth are included in the scope; however, research evidence is limited for this population. Careful individualized assessment and clinical judgment as part of shared decision-making is essential in this situation.

This standard does not apply to people who have the following contraindications to vaginal birth after Caesarean (VBAC):

- Previous classical or inverted "T" uterine scar
- Previous hysterotomy or myomectomy entering the uterine cavity
- Previous uterine rupture
- Placenta accreta
- Placenta increta
- Placenta percreta
- Placenta previa
- Any other maternal or fetal complication that is a contraindication to vaginal birth

Why This Quality Standard Is Needed

The primary goals of this quality standard are to improve access to safe VBAC and promote informed shared decision-making. Most people who have had a Caesarean birth can have a VBAC, and a large body of evidence suggests that VBAC is safe for most eligible pregnant people.¹⁻³ However, Ontario's VBAC rates have decreased over time. In the 2014/2015 fiscal year, the rate of repeat Caesarean births for Ontario was 83.3%.4 Repeat Caesarean births represent about one-third of Caesarean births in total (Better Outcomes Registry and Network, June 2016), suggesting that increasing Ontario's VBAC rate could also substantially reduce the overall provincial Caesarean birth rate.

People considering planned VBAC need to balance the overall benefits (such as faster recovery time, lower risk of abnormal placentation with future pregnancy, and reduced neonatal respiratory morbidity) with the potential harms (such as uterine rupture, which occurs in approximately 1 of 200 labours after Caesarean).^{1,3} Overall, the available evidence suggests that both VBAC and elective repeat Caesarean section can be performed safely, and, for large populations. any absolute differences in maternal and neonatal outcomes are likely to be small.^{1-3,5,6} Informed shared decision-making is therefore especially important so that pregnant people can receive the care that is most consistent with their values and preferences.

There is significant variation in rates of planned VBAC across regions in Ontario; this variation may be related to regional differences in the resources available where the birth is planned: smaller and less-resourced hospitals have lower VBAC rates overall (Better Outcomes Registry and Network, June 2016). In areas that cannot offer timely access to Caesarean birth, choices for planned VBAC may be more limited. Decisions may also be influenced by social, financial, or cultural factors. Birth preferences may develop between pregnancies, and pregnant people may be influenced more by previous birth experience or by information from peers and the Internet than by health

care professionals.8 Research has also found substantial variation among regions and institutions in the use of shared decision-making between clinicians and patients who are planning their next birth.8

This quality standard is designed to help ensure that all people in Ontario who plan a birth after a Caesarean are offered VBAC, and that hospitals support and provide VBAC, when appropriate, as part of high-quality, evidence-based care.

Principles Underpinning This Quality Standard

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

Pregnant people who have had a previous Caesarean birth should receive services that are respectful of their rights and dignity and that promote shared decision-making.

Pregnant people who have had a previous Caesarean birth are provided services that are respectful of their gender, sexual orientation, socioeconomic status, housing, age, background (including self-identified cultural, ethnic, and religious background), and disability. Language, a basic tool for communication, is an essential part of safe care and needs to be considered throughout a person's health care journey. For example, in predominantly English-speaking settings, services should be actively offered in French and other languages.

Care providers should be aware of the historical context of the lives of Canada's Indigenous peoples and be sensitive to the impacts of intergenerational trauma and the physical, mental, emotional, and social harms experienced by Indigenous people, families, and communities.

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

How Success Can Be Measured

A limited number of overarching objectives are set for this quality standard; these objectives have been mapped to indicators to measure the success of this quality standard as a whole:

- Percentage of eligible pregnant people who plan a VBAC
- Percentage of eligible pregnant people who have a VBAC
- Percentage of eligible pregnant people who plan an elective repeat Caesarean section

The following are intended as balancing measures to ensure that VBAC continues to be a safe option for people planning a pregnancy after a previous Caesarean section:

- Rate of uterine rupture per 1,000 planned VBACs
- Percentage of neonates who remain in the neonatal intensive care unit for more than 4 hours among those born to people who planned a VBAC compared with those born to people who planned an elective repeat Caesarean section
- Rate of neonatal morbidity and mortality among those born to people who planned a VBAC compared with those born to people who planned an elective repeat Caesarean section

In addition, each quality statement within this quality standard is accompanied by one or more indicators. These indicators are intended to guide measurement of quality improvement efforts related to implementation of the statement. To assess the equitable delivery of care, the quality standard indicators can be stratified by patient or caregiver socioeconomic and demographic characteristics, such as income, education, language, and age.

Quality Statements in Brief

QUALITY STATEMENT 1:

Access to Vaginal Birth After Caesarean

People who have had a Caesarean birth before can plan a vaginal birth for their next birth, as long as there is no medical reason not to have one.

QUALITY STATEMENT 2:

Discussion After Caesarean Birth

After a Caesarean birth, people have a discussion with their physician or midwife and receive written information about the reasons for their Caesarean birth and their options for future births.

QUALITY STATEMENT 3: Shared Decision-Making

Pregnant people who have had a previous Caesarean birth participate in shared decision-making with their physician or midwife. The discussion and planned mode of birth are documented in the perinatal record.

