

# Diabetes in pregnancy

A booklet for patients, carers and family members



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www.healthcareimprovementscotland.org



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# Who is this booklet for?

#### This booklet is for you if:

- you live with type 1 or type 2 diabetes and are planning a pregnancy
- you have developed diabetes during pregnancy (gestational diabetes)

Family members, friends and carers may also find this booklet helpful.

Details of support organisations and other places where you can find out more information are on page 25.



## What is this booklet about?

This booklet explains the recommendations in a guideline produced by the Scottish Intercollegiate Guidelines Network about managing diabetes during pregnancy.

Recommendations in the guideline are based on different types of evidence. Some of it comes from current research, some from the clinical experience and opinions of healthcare professionals, and some from people with lived experience.

The booklet will cover:	The booklet will not cover:
care before pregnancy     (pre-conception care)	care during labour and birth
care during pregnancy     (antenatal care)	
glucose monitoring during pregnancy	
medication management	
lifestyle interventions	
postnatal care	

There are two different types of recommendations in the booklet



Recommendation based on the research evidence



Recommendation based on clinical experience

#### What is diabetes?

Diabetes is a health condition that affects how your body handles glucose, a type of sugar in your blood. When you have diabetes, your body:

- doesn't make enough insulin (a hormone that helps glucose get into your cells), or
- can't use insulin properly. This leads to high levels of glucose in your blood, which can cause various health problems if not managed well.

#### **Blood glucose levels**

This refers to the amount of glucose (sugar) present in the blood. Glucose is the body's main source of energy. Maintaining stable blood glucose levels is crucial for overall health.

#### Types of diabetes

There are two main types of diabetes:

**Type 1 diabetes** is when the pancreas produces little to no insulin, a hormone necessary for regulating blood glucose levels.

**Type 2 diabetes** is when the body becomes resistant to the effects of insulin or doesn't produce enough insulin to maintain normal blood glucose levels.

#### **Pancreas**

The pancreas is an organ behind your stomach. It helps digest food and controls blood sugar.

There are other types of diabetes including:

**Gestational diabetes** is diabetes that can develop during pregnancy. It affects women who haven't had diabetes before. Gestational diabetes is not as common as type 1 or type 2 diabetes, but is increasing. It affects at least 4–5 in 100 women during pregnancy, or 1 in 20 pregnancies in the UK.

For more information on types of diabetes, please see <u>Diabetes UK's website</u>.

# What if I already have type 1 or type 2 diabetes and am planning a pregnancy?

Before becoming pregnant, it's important that you manage your diabetes well.

What should I do before planning pregnancy to manage my diabetes in the best way?

You should use reliable contraception until you reach your target HbA1c as discussed with your healthcare team. Research shows that when diabetes is well-managed before conception, pregnancy outcomes are much better.

#### HbA1c

A measure of average blood glucose levels over the past two to three months. It provides valuable information about long term blood glucose control.



#### Recommendation based on the research evidence

Before planning a pregnancy you should:

aim for an HbA1c as low as possible without excessive hypoglycaemia (abnormally low blood glucose).



Without a doubt my pregnancy was the hardest thing I have ever done. But it was so incredibly worth it. Read Sarah's story.



#### Recommendation based on clinical experience

Before planning a pregnancy you should:

- talk to your healthcare professionals for advice and support
- consider if you can do things to support a healthy pregnancy and beyond. For example, stopping smoking, having healthy eating patterns (such as increasing the amount of wholegrains and vegetables while reducing fat), doing an enjoyable physical activity as part of your daily routine, and managing your weight if needed
- use contraception until you're ready for pregnancy
- take 5mg folic acid for at least three months before stopping contraception and during the first three months of pregnancy to reduce the risk of birth defects
- review your medications with your healthcare professional and switch to safer options for pregnancy if necessary
- understand the importance of maintaining optimal HbA1c levels and managing blood glucose levels during pregnancy, with a focus on reducing hypoglycaemia
- aim for a HbA1c level below 48 mmol/mol, which can lower the chances of problems during pregnancy and birth. Your healthcare plan should be based on your individual needs.

mmol/mol is a way to measure how much glucose has been in your blood over the last three months. It shows the amount of glucose-coated hemoglobin (protein in red blood cells) compared to normal hemoglobin, helping people with diabetes see how well they've managed their blood glucose levels.

#### Recommendation based on clinical experience



When setting goals for your HbA1c, your healthcare professional should consider other things too. These include whether you have high blood pressure and the condition of your eyes and kidneys.



