Screening, Diagnosis and Management of Gestational Diabetes in New Zealand: A Clinical Practice Guideline

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Today

- Process to develop the guideline
- What the guideline recommends
- Implementation of the recommendations
- Questions/discussion

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Why?

- Currently no national guidance - practice varies around NZ and internationally
- Pre-diabetes and gestational diabetes mellitus (GDM) are increasing
- 50 percent of those diagnosed with GDM will go on to develop type 2 diabetes within 5-10 years of the initial diagnosis
- Early identification and good management will help address this
- PMs Science Advisor Professor Gluckman identified screening for GDM as one of six areas for the Ministry to focus on in his 2012 report
- One of 4 recommended guidelines to be developed as part of the national Maternity Quality and Safety Programme

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Quite a long and involved process has been required to develop the guideline.

How it was developed

- Auckland Uniservices contracted in late 2012 to develop the Guideline
- A Guideline Development Team (GDT) was assembled to support the work

GDT Membership

- Diabetes New Zealand
- National Diabetes Service Improvement Group
- National Screening Advisory Committee
- New Zealand College of Midwives
- New Zealand Society for the Study of Diabetes
- Paediatric Society
- Pharmaceutical Society of New Zealand
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists
- Royal New Zealand College of General Practitioners
- Australasian Diabetes in Pregnancy Society
- Clinical Nurse Specialists in diabetes
- Dieticians
- Consumers
- Ministry of Health (ex-officio)

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How [continued]

- Extensive literature search, reviewed by the GDT
- Consultation in maternity and diabetes sectors and DHBs in June 2013 – feedback generally positive and supportive of the recommendations
- Endorsed by professional colleges mid 2014 – final editing and formatting just finished

What does the Guideline recommend?

- 37 recommendations - many already current practice in most or some areas
  - offering universal screening for GDM at 24-28 weeks using a 50g oral Glucose Challenge Test (GCT)
  - offering dietary and lifestyle advice
  - monitoring the mother's and baby's blood sugar levels after the birth
  - measuring & recording maternal weight at routine antenatal visits
  - Considering use of metformin for pre-diabetic women who are not get good control through lifestyle changes

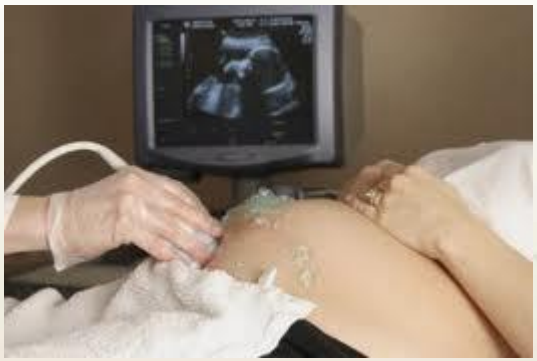
Screening during pregnancy

- Every pregnant woman should be offered HbA1c as a routine part of booking antenatal blood tests (before 20 weeks)
- Referral or further testing if the HbA1c result is 41 mmol/mol or over:
  - **41-49:** offer dietetic advice and a 2 hour, 75g oral glucose tolerance test (OGTT) at 24 to 28 weeks (increased risk of gestational diabetes)
  - **50 or higher**: refer directly to a specialised diabetes in pregnancy service (probable undiagnosed diabetes)
- LMC should arrange a 1 hour, 50g oral glucose challenge test (polycose) at 24 to 28 weeks for all women whose HbA1c was 40 mmol/mol or less at booking; or who have not had an HbA1c at booking

Fewer ultrasounds for women diagnosed with GDM

- Ultrasound assessment of the foetus for women with GDM should be offered at the time of diagnosis and at 36-37 weeks

- Further scans only if clinically indicated



Type and timing of birth

- Women with diabetes who have a normally grown fetus and good blood glucose control should not be offered early elective birth (eg: at 38 weeks)
- Early delivery not recommended (eg: not before 38 weeks)
- Vaginal birth is the preferred mode of birth
- Women whose diabetes is poorly controlled should be assessed for timing of birth by an obstetrician

Follow-up of women with gestational diabetes

- HbA1c measurement should be offered at 3 months postpartum
- The OGTT at 6 weeks postpartum is no longer routinely recommended
- If the HbA1c result is not normal, either refer to medical specialist or provide advice on diet and lifestyle modification
- Women with a normal HbA1c result should still be offered yearly HbA1c checks

Implementation

DHBs are expected to start implementation in 2014/15

- Start aligning practice with recommendations that are easier to implement
- Planning for implementation of guidelines that are more involved

What is being done to assist the sector to implement the Guideline?

- Consumer document and health professional resource have been produced
- Workshop for clinicians planned for later this financial year
- Case studies on the resource implications of full implementation in two DHB regions have been undertaken

Case studies – what they found that's relevant for you

DHB Managers

- Numbers of women diagnosed with GDM will rise
- Costs are likely to rise more for those who currently only do oral glucose testing (ie: are not currently HbA1c testing) but some cost savings from fewer ultrasounds
- Main resourcing issue will be additional staffing for GDM specialist services
- DHBs need to decide how best to deliver 'dietetic advice' to women diagnosed with pre-diabetes
- For DHBs with a lower threshold for specialist services than that recommended in the guideline, costs will be significantly more than those calculated in the case studies

Case studies – what they found that's relevant for you

Primary Care Managers (includes midwifery)

- Main challenge is the introduction of universal offer of an HbA1c test at first booking blood tests and 12 week postpartum HbA1c test for those with GDM
- For midwife LMCs, conveying information about the HbA1c testing at booking will be an additional task, but most women will be in the non-diabetic group so time commitment should not be onerous
- Supporting consistent 'transfer of care' systems between tertiary/secondary and primary care to ensure postpartum tests and quality follow up care is required

Case studies – what they found that's relevant for you

DHB Clinicians

- Consistent implementation of the recommendations across all services is critical to reduce the variable care women currently receive
- Identifying a champion for the recommendations within services will assist in consistent implementation, and reduce confusion within services

Primary Care Clinicians (includes midwifery)

- Individual clinicians will face some challenges managing the information requirements of the HbA1C test offer at booking
- Primary care follow-up for women with GDM involves comprehensive care, including pre-conception planning and ongoing testing for diabetes
- Support for the widespread implementation and use of accurate information about testing and treatment pathways for women will be critical

Questions/Discussion

- What are the main barriers you see to implementation?
- What can the Ministry do to help?