QUALITY STATEMENT 4: Previous Vaginal Birth

Pregnant people who have had both a previous Caesarean birth and a previous vaginal birth are informed that they have a high likelihood of successful vaginal birth if no contraindication is present.

QUALITY STATEMENT 5: **Operative Reports and Incision Type**

Physicians and midwives obtain an operative report from any previous Caesarean births whenever possible. Pregnant people who have had a previous Caesarean birth with an unknown type of uterine incision have an individualized assessment by their physician or midwife to determine the likelihood of a low transverse incision.

QUALITY STATEMENT 6: Timely Access to Caesarean Birth

Pregnant people planning a vaginal birth after Caesarean are aware of the resources available and not available at their planned place of birth, including physician, midwifery, nursing, anesthesiology, and neonatal care, and the ability to provide timely access to Caesarean birth.

QUALITY STATEMENT 7: Unplanned Labour

Pregnant people planning an elective repeat Caesarean section should have a documented discussion with their physician or midwife about the feasibility of vaginal birth after Caesarean if they go into unplanned labour. This discussion should take place during antenatal care and again if the person arrives at the hospital in labour.

QUALITY STATEMENT 8:

Induction and Augmentation of Labour

Pregnant people who have had a previous Caesarean birth are offered induction and/or oxytocin augmentation of labour when medically indicated, and are informed by their physician or midwife about the potential benefits and harms associated with the method proposed. Discussion about this should begin in the antenatal period.

QUALITY STATEMENT 9:

Signs and Symptoms of Uterine Rupture

During active labour, pregnant people who have had a previous Caesarean birth are closely monitored for signs or symptoms of uterine rupture.



Access to Vaginal Birth After Caesarean

People who have had a Caesarean birth before can plan a vaginal birth for their next birth, as long as there is no medical reason not to have one.

Background

Vaginal birth after Caesarean (VBAC) is safe and appropriate for most people who have had a previous Caesarean birth. 1-3,6 When no contraindications to VBAC are present, physicians and midwives should counsel pregnant people and their families to make choices that reflect their values, preferences, and priorities.² This

kind of supportive care requires the availability of health care professionals and facilities that offer and encourage planned VBAC.2 Local institutional policies, opinion leaders, and audit and feedback are all potentially effective ways of promoting and increasing access to VBAC.2

Sources: American Academy of Family Physicians, 2014² | Association of Ontario Midwives, 2011¹ | Royal College of Obstetricians and Gynaecologists, 2015³ | Schifrin and Cohen, 2013⁹ | Society of Obstetricians and Gynaecologists of Canada, 2005⁶

What This Quality Statement Means

For Pregnant People

You can plan a vaginal birth in this pregnancy, as long as there is no medical reason not to have one.

For Clinicians

Offer VBAC in a supportive manner to all pregnant people who have had a previous Caesarean birth and who have no contraindication to a vaginal birth.

For Health Services

Ensure that health care professionals and facilities have systems, processes, and resources in place to offer and support planned VBAC.

Quality Indicators

Structural Indicator

Availability of facilities that have policies supportive of VBAC

· Local data collection

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Access

Pregnant people planning a VBAC have access to a physician or midwife who is supportive of VBAC. This may include referral to a more comprehensive service that can offer planned VBAC.

Discussion After Caesarean Birth

After a Caesarean birth, people have a discussion with their physician or midwife and receive written information about the reasons for their Caesarean birth and their options for future births.

Background

Preferences for future births are usually established between pregnancies.8 Therefore, vaginal birth after Caesarean should be presented as an option for future births at discharge from hospital and again at the 6-week postnatal visit. It is important to discuss the reasons for the initial Caesarean birth so that the person and their family can use that information for family planning and future births. 10 Discussion should also include the association between a delivery interval of less than 18 to 24 months and increased risk of uterine rupture.^{1,6} The physician or midwife should ask about the person's emotional state and well-being and encourage them to ask questions.

Information should be provided during the discussion and also in written form so that it can be retained and shared.¹⁰ Written information facilitates communication with care providers from one birth to the next, because the clinical context and factors involved in the previous Caesarean birth are then clear, not only to the physician or midwife but also to the pregnant person and their family. This information can support shared decision-making during the next pregnancy, and this discussion should be repeated for each subsequent Caesarean birth.

Sources: Association of Ontario Midwives, 2011¹ | Munro, 2016⁸ | NICE, 2011 (updated 2012)¹⁰ | Society of Obstetricians and Gynaecologists of Canada, 2005^{6}

What This Quality Statement Means

For Pregnant People

Before you leave the hospital, your physician or midwife should talk with you about why you had a Caesarean birth and what your options are for future births. They should give you this information in a written report (see Definitions section). They should also talk about this at your 6-week follow-up appointment.

For Clinicians

Have a discussion with people who have had a Caesarean birth and provide written information about the reasons for their Caesarean birth and their options for future births.