#### Recommendation based on clinical experience

If you have type 2 diabetes and are thinking about getting pregnant, your healthcare professional might suggest sending you to a specialist to support your diabetes. They might recommend using continuous glucose monitors (CGMs) if your blood glucose levels aren't where they should be before pregnancy.



#### **Information**

The following information should be discussed with you:

- Pregnancy planning during annual review, including contraception and what to do before you conceive, and postnatal issues.
- Access to antenatal clinics and support from professionals.
- Setting HbA1c targets that consider factors like your body mass index (BMI) and possible diabetic complications.
- Lifestyle changes, regular monitoring, and medication adjustments.
- Hypoglycaemia recognition and management.
- Driving regulations.
- Folic acid 5mg, vitamin D and multi-vitamin supplementation.
- Antenatal care, pregnancy risks, and the role of the different professionals in your healthcare team.
- Managing diabetes if you become unwell.
- Postnatal care, including breastfeeding support.

You can ask about any of these points if they are not discussed with you.

#### It's OK to ask

When you go to your healthcare appointment(s), we encourage you to ask four key questions that will help you and your healthcare professionals make decisions together. This will make sure the care is right for you.

- 1. What are the benefits of my treatment?
- 2. What are the risks of my treatment?
- 3. What alternative treatments can I try?
- 4. What if I do nothing?

Learn more about "It's OK to ask"

Learn more about realistic medicine

# What should happen if I become pregnant and have type 1 or type 2 diabetes?

#### Antenatal care

Care during pregnancy (antenatal care) is essential for all pregnant women to ensure the health and well-being of the mother and the developing baby. If you have diabetes and become pregnant, antenatal care becomes even more important because of the potential complications that diabetes can introduce during pregnancy.

Both your diabetes and pregnancy care teams should talk to you early on in your pregnancy. This should happen soon after you find out you're pregnant, before your first official antenatal appointment.

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#### Information

Your healthcare professional should make sure you:

- understand the increased frequency of appointments during pregnancy and the involvement of various healthcare professionals
- receive personalised communication regarding potential risks associated with diabetes during pregnancy, and support to help you make good choices without being judged.

How does continuous glucose monitoring (CGM) benefit pregnant women with diabetes?

CGM is a medical device that tracks glucose levels in real time throughout the day and night. CGM continually monitors your blood glucose, giving you real-time updates through a device attached to your body. CGM helps you to maintain optimal glucose levels, reducing the risks of complications like having a big baby, pre-eclampsia and neonatal hypoglycaemia.



If you have type 1 diabetes, healthcare professionals should make sure you can have CGM during pregnancy if you would like it. If you have type 2 diabetes, healthcare professionals should consider whether CGM is right for you during pregnancy.

#### Pre-eclampsia

A serious condition that can develop during pregnancy. It results in high blood pressure and can damage organs, such as the kidneys. It requires medical care to prevent complications for both the mother and baby.

#### Neonatal hypoglycaemia

Low blood glucose levels in newborn babies, which can happen if the mother has diabetes or if the baby produces too much insulin in response to high glucose levels during pregnancy.

# What are the recommended blood glucose targets during pregnancy for women with diabetes?

Maintaining blood glucose targets during pregnancy is important for you and your baby's health. If your pregnancy was not planned, it's important to contact the diabetes team to support you and help manage your diabetes. It can be difficult to reach the target. Try not to worry. Your health care team can support you to get as close as possible.

The table below shows the glucose levels you should aim for:

Type of diabetes	Before meals	One hour after meals	Two hours after meals	Before bed
Type 1	Between 4 and 6 mmol/L.	Less than 8 mmol/L.	Less than 7 mmol/L.	Greater than 6 mmol/L.
Type 2	Between 4 and 6 mmol/L.	Less than 8 mmol/L.	Less than 7 mmol/L.	Greater than 6 mmol/L.
Gestational diabetes	Less than 5.5 mmol/L.	Less than 8 mmol/L.	Less than 7 mmol/L.	Greater than 6 mmol/L.

#### Recommendation based on the research evidence



If you are monitoring your glucose levels in pregnancy using CGM, your team will monitor your overall glucose patterns. They will recommend your blood glucose levels are in the range 3.5-7.8 mmol/L at least 70% of the time.



If you already have diabetes, it's good to aim for glucose levels close to those in people who don't. This may reduce the risk of having a large-forgestational age baby and the need for an emergency Caesarean section.



