

Diabetes in pregnancy: management of diabetes and its complications from preconception to the postnatal period

Final review questions and priorities for health economic analysis

Preconception care

1. What is the effectiveness of oral oestrogen-containing contraceptives in women with diabetes compared with women without diabetes?
2. What is the effectiveness of oral progestogen-containing contraceptives in women with diabetes compared with women without diabetes?
3. What is the target value for haemoglobin A_{1c} (HbA_{1c}) in women with type 1 or type 2 diabetes who are planning pregnancy?
4. What are the target ranges for blood glucose in women with type 1 or type 2 diabetes who are planning pregnancy?
5. What is the effectiveness of blood ketone monitoring compared with urine ketone monitoring for women with type 1 or type 2 diabetes who are planning pregnancy?

Gestational diabetes

6. What is the effectiveness of the following procedures in detecting glucose intolerance in the first trimester diagnosed using a 75g OGTT:
 - risk factor based screening
 - urine test for glycosuria
 - random blood glucose test
 - 50 g oral glucose challenge test
 - fasting blood glucose test
 - HbA_{1c} test? [*Priority for health economic analysis; a combined analysis for questions 6, 7, 8 and 9 may be undertaken*]
7. What is the effectiveness of the following procedures in detecting glucose intolerance in the second trimester diagnosed using a 75g OGTT:
 - risk factor based screening

- urine test for glycosuria
 - random blood glucose test
 - 50 g oral glucose challenge test
 - fasting blood glucose test
 - HbA_{1c} test? *[Priority for health economic analysis; a combined analysis for questions 6, 7, 8 and 9 may be undertaken]*
8. Which criteria should be used to diagnose gestational diabetes using the 75 g oral glucose tolerance test (OGTT):
- World Health Organization (WHO) or
 - International Association of Diabetes and Pregnancy Study Groups (IADPSG)? *[Priority for health economic analysis; a combined analysis for questions 6, 7, 8 and 9 may be undertaken]*
9. What is the effectiveness of the following interventions (alone or in combination) in women with gestational diabetes:
- non-pharmacological interventions (diet and/or exercise)
 - pharmacological interventions (metformin, glibenclamide and insulin)? *[Priority for health economic analysis; a combined analysis for questions 6, 7, 8 and 9 may be undertaken]*

Antenatal care

10. What is the effectiveness of HbA_{1c} monitoring in predicting adverse outcomes in women with type 1, type 2 or gestational diabetes during pregnancy?
11. What is the effectiveness of blood glucose monitoring in predicting adverse outcomes in women with type 1, type 2 or gestational diabetes during pregnancy?
12. What is the target value for HbA_{1c} in women with type 1, type 2 or gestational diabetes during pregnancy?
13. What are the target ranges for blood glucose in women with type 1, type 2 or gestational diabetes during pregnancy?

14. What is the effectiveness of blood ketone monitoring compared with urine ketone monitoring for women with type 1, type 2 or gestational diabetes during pregnancy?
15. What is the effectiveness of continuous glucose monitoring in pregnant women with diabetes compared with intermittent capillary blood glucose monitoring?
[Priority for health economic analysis]
16. What is the effectiveness of specialist teams for pregnant women with diabetes?
[Priority for health economic analysis]

Intrapartum care

17. What is the gestational age-specific risk of intrauterine death in pregnancies with type 1, type 2 or gestational diabetes, and the optimal timing of birth? *[Priority for health economic analysis]*

Postnatal care

18. What is the effectiveness of the following tests in detecting glucose intolerance after pregnancy in women who have had gestational diabetes (but are not hyperglycaemic before they are transferred to community care):
 - fasting plasma glucose test
 - HbA_{1c} test
 - 75 g OGTT? *[Priority for health economic analysis; a combined analysis for questions 18 and 19 may be undertaken]*
19. What is the optimal timing of postnatal testing in detecting glucose intolerance after pregnancy in women who have had gestational diabetes (but are not hyperglycaemic before they are transferred to community care)? *[Priority for health economic analysis; a combined analysis for questions 18 and 19 may be undertaken]*