For Health Services

Ensure that systems, resources, and training are available for physicians and midwives to have discussions and provide written information about the reasons for Caesarean births and options for future births.

Quality Indicators

Process Indicator

Percentage of people who have had a Caesarean birth and who have a discussion with their physician or midwife about the reasons for their Caesarean birth and their options for future births at discharge

- Denominator: number of people who have had a Caesarean birth
- Numerator: number of people in the denominator who have a discussion with their physician or midwife about the reasons for their Caesarean birth and their options for future births at discharge
- Data source: local data collection

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Discussion

A conversation between the person who had a Caesarean birth, their family, and a physician or midwife to provide accurate information about the reason for the Caesarean birth, including the clinical situation, recurring and non-recurring indications for Caesarean birth. and how it might affect options for future births. This conversation should happen before the person is discharged from hospital and should be reviewed at the 6-week postnatal visit. It should take place after each Caesarean birth.

Written information

Written information could be in the form of an operative report, but should be in a format that is easy to read and includes the following:

- Gestational age
- Reason for Caesarean section
- Fetal position and presentation
- Length of labour and dilation before Caesarean section
- Whether labour was induced or augmented
- Type of uterine incision, extension of the incision, and closure
- Any contraindication to future vaginal birth

Discussion After Caesarean Birth

PROCESS INDICATORS CONTINUED

Percentage of people who have had a Caesarean birth and who have a discussion with their physician or midwife about the reasons for their Caesarean birth and their options for future births at the 6-week postnatal visit

- Denominator: number of people who have had a Caesarean birth
- Numerator: number of people in the denominator who have a discussion with their physician or midwife about the reasons for their Caesarean birth and their options for future births at the 6-week postnatal visit
- Data source: local data collection

Percentage of people who have had a Caesarean birth and who receive written information after a discussion with their physician or midwife about the reasons for their Caesarean birth and their options for future births at discharge and at the 6-week postnatal visit

- Denominator: number of people who have had a Caesarean birth and who have a discussion with their physician or midwife about the reasons for their Caesarean birth and their options for future births at discharge and at the 6-week postnatal visit
- Numerator: number of people in the denominator who receive written information about the reasons for their Caesarean birth and their options for future births at discharge and at the 6-week postnatal visit
- Data source: local data collection

Shared Decision-Making

Pregnant people who have had a previous Caesarean birth participate in shared decision-making with their physician or midwife. The discussion and planned mode of birth are documented in the perinatal record.

Background

Eligible pregnant people who have had a previous Caesarean birth should receive counselling on both planned vaginal birth after Caesarean (VBAC) and elective repeat Caesarean section.^{1,2,6} The choice of mode of birth requires shared decision-making and considers the person's values and preferences, the outcomes of the previous Caesarean birth and previous operative report, the person's risk profile, and clinical factors relevant to the current pregnancy. This process also includes the person's partner or family, if desired.

Physicians and midwives should inform pregnant people who have had a previous Caesarean birth that VBAC is safe for most people, but not without risk. 1-3,6

Antenatal counselling should include information about preparedness during labour (e.g., electronic fetal monitoring, IV access, and immediate access to Caesarean section) and unbiased information about the benefits and potential harms of VBAC versus elective repeat Caesarean section, including:

- Expected post-pregnancy function, pain, and recovery time
- Potential complications
- Potential maternal and neonatal morbidity and mortality
- Implications for future pregnancies

Shared Decision-Making

BACKGROUND CONTINUED

The risk of uterine rupture during labour after previous Caesarean is estimated to be 1 in 200.1-3,6 Uterine rupture requires an emergency Caesarean section, and it increases the risk of maternal bleeding and the need for a hysterectomy.6 Uterine rupture may result in maternal or perinatal death if a Caesarean section is not performed quickly enough.⁶ The use of a decision aid is recommended to facilitate best practices in shared decision-making, informed consent, and documentation.3 Decision aids present risk information in a balanced and comprehensive manner, to help the person clarify their preferences, which supports informed decision-making.

Physicians and midwives should document antenatal counselling on VBAC, the person's decision about their planned mode of birth, and a plan for mode of birth if spontaneous labour occurs before the scheduled delivery date when elective repeat Caesarean section is chosen.^{1,3,6}

Sources: American Academy of Family Physicians, 2014² | Association of Ontario Midwives, 2011¹ | Royal College of Obstetricians and Gynaecologists, 2015³ | Society of Obstetricians and Gynaecologists of Canada, 2005⁶

What This Quality Statement Means

For Pregnant People

When you are choosing how you want to give birth, you and your physician or midwife should work together to make decisions. Conversations should include what is important to you about your birth experience, and the benefits and possible harms of both vaginal birth after Caesarean and a planned repeat Caesarean section.

For Clinicians

Provide antenatal counselling that supports shared decision-making for the planned mode of birth and offer VBAC when appropriate. Document the discussion and the planned mode of birth in the perinatal record.

For Health Services

Ensure that systems are in place so that physicians and midwives have the skills to support shared decision-making and document the discussion and planned mode of birth in the perinatal record.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Perinatal record

Standardized documentation of perinatal care. The Ontario Perinatal Record, 2016 version, acts as a care map for pregnancy, birth, and the very early newborn period.