#### Recommendation based on the research evidence

If you have gestational diabetes, it's beneficial to aim for glucose levels similar to those in people without diabetes (see page 12). This can help reduce the risk of having a Caesarean section, a large-for-gestational-age baby, neonatal hypoglycaemia and pre-eclampsia. To reach these target glucose levels, you might need more medication and closer monitoring during pregnancy.



#### Recommendation based on the research evidence

Sometimes, to reach lower blood glucose targets, you may need more glucose-lowering medications, such as insulin. More follow-ups with healthcare professionals may also be needed.

#### Large-for gestational-age (LGA)

Refers to babies who are larger than average for their pregnancy age. They often weigh more than 9 out of 10 babies of the same age. LGA babies can pose risks during delivery and increase the need for a Caesarean section birth.

When should pregnant women with diabetes monitor ketones levels?

Ketones are chemicals produced when your body breaks down fat for energy.



#### Recommendation based on clinical experience

If you have type 1 diabetes, you should monitor ketone levels in your blood if your blood glucose level is 10 mmol/L or higher, or you are ill. Checking blood ketones helps assess the risk of diabetic ketoacidosis (DKA), a serious complication of diabetes characterised by high ketone levels and acidic blood.

When is it recommended to deliver babies of women with diabetes during pregnancy?



#### **Information**

It's important to talk with your healthcare professional about when and how you plan to give birth. You should aim to talk about it as soon as possible after becoming pregnant. You will be able to create a birthing plan that is the best possible for you and your baby. This can be recorded in your case notes too. Final decisions about when and how to deliver your baby will be made during the third trimester of your pregnancy.



It was really important for me to be able to discuss my delivery options with my healthcare team throughout my pregnancy. After having an emergency c-section with my first baby I really wanted to try for a vaginal birth after caesarean with my second. My team was so supportive of this decision. We created a plan and put this in place on how we would ensure I was able to manage my diabetes throughout the induction and labour.

Some babies may be delivered prematurely. Often no cause is found and it may or may not be related to your diabetes. Premature babies may need urgent neonatal care and you will be supported by your healthcare team. Further details are available from the charity Bliss (see page 28).

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#### Recommendation based on the research evidence

If you have uncomplicated type 1 or type 2 diabetes, it's recommended that you have an elective birth by induction or Caesarean between 37 and 38 weeks +6 days of pregnancy. Elective birth by induction or Caesarean is the planned decision to either induce labour or perform a Caesarean section rather than waiting for labour to start naturally. If you have uncomplicated gestational diabetes, delivery can wait until 40 weeks.



#### Recommendation based on the research evidence

If you have gestational diabetes, plan to give birth by 40 weeks and 6 days at the latest. If you haven't given birth by then, you should be offered an induction or a Caesarean section if necessary. Your healthcare professionals will consider an earlier birth if there are any complications for you or your baby.

#### **Caesarean birth**

A surgical procedure to deliver a baby through a cut in the mother's abdomen and uterus, often performed when vaginal delivery is not possible or advisable.

#### Induction of labour

A medical intervention to stimulate uterine contractions artificially to start the process of childbirth when it doesn't start naturally.

## What is gestational diabetes?

Gestational diabetes is a type of diabetes that develops during pregnancy and disappears after giving birth. It happens when your body can't produce enough insulin to meet the extra needs during pregnancy, leading to high blood glucose levels. This happens because pregnancy causes insulin resistance. If not managed properly, gestational diabetes can increase the risk of complications for both you and your baby during pregnancy. Having gestational diabetes increases your risk of going on to develop type 2 diabetes.

#### What are the risk factors for gestational diabetes?

There are some risk factors for gestational diabetes that should be recognised by healthcare professionals.

- Your BMI is above 30.
- You previously had a baby who weighed more than 4.5kg (9 .9lb) at birth.
- You had gestational diabetes in a previous pregnancy.
- You have a family history of diabetes.
- Your family is of a minority ethnic origin that has a higher chance of developing diabetes.
- You are over age 35.
- You have a history of polycystic ovary syndrome.

#### Polycystic ovary syndrome

A hormonal disorder causing enlarged ovaries with small cysts. It affects your periods, fertility and hormone levels.

If any of these risk factors apply to you, you may be offered screening for gestational diabetes during pregnancy.



You should be considered for screening for gestational diabetes if you have a history of polycystic ovary syndrome.



#### Recommendation based on the research evidence

If you are over age 40 and pregnant, you should be screened for gestational diabetes.



