## The easy-to-do audit series An audit of diabetes screening in women previously

## diagnosed with gestational diabetes



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Undertaking simple audits and reflecting and acting on our findings can be a powerful way to change practice and improve the care we deliver. In this new series, Dr Sam Seidu will introduce simple, easy-to-run audits. The first audit is on diabetes screening in women previously diagnosed with gestational diabetes. The PCDS hopes these handson "how to" audit guides will provide the practical guidance and motivation we all need to take action in the limited time available.

estational diabetes is defined as any degree of glucose intolerance that is first detected during pregnancy (Metzger and Coustan, 1998). For all women who have had diabetes during pregnancy, it is estimated that approximately 87.5% have gestational diabetes (NICE, 2015). Shortly after delivery, glucose homoeostasis is restored to non-pregnancy levels, but some women become at risk of developing type 2 diabetes in the future (Kim et al, 2002; Järvelä et al, 2006), with up to 50% developing type 2 diabetes within 5 years of the birth (NICE, 2015). For any population and ethnic group, the risk of gestational diabetes indicates the underlying frequency of type 2 diabetes (Kim et al, 2002; NICE, 2015).

The incidences of gestational diabetes and type 2 diabetes are rising throughout the world, with huge healthcare and economic costs. There is, thus, an urgent need to put in place interventions that may delay or prevent type 2 diabetes developing in this high-risk population of women. For this reason, NICE (2015) advises that women who are diagnosed with gestational

diabetes and whose blood glucose levels return to normal after the birth should be offered a fasting plasma glucose test 6-13 weeks after the birth to exclude diabetes. The guidance, however, recognises that for practical reasons this might take place at the 6-week post-natal check, which is normally conducted by general practitioners in primary care. According to NICE (2015), if the fasting plasma glucose test has not been performed by 13 weeks, it should be offered again. However, if a fasting plasma glucose test is not possible, then an HbA<sub>1c</sub> test should be offered instead. For women who are not found to have diabetes at this stage, it is recommended that they are offered an annual HbA<sub>1c</sub> test.

Kim C, Newton KM, Knopp RH (2002) Gestational diabetes and the incidence of type 2 diabetes. *Diabetes Care* 25: 1862–68

Järvelä IY, Juutinen J, Koskela P et al (2006) Gestational diabetes identifies women at risk for permanent type 1 and type 2 diabetes in fertile age. Predictive role of auto-antibodies. *Diabetes Care* **29**: 607–12

Metzger BE, Coustan DR (1998) Proceedings of the Fourth International Work-shop-Conference on Gestational Diabetes Mellitus. *Diabetes Care* **21**(Suppl 2): B1–B167

NICE (2015) Diabetes in pregnancy: management from preconception to the postnatal period [NG3]. NICE, London

#### Your turn:

The instructions on the next page explain how to complete the audit. You can download the full-size audit form at www.diabetesandprimarycare.co.uk/audits to fill in and retain. The audit should take no more than a few hours to complete.

After you have completed the first data collection, you can send in your top-line aggregated data to **dpc@sbcommunicationsgroup.com**.



## Instructions to complete the audit

#### Download the full-size audit form at www.diabetesandprimarycare.co.uk/audits

#### Audit method

This will be a two-step completed audit to be carried out in primary care centres in the UK. The first retrospective data collection from the past 12 months will be done on a selected day between 1<sup>st</sup> March and 30<sup>th</sup> April. The second data collection will take place 12 months later to allow for appropriate interventions to be put in place at the local or practice level.

#### Criteria

- 1. All patients with a gestational diabetes diagnosis should have a fasting blood glucose test at the 6-week postnatal check, any time between 6 and 13 weeks after birth or have an HbA<sub>tc</sub> test after 13 weeks (NICE, 2015).
- 2. All patients with a gestational diabetes diagnosis should be

### offered $HbA_{1c}$ testing annually if they were found not to have diabetes at the 6-week post-natal check (NICE, 2015).

#### **Standards**

- For criterion 1, a target of 90% is to be considered to allow for non-attendance, relocation of patients and difficult-to-reach patient groups.
- For criterion 2, a target of 80% is to be considered to allow for non-attendance. A lower target at this stage is considered as it is less likely the patients will attend for the screening without the imperative of a baby check.
- **N.B.** Set a reminder on the practice's electronic calendar to repeat the audit as close to the first data collection date 12 months later.

## An audit of diabetes screening in women previously diagnosed with gestational diabetes.



Date of first data collection: \_ \_/\_\_/\_\_ Criteria recap late range [ / All patients with a gestational diabetes diagnosis should have a fasting blood Date of second data collection: / / glucose test at the 6-week post-natal check, any time between 6 and 13 weeks after birth or have an HbA<sub>tc</sub> test after 13 weeks (NICE, 2015). date range [\_\_/\_/\_\_- \_\_/\_\_] 2. All patients with a gestational diabetes diagnosis should be offered HbA<sub>te</sub> testing Useful search terms annually if they were found not to have diabetes at the 6-week post-natal check 6-week baby check; maternal check; gestational diabetes; post-natal check; fasting blood glucose; HbA1c; high risk of diabetes (NICE, 2015). Total number of women Total number of women Number of Number of diagnosed with gestational diagnosed with gestational Criteria women who met women who met Standard Percentage Percentage diabetes in the last 12 months diabetes in the last 12 months the criterion the criterion (first data collection) (second data collection) 23 33% 65 29 45% 90% 70 e.g. 1 90% 2 80% 1. What change(s) will be implemented after the first data collection? 2. What are the conclusions and lessons learned following the second data collection?

3. Are any further steps required for change, such as repeating the audit in 2018?

Preview of the audit form, which is available to download in full-size at www.diabetesandprimarycare.co.uk/audits



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Date of first data collection:	date range [//	Date of second data collection	date range / / / / / / ]

# Useful search terms

6-week baby check; maternal check; gestational diabetes; post-natal check; fasting blood glucose;  $HbA_{hc}$ ; high risk of diabetes.

## Criteria recap

- 1. All patients with a gestational diabetes diagnosis should have a fasting blood glucose test at the 6-week post-natal check, any time between 6 and 13 weeks after birth or have an  $HbA_{1c}$  test after 13 weeks (NICE, 2015).
- All patients with a gestational diabetes diagnosis should be offered HbA<sub>1c</sub> testing annually if they were found not to have diabetes at the 6-week post-natal check (NICE, 2015).

Standard	%05	%06	80%
Percentage	45%		
Number of women who met Percentage Standard the criterion	56		
Total number of women diagnosed with gestational diabetes in the last 12 months (second data collection)	65		
Percentage	33%		
Number of women who met the criterion	23		
Total number of women diagnosed with gestational diabetes in the last 12 months (fürst data collection)	92		
Criteria	e.g. 1	-	2

1. What change(s) will be implemented after the first data collection?

2. What are the conclusions and lessons learned following the second data collection?

3. Are any further steps required for change, such as repeating the audit in 2018?