Shared decision-making

A collaborative process that allows people and their health care professionals to make decisions together. The health care professional11:

- Invites the person to participate
- Presents options
- · Provides information about the benefits and potential harms of each option, as well as care during labour and discussion of potential interventions
- Helps people evaluate the options based on their values and preferences
- Facilitates deliberation and decision-making
- Helps implement decisions
- Provides decision-making aids or other tools

Quality Indicators

Process Indicators

Percentage of pregnant people who have had a previous Caesarean birth and who have a documented discussion with their physician or midwife about their values and preferences, the benefits and potential harms of planned VBAC, and the benefits and potential harms of elective repeat Caesarean section

- Denominator: number of pregnant people who have had a previous Caesarean birth
- Numerator: number of people in the denominator who have a documented discussion with their physician or midwife about their values and preferences, the benefits and potential harms of planned VBAC, and the benefits and potential harms of elective repeat Caesarean section
- Data source: local data collection

Percentage of pregnant people who have had a previous Caesarean birth and whose planned mode of birth is documented in their clinical chart

- Denominator: number of pregnant people who have had a previous Caesarean birth
- Numerator: number of people in the denominator whose planned mode of birth is documented in their clinical chart
- Data source: Better Outcomes Registry and Network

Previous Vaginal Birth

Pregnant people who have had both a previous Caesarean birth and a previous vaginal birth are informed that they have a high likelihood of successful vaginal birth if no contraindication is present.

Background

The strongest predictor of successful vaginal birth after Caesarean (VBAC) is a previous vaginal birth; in this scenario, the VBAC success rate is highapproximately 85% to 90%.3 Previous vaginal birth is also independently associated with a reduced risk of uterine rupture.3 Physicians and midwives should inform pregnant people who have had a previous Caesarean birth and a previous vaginal

birth or VBAC that they have a high likelihood of VBAC success for the current pregnancy. Physicians and midwives should encourage planned VBAC if no contraindication is present because of the faster recovery time, lower risk of abnormal placentation with future pregnancies, and lower risk of harm from uterine rupture.1-3,6

Sources: American Academy of Family Physicians, 2014² | Association of Ontario Midwives, 2011¹ | Royal College of Obstetricians and Gynaecologists, 2015³ | Society of Obstetricians and Gynaecologists of Canada, 2005⁶

What This Quality Statement Means

For Pregnant People

If you have had a vaginal birth before, you are very likely to have a successful vaginal birth after Caesarean, as long as there are no medical reasons to avoid one in this pregnancy.

For Clinicians

Inform pregnant people who have had both Caesarean and vaginal births, and who have no contraindications to vaginal birth in their current pregnancy, that they have a high likelihood of successful VBAC.

For Health Services

Ensure that processes and systems are in place to inform people who have had both Caesarean and vaginal births, and who have no contraindications to vaginal birth in their current pregnancy, that they have a high likelihood of successful VBAC.

Quality Indicators

Outcome Indicator

Percentage of pregnant people who have had a previous Caesarean birth and a previous vaginal birth, and who are planning a VBAC for their current pregnancy

- Denominator: number of pregnant people who have had a previous Caesarean birth and a previous vaginal birth
- Numerator: number of people in the denominator who are planning a VBAC for their current pregnancy
- Data source: Better Outcomes Registry and Network

Operative Reports and Incision Type

Physicians and midwives obtain an operative report from any previous Caesarean births whenever possible. Pregnant people who have had a previous Caesarean birth with an unknown type of uterine incision have an individualized assessment by their physician or midwife to determine the likelihood of a low transverse incision.

Background

Physicians and midwives should make every effort to obtain an operative report from the previous Caesarean section to develop an appropriate plan of care for people considering a vaginal birth after Caesarean (VBAC).1 Physicians and midwives should review the operative report and

note the type of uterine incision used, as well as any extensions of the incision, to determine the feasibility of VBAC.6 A previous classical or inverted "T" uterine scar, a previous myomectomy entering the uterine cavity, or a previous uterine rupture are contraindications to labour after Caesarean.6

Operative Reports and Incision Type

BACKGROUND CONTINUED

When the operative report is unavailable, physicians and midwives should discuss and explore specific details of previous Caesarean birth(s) to determine the likelihood of a low transverse uterine incision.6 Considerations should include the reason for the previous Caesarean, gestational age at the time of the previous Caesarean, and any other relevant clinical details. Any other previous relevant gynecologic history—including other uterine surgeries or interventions-should be considered and documented. If the likelihood of a low transverse incision is high, labour after Caesarean can be offered with informed consent and a discussion of possible increased risks of harm due to uterine rupture.6 Inability to obtain the previous operative report(s) should be documented.¹

Sources: Association of Ontario Midwives, 2011¹ | Royal College of Obstetricians and Gynaecologists, 2015³ | Society of Obstetricians and Gynaecologists of Canada, 20056

What This Quality Statement Means

For Pregnant People

Your physician or midwife should read the report from your previous Caesarean birth. If they don't know the type of scar on your uterus from your previous Caesarean birth, they should help determine whether a vaginal birth after Caesarean is right for you.