#### Recommendation based on the research evidence

You should be considered for screening for gestational diabetes if you are aged 35-40 and pregnant.

How do healthcare professionals diagnose gestational diabetes?

Healthcare professionals can use the oral glucose tolerance test (OGTT) to diagnose various types of diabetes, including gestational diabetes.

The OGTT checks how your body processes glucose. After fasting for 8-10 hours, your blood is tested. Then, you drink a 75-gram sugary solution, and your blood is tested again after 1 and 2 hours. This helps diagnose diabetes and gestational diabetes.



If your test shows any of these results, you will be diagnosed with gestational diabetes:

- Fasting blood glucose level of 5.3 mmol/L or higher.
- One-hour blood glucose level after the glucose drink of 10.6 mmol/L or higher.
- Two-hour blood glucose level after the glucose drink of 9.0 mmol/L or higher.

How should I be supported to become more active and eat healthy?



#### Recommendation based on the research evidence

A trained healthcare professional should give you dietary advice and tips about staying active.



#### Recommendation based on clinical experience

You should have access to a dietitian for nutritional advice, whether you're following a specific diet plan or not. This support can be offered one-to-one or in group sessions, depending on what works best for you.

Advice about diet will often be to reduce refined carbohydrates (processed carbohydrates such as white bread, white rice, pasta made from wheat flour and sugary cereals), avoid gaining a lot of weight and increase your physical activity. Specific dietary recommendations may vary based on your individual needs and preferences.



Physical activity is important for women with gestational diabetes and can help improve glucose control. You should aim for 150 minutes of moderate physical activity each week while pregnant. You can spread this time across different days and do various activities to stay active and healthy.

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#### Recommendation based on clinical experience

Diabetes teams should strongly encourage you to take part in physical activities that suit you.

Are there any supplements or alternative treatments for gestational diabetes?

There is limited evidence about whether myo-inositol and probiotics will help. Women should consult their healthcare professional before considering these supplements.



If you need medication to control your gestational diabetes, your healthcare professional will suggest metformin or insulin first.



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#### Recommendation based on the research evidence

Diabetes teams should talk to you about the specific side-effects of metformin and insulin, including the fact that metformin crosses the placenta. Studies have shown that children exposed to metformin during pregnancy may have slightly lower birth weights.

#### **Placenta**

A temporary organ in pregnancy. It carries nutrients and oxygen from mother to baby, and removes waste.

# What postnatal care should I have?

Your healthcare professional will discuss what changes are needed after delivery, and support you in managing your diabetes.

#### What will happen if I have type 1 diabetes or type 2 diabetes?

After the birth, if you have type 1 diabetes, you will need a reduction in insulin doses. You'll work on a plan, supported by the diabetes team, to return to your pre-pregnancy insulin doses.

If you have type 2 diabetes and needed insulin during your pregnancy, your insulin dose may decrease or even be stopped, depending on your needs. Depending on your plans for future pregnancies, you may want to think about different oral or injectable therapies.



#### The following information should be discussed with you:

- If you were using insulin before your pregnancy, your basal insulin dose might need to be reduced by about 50% after delivery. Your diabetes team will help you adjust your insulin to what you were using before you got pregnant.
- If you're breastfeeding, you might need some extra support and possibly a review of your medications. It's important to stick to metformin or insulin (or both) while breastfeeding, and not switch to other glucose-lowering therapies.
- It's crucial to have ongoing follow-up and support. Make sure you book a review appointment with the diabetes team. If you're returning to primary care (your GP), make sure you know how to get support for future pregnancies.
- Contraception options are available on postnatal wards, and you should be informed about them. If you prefer, you can get information leaflets and arrange a review with your GP or local family planning services.
- Depending on your individual needs and what's available in your area, you should review and plan for the use of continuous glucose monitoring (CGM).

#### What will happen if I had gestational diabetes?

If you had gestational diabetes, it's important to monitor for glucose intolerance after pregnancy. Adjustments may include stopping metformin and insulin as necessary.

Gestational diabetes increases the risk of developing type 2 diabetes and cardiovascular disease later in life. Detecting glucose intolerance soon after pregnancy will mean your healthcare professionals can give help to prevent or delay the onset of diabetes and reduce the risk of complications.



