

Recommendations for the diagnosis of Gestational Diabetes Mellitus (GDM)

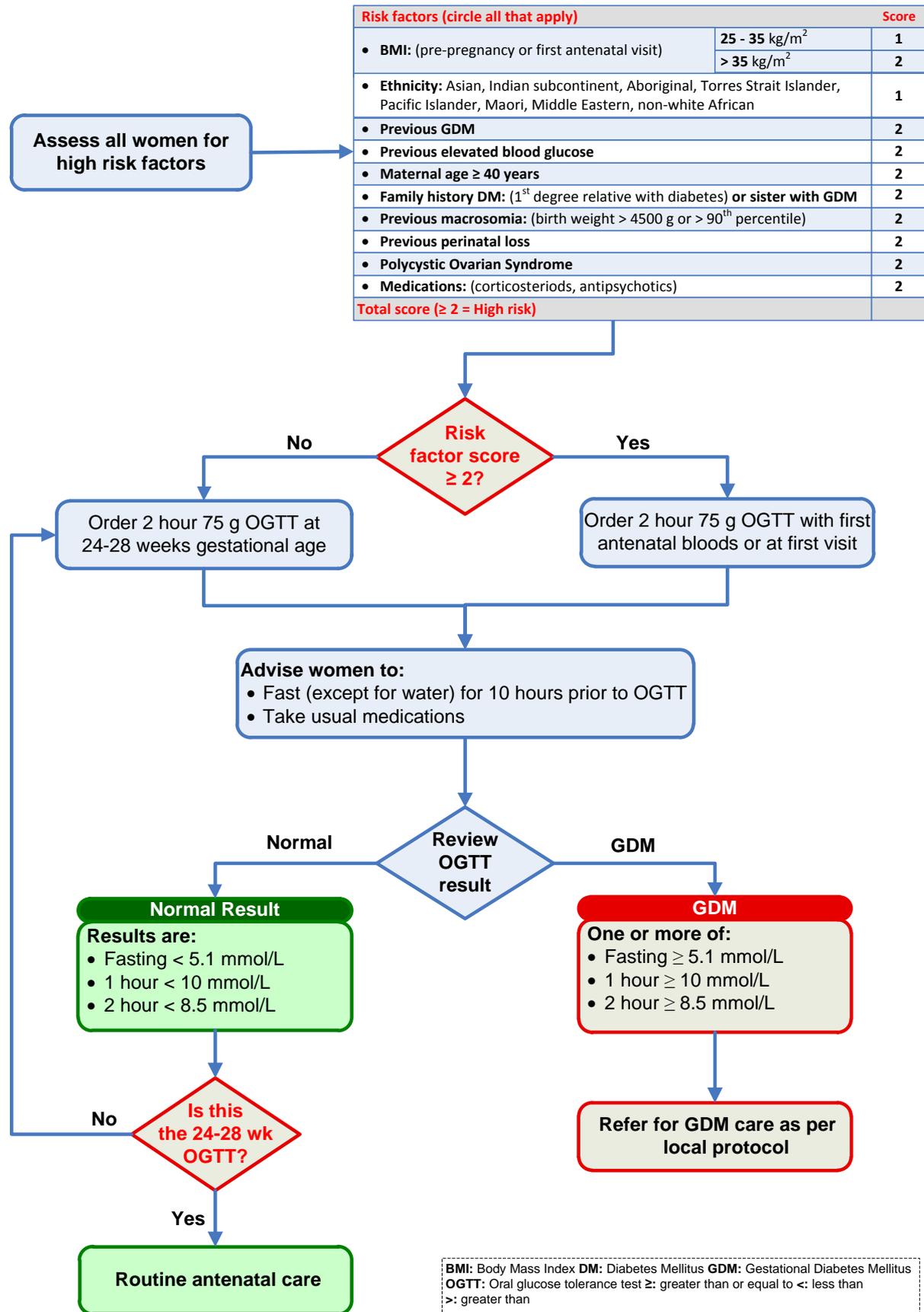
Effective Date	By 1 January 2015
Audience	Private and public clinicians caring for maternity patients in Queensland
Endorsement	Recommendations endorsed in October 2014 by: <ul style="list-style-type: none"> • Statewide Maternity and Neonatal Clinical Network • Statewide Diabetes Clinical Network • Queensland Clinical Guidelines
Prepared by	Statewide Diabetes Clinical Network – GDM reference group Queensland Clinical Guidelines

Key recommendations

As of 1 January 2015 the diagnosis of GDM is to be based only on an oral glucose tolerance test (75g carbohydrate load). There has also been a change to the threshold for diagnosis of GDM. This is in line with recommendations from the International Association of Diabetes in Pregnancy Study Groups (IADPSG) and the World Health Organisation (WHO) and is endorsed by the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG).