For Clinicians

Obtain operative reports from previous Caesarean births whenever possible to develop an appropriate plan of care. Inability to obtain the operative record should be documented, and VBAC may still be offered with shared decision-making. Document the discussion and planned mode of birth. When the incision type used in the previous Caesarean birth is unknown, assess the person's preference and the clinical circumstances surrounding the previous Caesarean birth to determine whether VBAC is feasible.

For Health Services

Ensure that physicians and midwives and facilities have the necessary resources, systems, and processes in place to obtain and send operative reports from previous Caesarean births in a timely way whenever possible. When the incision type used in the previous Caesarean birth is unknown, ensure that physicians and midwives are equipped with the knowledge and skills to assess the clinical circumstances surrounding previous Caesarean birth and determine whether VBAC is feasible.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Uterine incision

The type of cut made to the uterus during Caesarean birth. This may be different than the incision made in the skin. Low transverse, a horizontal incision in the lower uterus, is the most common type used in Canada and has a lower risk of uterine rupture than other types of incisions.1-3,6

Individualized assessment

Assessment that includes the circumstances of the previous Caesarean birth, the person's values and preferences, the person's risk profile, and clinical factors relevant to the current pregnancy and fetal health during labour.

Quality Indicators

Process Indicators

Percentage of pregnant people who have had a previous Caesarean birth whose physician or midwife makes a documented attempt to obtain the operative report from the previous Caesarean birth

- Denominator: number of pregnant people who have had a previous Caesarean birth
- Numerator: number of people in the denominator whose physician or midwife makes a documented attempt to obtain the operative report from the previous Caesarean birth
- Data source: local data collection

Percentage of pregnant people who have had a previous Caesarean birth with an unknown type of uterine incision and have a documented individualized assessment to determine whether VBAC is feasible

- Denominator: number of pregnant people who have had a previous Caesarean birth with an unknown type of uterine incision
- Numerator: number of people in the denominator who have a documented individualized assessment to determine whether VBAC is feasible
- Data source: local data collection

Timely Access to Caesarean Birth

Pregnant people planning a vaginal birth after Caesarean are aware of the resources available and not available at their planned place of birth, including physician, midwifery, nursing, anesthesiology, and neonatal care, and the ability to provide timely access to Caesarean birth.

Background

In an emergency, the risk to the person and the newborn is increased if a Caesarean birth is delayed.^{3,6} Therefore, the physician or midwife should advise that the safest place for a vaginal birth after Caesarean (VBAC) is in hospital, where there is access to continuous fetal monitoring and timely access to Caesarean birth. Physicians and midwives must be aware of the availability of physician, midwifery, nursing, anesthesiology, and pediatric staff for people in labour in their hospital.6 This information should be shared with people

planning a VBAC as part of shared decisionmaking (Quality Statement 3).1 Hospitals should have written policies and protocols to promote and ensure access to VBAC that include how physicians are notified or consulted to provide timely Caesarean birth if needed.^{2,6} Maternal factors that may increase the potential risk of uterine rupture should be discussed and considered when planning birth location, and referral to a more comprehensive service that includes supports for planned VBAC may be appropriate.

Sources: American Academy of Family Physicians, 2014² | Association of Ontario Midwives, 2011¹ | Royal College of Obstetricians and Gynaecologists, 2015³ | Society of Obstetricians and Gynaecologists of Canada, 2005⁶

What This Quality Statement Means

For Pregnant People

If you choose to plan a vaginal birth after Caesarean, your physician or midwife should tell you about the expertise available and not available where you plan to give birth, and what would happen if you needed an unplanned Caesarean birth. If you're planning to have a vaginal birth after Caesarean, the safest place to have it is in hospital.

For Clinicians

Inform pregnant people planning a VBAC about the physician, midwifery, nursing, anesthesiology, and neonatal resources available and not available at their planned place of birth in case they need an unplanned Caesarean birth. If an out-of-hospital birth is planned, inform people about plans for transport and timely transfer to hospital.

For Health Services

Ensure that physicians and midwives and other relevant staff in the health service have the knowledge to inform pregnant people planning a VBAC about the resources available and not available at their planned place of birth. Practice should be supported by a written policy, protocol, or guideline.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Timely access

When there is an indication for Caesarean section, it should occur promptly, as delay in surgery could result in serious maternal and/or neonatal harm.

Quality Indicators

Process Indicator

Percentage of pregnant people planning a VBAC who have a documented discussion about the resources available and not available at their planned place of birth, including obstetric, nursing, anesthesiology, neonatal care, and the ability to provide timely access to Caesarean birth

- Denominator: number of pregnant people planning a VBAC
- · Numerator: number of people in the denominator who have a documented discussion about the resources available and not available at their planned place of birth, including obstetric, nursing, anesthesiology, neonatal care, and the ability to provide timely access to Caesarean birth
- Data source: local data collection

Unplanned Labour

Pregnant people planning an elective repeat Caesarean section should have a documented discussion with their physician or midwife about the feasibility of vaginal birth after Caesarean if they go into unplanned labour. This discussion should take place during antenatal care and again if the person arrives at the hospital in labour.