#### The following information should be discussed with you:

- If you had gestational diabetes, you'll need to stop taking any glucoselowering medications you were using during pregnancy.
- It's important to have postnatal screening for diabetes, get your blood glucose levels checked annually and use services to reduce your future diabetes risk.
- Work with your diabetes team and a dietitian to decide on a weight management programme. Options include in-person or online sessions to help prevent type 2 diabetes.
- Plan future pregnancies carefully. Review your blood glucose control and aim to avoid type 2 diabetes before getting pregnant.
- In future pregnancies, you'll be screened early for type 2 diabetes and follow a 'Gestational Diabetes Pathway' with support from a community midwife, specialist services and dietitians.



#### Recommendation based on the research evidence

If you've had gestational diabetes, it's important to know that you could have it again in future pregnancies. There are risks with this, so when you're planning to get pregnant in the future, your doctor might suggest testing for diabetes beforehand to make sure you and your baby stay healthy.

#### What are the options for testing glucose intolerance after pregnancy?

Tests commonly used include fasting blood glucose and HbA1c. The fasting blood glucose test measures the level of glucose in the blood after you have fasted for at least eight hours. You do not need to fast for the HbA1c test. These tests can detect diabetes, impaired fasting glucose and impaired glucose tolerance after your baby is born.



#### Recommendation based on the research evidence

After giving birth, if your blood glucose levels returned to normal, you should be offered the following:

- Advice on lifestyle changes like weight management, diet, and exercise.
- A fasting blood glucose test 6-13 weeks after birth.

If you haven't had a fasting blood glucose test by 13 weeks, you should still be offered one, or an HbA1c test as an alternative.

Healthcare professionals will not routinely offer a 75g 2-hour oral glucose tolerance test.



#### Recommendation based on the research evidence

If your postnatal test is a fasting blood glucose test:

- If your level is below 6.0 mmol/L, you'll have a low chance of diabetes. You'll need annual tests and changes to such things as your diet and physical activity levels.
- If your level is between 6.0 and 6.9 mmol/L, you're at high risk of type 2 diabetes and will receive advice and interventions.
- If your level is 7.0 mmol/L or above, you'll probably have type 2 diabetes and need further tests.



If your postnatal test is an HbA1c test:

- If your level is below 39 mmol/mol (5.7%), you'll have a low chance of diabetes.
- If your level is between 39 and 47 mmol/mol (5.7% and 6.4%), you're at high risk of type 2 diabetes and will receive advice and interventions.
- If your level is 48 mmol/mol (6.5%) or above, you have type 2 diabetes and will be referred for further care.
- You'll need an annual test to check that your blood glucose levels are normal.

Most centres in Scotland measure HbA1c 3 months after delivery and offer entry to the type 2 diabetes <u>Framework for prevention</u>, <u>early detection</u>, and <u>intervention</u>.

### Sources of further information

The organisations we have listed below may be able to answer any questions you have and offer support.

SIGN accepts no responsibility for the information they give.

#### **National organisations**

**Diabetes Scotland/Diabetes UK** 

www.diabetes.org.uk/in\_your\_area/scotland

Helpline: 0141 212 8710, Monday to Friday, 9am-6pm

Diabetes Scotland provides a wide range of information on diabetes including leaflets, fact sheets, details of support groups and advice on all aspects of diabetes. The Diabetes UK <u>Learning Zone</u> offers videos, quizzes and interactive tools for managing diabetes day-to-day which are tailored for each individual.

Dietary advice for women with gestational diabetes

#### **JDFR UK**

#### www.jdrf.org.uk

Tel: 01224 248677 (Scotland), 07442 332872 (Central Scotland)

Email: scotland@jdrf.org.uk

JDRF uses research to cure, treat and prevent type 1 diabetes, accelerates access to type 1 diabetes treatment technologies and medicines and supports people living with type 1 diabetes.

Through its international JDRF network, funding of UK researchers, advocacy work with the NHS and the support it provides to people with type 1 diabetes, JDRF helps to prevent, treat and ultimately find cures for type 1 diabetes.

#### National organisations continued

#### **Insulin Dependent Diabetes Trust**

#### www.iddt.org

Tel: 01604 622 837

The Insulin Dependent Diabetes Trust is run by people living with diabetes to raise awareness of important issues for people with diabetes. It provides information in non-medical language.