Aspect	Recommendation
Diagnostic testing	<ul style="list-style-type: none"> • Diagnosis of GDM is based solely upon an oral glucose tolerance test (75 g carbohydrate load) • The two step Glucose Challenge Test (GCT) followed by an Oral Glucose Tolerance Test (OGTT) will no longer be performed • The GCT will not be available for GDM diagnosis (do not order this test)
All women	<ul style="list-style-type: none"> • Require a two hour OGTT (after overnight fasting) • Should maintain a normal diet until 10 hours before the OGTT and then fast • During fasting, advise the woman to drink water to prevent dehydration and to continue any usual medications • The three day high carbohydrate diet is no longer required
High risk women	<ul style="list-style-type: none"> • Perform an additional early OGTT with first antenatal bloods or at the first antenatal visit (as early as possible) • If normal, repeat at 24-28 weeks
Women having maternal steroids	<ul style="list-style-type: none"> • Do not perform an OGTT within one week of maternal steroids (betamethasone/dexamethasone) administration • Monitor blood glucose levels if the woman is receiving steroids
Diagnostic threshold for GDM	<ul style="list-style-type: none"> • Diagnosis of GDM is based on: <ul style="list-style-type: none"> ○ Fasting glucose greater than or equal to 5.1 mmol/L and/or ○ 1-hour glucose greater than or equal to 10.0 mmol/L and/or ○ 2-hour glucose greater than or equal to 8.5 mmol/L • If a fasting glucose test has been performed for other reasons and shows an elevated value, this may be accepted as diagnostic of GDM
Diabetes in pregnancy	<ul style="list-style-type: none"> • Women with markedly elevated values may be classified as having Diabetes in Pregnancy <ul style="list-style-type: none"> ○ Fasting glucose greater than or equal to 7.0 mmol/L (OGTT or fasting plasma glucose) and/or ○ 2-hour glucose greater than or equal to 11.1 mmol/L (OGTT) • Women with diabetes in pregnancy: <ul style="list-style-type: none"> ○ Require urgent care ○ May have undiagnosed “overt” diabetes and associated complications such as retinopathy and nephropathy ○ Are at higher risk of pregnancy complications ○ Manage in a centre/clinic with experience in the management of pre-existing diabetes in pregnancy ○ May require confirmation of diagnosis in the postpartum period

Flow chart for Gestational Diabetes Mellitus



Supporting information

Aspect		
Rationale	<ul style="list-style-type: none"> • The OGTT has been recommended instead of the GCT because: <ul style="list-style-type: none"> ○ Up to 25% of GDM is missed by the two-step process ○ Diagnosis and therapy of GDM is delayed by the two-step process, sometimes beyond 30 weeks' due to delays in arranging and performing the second test ○ Some women do not ever get to do the second test when indicated ○ Health services will be able to accurately determine the incidence of GDM 	
Further information	<ul style="list-style-type: none"> • Report of a World Health Organization Consultation. Diagnostic criteria and classification of hyperglycaemia first detected in pregnancy: a World Health Organization Guideline. <i>Diabetes Research and Clinical Practice</i> 2014; 103 (3): 341-63 • IADPSG Consensus Panel International association of diabetes and pregnancy study groups recommendations on the diagnosis and classification of hyperglycemia in pregnancy. <i>Diabetes Care</i> 2010; 33:676-682 • RANZCOG recommendations for GDM diagnosis • Australasian Diabetes in Pregnancy Society (ADIPS) • Queensland Clinical Guidelines 	
Acknowledgements	<ul style="list-style-type: none"> • Professor Chis Nolan and Australian Capital Territory Diabetes in Pregnancy Service • Statewide Maternity and Neonatal Clinical Network (QLD) • Statewide Diabetes Clinical Network • Queensland Clinical Guidelines • Statewide Rural and Remote Clinical Network • Gestational Diabetes reference group – Statewide Diabetes Clinical Network 	
Acronyms	GDM:	Gestational Diabetes Mellitus
	OGTT	Oral glucose tolerance test
	GCT	Glucose challenge test
	RANZCOG	Royal Australian and New Zealand College of Obstetricians and Gynaecologists
	WHO	World Health Organisation
	IADPSG	International Association of Diabetes in Pregnancy Study Groups