Background

During antenatal care, physicians and midwives should discuss the possibility of unplanned labour occurring before the scheduled delivery date with people who are planning an elective repeat Caesarean section. Any preferences for attempting a vaginal birth after Caesarean (VBAC) in this situation should be documented in the person's perinatal record.

People planning an elective repeat Caesarean section who experience unplanned labour should engage in shared decision-making with their physician or midwife about the feasibility of

VBAC when they arrive at the hospital in labour.^{2,3} People's preferences, clinical factors that may increase the risk of uterine rupture, and the clinical judgment of the physician or midwife should be considered when determining the mode of birth.² Obstetrical care providers and pregnant people should continue to engage in shared decisionmaking during labour after Caesarean if there are any changes in maternal or fetal health status that may affect the risks associated with labour and the likelihood of vaginal birth.2

Sources: American Academy of Family Physicians, 2014² | Royal College of Obstetricians and Gynaecologists, 20153

What This Quality Statement Means

For Pregnant People

If you plan to have another Caesarean birth but you go into labour before your scheduled Caesarean, it may still be possible to have a vaginal birth. Talk to your physician or midwife about your options if you go into labour early.

For Clinicians

Engage people who plan an elective repeat Caesarean section in shared decision-making about the feasibility of VBAC if they go into unplanned labour.

For Health Services

Ensure systems, processes, and resources are available for physicians, midwives, and facilities to engage people in shared decision-making about the feasibility of VBAC if they go into unplanned labour.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Unplanned labour

When labour begins spontaneously, before the scheduled elective repeat Caesarean section.

Quality Indicators

Process Indicators

Percentage of pregnant people planning an elective repeat Caesarean section who have a documented discussion that includes shared decision-making with their physician or midwife during antenatal care about the feasibility of VBAC in the event of unplanned labour

- Denominator: number of pregnant people planning an elective repeat Caesarean section
- Numerator: number of people in the denominator who have a documented discussion that includes shared decision-making with their physician or midwife during antenatal care about the feasibility of VBAC in the event of unplanned labour
- Data source: local data collection

Percentage of pregnant people planning an elective repeat Caesarean section who experience unplanned labour and have a documented discussion that includes shared decision-making with their physician or midwife about the feasibility of VBAC

- Denominator: number of pregnant people planning an elective repeat Caesarean section who experience unplanned labour
- Numerator: number of people in the denominator who have a documented discussion that includes shared decision-making with their physician or midwife about the feasibility of VBAC
- Data source: local data collection

Induction and Augmentation of Labour

Pregnant people who have had a previous Caesarean birth are offered induction and/or oxytocin augmentation of labour when medically indicated, and are informed by their physician or midwife about the potential benefits and harms associated with the method proposed. Discussion about this should begin in the antenatal period.

Background

Evidence suggests that compared with spontaneous labour, induction or augmentation of labour after a previous Caesarean delivery increases the risk of uterine rupture by 2 to 3 times, and increases the risk of Caesarean birth by 1.5 times.3 However, because the absolute risk of uterine rupture is low, induction and augmentation of labour can be offered when the indication is appropriate and after counselling

on potential benefits and harms.⁶ Physicians and midwives should talk with their patient or client about the decision to induce or augment labour, the proposed method to be used, time intervals for serial vaginal examination, and criteria for labour progress that would lead to discontinuing labour and proceeding to a Caesarean birth.3



Induction and Augmentation of Labour

BACKGROUND CONTINUED

If oxytocin augmentation is used, clinicians should pay very close attention to labour progress and uterine activity. The use of oxytocin requires one-to-one nursing or midwifery care and continuous electronic fetal monitoring during active labour.

In people who have had a previous Caesarean birth, pregnancy that continues beyond 40 weeks is not a contraindication for labour. 6 Induction of labour should be considered only after 41 weeks, unless there are other medical indications for it.12 Mechanical methods of induction such as amniotomy or Foley catheter cervical ripening are preferred, because they are associated with a smaller increased risk of uterine rupture. 1,3,6 Misoprostol or prostaglandins should not be used during labour after Caesarean birth because of their association with a high risk of uterine rupture.2

Sources: American Academy of Family Physicians, 2014² | Association of Ontario Midwives, 2011¹ | Royal College of Obstetricians and Gynaecologists, 2015³ | Society of Obstetricians and Gynaecologists of Canada, 2005⁶

What This Quality Statement Means

For Pregnant People

You may be offered drugs or other methods to speed up your labour if you need it. Be sure to talk with your physician or midwife about the benefits and potential harms of what they recommend.

For Clinicians

Offer induction and/or oxytocin augmentation of labour when medically indicated, and discuss the benefits and potential harms associated with the method proposed, including increased risk of uterine rupture. Do not use misoprostol to induce labour after Caesarean.