#### **Insulin Pump Awareness Group**

#### www.ipag.co.uk

The Insulin Pump Awareness Group was formed and run by a group of people who are pump users, likely to use pumps in the future, or parents of children with type 1 diabetes

#### My Diabetes My Way

#### www.mydiabetesmyway.scot.nhs.uk

Gestational diabetes elearning site <a href="https://www.elearning.mydiabetesmyway.scot.nhs.uk/">www.elearning.mydiabetesmyway.scot.nhs.uk/</a> courses/gestational-diabetes-course/

My Diabetes My Way is NHSScotland's interactive diabetes website that helps to support people who have diabetes and their family and friends.

#### Other national organisations

#### **NHS 24**

Tel: 111

#### www.nhs24.scot

NHS 24 is an online and out-of-hours phone service providing the Scottish people with access to health advice and information 24 hours a day, 365 days a year.

#### Other national organisations continued

#### **NHS Inform**

Tel: 0800 224 488

#### www.nhsinform.scot

This is the national health and care information service for Scotland. It gives information and links to resources. It supports people with diabetes and health conditions that can develop during pregnancy.

#### **Breathing Space**

Tel: 0800 83 85 87 (Monday to Thursday, 6pm to 2am, Friday to Monday, 6pm to 6am)

#### www.breathingspace.scot

Breathing Space is a free and confidential phone and webchat service for anyone in Scotland over the age of 16 who may be feeling down or experiencing depression and need someone to talk to.

#### **British Heart Foundation**

Tel: 0300 330 3311

#### www.bhf.org.uk

The British Heart Foundation provides a telephone information service for people looking for information on health issues to do with the heart. Its website also provides a range of information.

#### Chest, Heart and Stroke Scotland (CHSS)

Tel: 0131 225 6963

#### www.chss.org.uk

CHSS aims to improve the quality of life of people affected by chest, heart and stroke illnesses by offering information, advice and support in the community. It produces leaflets on the links between diabetes, heart disease and stroke.

#### Other national organisations continued

#### **Bliss**

#### www.bliss.org.uk

Bliss is the leading charity for babies born premature or sick. It helps ensure that babies receive the best care by supporting families and healthcare professionals, campaigning for change and supporting research.

#### Citizens Advice Scotland

#### www.cas.org.uk

Citizens advice bureaux are local independent charities that provide free, confidential and impartial advice to people who need it.

#### **Driver and Vehicle Licensing Agency (DVLA)**

#### www.gov.uk/diabetes-driving

The DVLA is an executive agency of the UK Government Department for Transport. It is responsible for issuing driving licences and vehicle registration certificates. It also records driver endorsements, disqualifications and medical conditions. People who use insulin for more than 3 months to control their diabetes must inform the DVLA.

#### Maternal Mental Health Alliance

#### www.maternalmentalhealthalliance.org e.org

The Maternal Mental Health Alliance (MMHA) is a network of over 120 organisations that provide care and support for parents and families, including national organisations offering online or telephone support.

#### **PANDAS**

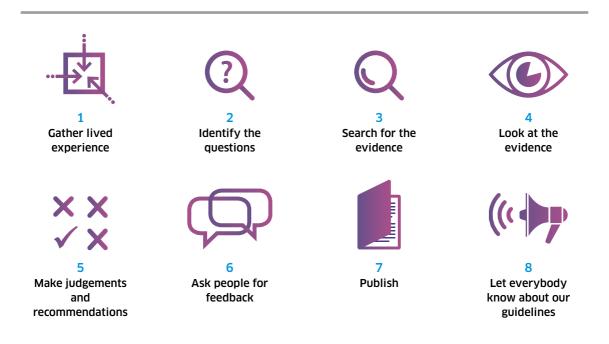
#### www.pandasfoundation.org.uk

Helpline: 0808 1961 776

PANDAS helps to support and advise any parent who has a perinatal mental illness. The website has a directory of local support groups.

# How are SIGN guidelines produced?

Our guidelines are based on the most up-to-date scientific evidence. We read research papers to find evidence for the best way to diagnose, treat and care for patients. If we cannot find this out from the research evidence, we ask healthcare professionals to use their clinical experience and judgment to suggest treatments.



You can read more about us by visiting www.sign.ac.uk or you can phone 0131 623 4720 and ask for a copy of our booklet 'SIGN guidelines: information for patients, carers and the public'.

The Scottish Intercollegiate Guidelines Network (SIGN) writes guidelines which give advice for healthcare professionals, patients and carers about the best treatments that are available. We write these guidelines by working with healthcare professionals, other NHS staff, patients, carers and members of the public.

We are happy to consider requests for other languages or formats. Please phone 0131 623 4720 or email sign@sign.ac.uk

# PAT171 Diabetes in Pregnancy



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