For Health Services

Ensure that physicians and midwives have the resources, knowledge, and skills to offer and monitor induction and/or oxytocin augmentation when medically indicated, and to discuss the benefits and potential harms associated with the method proposed.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Induction of labour

Starting contractions in a pregnant person who is not in labour to help achieve a vaginal birth within 24 to 48 hours.12

Augmentation of labour

Stimulating the uterus to increase the frequency, duration, and intensity of contractions after spontaneous labour has started.13

Quality Indicators

Process Indicators

Percentage of pregnant people who attempt a vaginal birth after Caesarean and present with documented clinical indications for labour induction who receive labour induction

- Denominator: number of pregnant people who attempt a vaginal birth after Caesarean and present with documented clinical indications for labour induction
- Numerator: number of people in the denominator who receive labour induction
- Data source: local data collection

Percentage of pregnant people who attempt a vaginal birth after Caesarean and present with documented clinical indications for labour augmentation who receive labour augmentation

- Denominator: number of pregnant people who attempt a vaginal birth after Caesarean and present with documented clinical indications for labour augmentation
- Numerator: number of people in the denominator who receive labour augmentation
- Data source: local data collection

Signs and Symptoms of Uterine Rupture

During active labour, pregnant people who have had a previous Caesarean birth are closely monitored for signs or symptoms of uterine rupture.

Background

People who labour after a previous Caesarean have a higher risk of uterine rupture than those who choose an elective repeat Caesarean section. Labour progress should be assessed regularly, and people should be monitored closely for signs or symptoms of uterine rupture and receive immediate medical attention if there are any concerns. 1,3,6

Signs or symptoms of uterine rupture may be sudden in onset and include1:

- Atypical and abnormal fetal heart tracings, including a changing baseline heart rate and/or variability (e.g., fetal bradycardia in the first or second stage of labour)
- Maternal hypotension
- Maternal tachycardia
- Hematuria and/or excessive vaginal bleeding
- Maternal restlessness
- Loss of fetal presenting part in the pelvis



Signs and Symptoms of Uterine Rupture

BACKGROUND CONTINUED

Continuous electronic fetal monitoring beginning at the onset of active labour and continuing for the duration of labour in people who have had a previous Caesarean birth can identify atypical and abnormal fetal heart rate in a timely manner, including fetal bradycardia—the most consistent and common predictive sign of uterine rupture. 3,6,14 Health care professionals should recognize and respond to atypical and abnormal fetal heart tracings.

Any unusual pain or increased requirement for pain relief in people who receive epidural analgesia should command immediate medical attention, because this may be indicative of a pending uterine rupture.^{1,3}

Sources: Association of Ontario Midwives, 20111 | Royal College of Obstetricians and Gynaecologists, 20153 | Society of Obstetricians and Gynaecologists of Canada, 20056 | Vaginal birth after Caesarean expert panel consensus

What This Quality Statement Means

For Pregnant People

While you are in labour, your health care professionals should watch you closely for signs and symptoms of a tear in your uterus.

For Clinicians

Monitor people who have had a previous Caesarean birth closely for signs or symptoms of uterine rupture during active labour.

For Health Services

Ensure that processes and resources are in place to support monitoring of people who have had a previous Caesarean birth closely for signs or symptoms of uterine rupture during active labour.

DEFINITIONS USED WITHIN THIS QUALITY STATEMENT

Uterine rupture

A tear in the uterine scar during labour or birth. This is an urgent situation that requires emergency Caesarean section or hysterectomy as soon as possible.6

Quality Indicators

Process Indicator

Percentage of pregnant people who attempt a vaginal birth after Caesarean who are monitored closely for signs and symptoms of uterine rupture through continuous electronic fetal monitoring

- Denominator: number of pregnant people who attempt a vaginal birth after Caesarean
- Numerator: number of people in the denominator who are monitored closely for signs and symptoms of uterine rupture through continuous electronic fetal monitoring
- Data source: local data collection

Balance Outcome Indicator

Rate of uterine rupture in pregnant people who plan a vaginal birth after Caesarean

- Denominator: number of pregnant people who plan a vaginal birth after Caesarean
- Numerator: number of people in the denominator who have a uterine rupture
- Data source: Better Outcomes Registry and Network

Acknowledgements

Expert Panel

Health Quality Ontario and the Provincial Council for Maternal and Child Health thank the following individuals for their generous voluntary contributions of time and expertise to help create this quality standard:

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Health Quality Ontario also thanks the PCMCH Maternal-Newborn Advisory Committee, chaired by Gareth Seaward and Siobhan Chisholm, for providing feedback on this quality standard.

References

- Association of Ontario Midwives, Bennett S, Bourret 1. K, Meuser A. Clinical practice guideline no. 14: vaginal birth after previous low-segment caesarean section [Internet]. Toronto (ON): The Organization; 2011 [cited 2016 Decl. Available from: http://www.ontariomidwives. ca/images/uploads/guidelines/No14CPG_VBAC_Final_ November 2011.pdf
- 2. American Academy of Family Physicians. Clinical practice guideline: planning for labor and vaginal birth after cesarean [Internet]. Leawood (KS): The Academy; 2014 [cited 2016 Jun]. Available from: http://www. aafp.org/dam/AAFP/documents/patient_care/clinical_ recommendations/AAFP%20PVBAC%20guideline.pdf
- Royal College of Obstetricians and Gynaecologists. Birth after previous caesarean birth green-top guideline no. 45 [Internet]. London (UK): The Organization; 2015 [cited 2016 Jun]. Available from: https://www.rcog.org. uk/globalassets/documents/guidelines/gtg_45.pdf
- Canadian Institute for Health Information. QuickStats: Childbirth indicators by place of residence 2014-2015; What is the repeat caesarean section rate in Ontario, 2014-2015? [Internet]. North York (ON): The Institute; 2016 [cited 2016 Jun 2]. Available from: https://apps.cihi.ca/mstrapp/asp/Main. aspx?Server=apmstrextprd_i&project=Quick+Stats &uid=pce pub en&pwd=&evt=2048001&visualization Mode=0&documentID= 029DB170438205AEBCC75B 8673CCE822

- Bickford CD, Janssen PA. Maternal and newborn 5. outcomes after a prior cesarean birth by planned mode of delivery and history of prior vaginal birth in British Columbia: a retrospective cohort study. CMAJ Open. 2015;3(2):E158-65.
- 6. Society of Obstetricians and Gynaecologists of Canada. SOGC clinical practice guidelines. Guidelines for vaginal birth after previous caesarean birth. Number 155 (Replaces guideline Number 147). Int J Gynaecol Obstet. 2005;89(3):319-31.
- 7. Grzybowski S, Kornelsen J, Barclay L. Closing rural maternity services: is it worth the risk? Can J Rural Med. 2016;21(1):17-9.
- 8. Munro S. Policy brief: access to maternity services: vaginal birth after caesarean [Internet]. Vancouver (BC): Sarah Munro; 2016 [cited 2016 Decl. Available from: https://static1.squarespace. com/static/555a1a87e4b07ba26dc3faf4/t/5769a 1c203596e833237b8c4/1466540581450/Munro VBAC+Policy+Brief+v1.5.pdf
- Schifrin BS, Cohen WR. The effect of malpractice claims on the use of caesarean section. Best Pract Res Clin Obstet Gynaecol. 2013;27(2):269-83.
- 10. National Institute for Health and Clinical Excellence. Caesarean section: clinical guideline [Internet]. London (UK): The Institute; 2011 [cited 2016 Jun]. Available from: https://www.nice.org.uk/guidance/cg132

REFERENCES CONTINUED

- 11. Wexler R. Six steps of shared decision making [Internet]. Boston (MA): Informed Medical Decisions Foundation; 2012 [cited 2016 Jun]. Available from: https://www.mainequalitycounts.org/image_upload/ SixStepsSDM2.pdf
- 12. Leduc D, Biringer A, Lee L, Dy J, Azzam H, Barrett J, et al. Induction of labour: review. J Obstet Gynaecol Can. 2015;37(4):380-3.
- **13.** World Health Organization. WHO recommendations for augmentation of labour [Internet]. Geneva: The Organization; 2014 [cited 2016 Dec]. Available from: http://apps.who.int/iris/ bitstream/10665/112825/1/9789241507363_eng.pdf
- 14. Liston R, Sawchuck D, Young D. Fetal health surveillance: antepartum and intrapartum consensus guideline. J Obstet Gynaecol Can. 2007;29(9 Suppl 4):S3-56.

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 largescale 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 there is 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 the Provincial Council for Maternal and Child Health

The mandate of the Provincial Council for Maternal and Child Health (PCMCH) is to provide evidence-based and strategic leadership on maternal, newborn, child and youth health care services in Ontario. This includes addressing and supporting provincial coordination of planning, innovation, monitoring and knowledge management for maternal, newborn, child and youth health care services and/or standards across both community and hospital settings. The overall goal of PCMCH is to support the development of a system of care that provides timely, equitable, accessible, high quality, evidence-based, family-centred care in an efficient and effective manner.

Vision

Healthy pregnancies, babies, children and families for lifelong health in Ontario.

Mission

Be the provincial forum in which families, caregivers, clinical and administrative leaders in maternal, child and youth health can identify patterns, issues of importance and improvement opportunities in health and health care delivery.

Enhance the delivery and experience of maternal, child and youth health care services by engaging individuals, families and their care providers in building provincial consensus regarding standards of care, leading practices and priorities for system improvement, and monitoring of the performance of Ontario's maternal and child health care system.

Be a trusted leader and voice to Ontario's maternal, child and youth health care providers, planners and stewards in order to improve the care experience and overall health care system performance.

Facilitate knowledge to action that will support individuals, caregivers, health care providers and planners in improving the health and wellbeing of children, youth, and families.

Notes



Looking for more information?

Visit our website at **hqontario.ca** and contact us at **qualitystandards@hqontario.ca** if you have any questions or feedback about this guide.

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