

# SESLHD GUIDELINE COVER SHEET

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<b>SUMMARY</b>	A document to guide the screening, management, and follow-up of a woman with Gestational Diabetes Mellitus (GDM).

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## Section 1 – Background

This guideline provides information on a SESLHD approach to managing **Gestational Diabetes Mellitus (GDM)**. It contains principles that are recommended for all relevant SESLHD employees.

For management of a woman with pre-existing/pre-gestational diabetes mellitus refer to: [SESLHDGL/116 - Management of Pre-Existing Diabetes in Pregnancy](#)

The document provides guidance for:

- Pregnant woman with known pre-existing Impaired Glucose Tolerance (IGT)
- Pregnant woman with GDM diagnosed in pregnancy

## Section 2 – Principles

- To provide consistent appropriate services to a woman and her neonate(s) at risk of maternal and fetal/neonatal complications of GDM in pregnancy<sup>1,2,3,4</sup>
- To provide a structured pathway for education which includes diet, exercise, medication, self-care, and blood glucose level (BGL) monitoring to a woman with GDM in pregnancy
- To optimise glycaemic control for a woman with GDM in pregnancy
- To detect and manage appropriately any maternal or fetal complication of GDM manifesting during pregnancy
- To prevent or shorten hospitalisation for a woman and her neonate(s) by providing stabilisation through appropriate services
- To liaise with Obstetric Medical officers, Endocrinology team/Obstetric Medicine team, Midwives, Diabetes Educators, Dietitians, Lactation Consultants, Neonatologists, Allied Health, and General Practitioners to help them provide an appropriate level of care to a woman with GDM in pregnancy
- To identify a woman with persistent diabetes or carbohydrate intolerance following pregnancy and to ensure appropriate follow up
- To ensure equal and appropriate access to all women within SESLHD.

### **EXCLUSIONS**

**Women with pre-existing/pre-gestational diabetes**

## Section 3 – Definitions/Abbreviations

ADIPS	Australasian Diabetes in Pregnancy Society
ANC	Antenatal Clinic
APT	Advanced Physician Trainee
BGL	Blood Glucose Level
BPT	Basic Physician Trainee
BMI	Body Mass Index
BS	Birthing Service
CBR	Clinical Business Rule
cEFM	Continuous Electronic Fetal Monitoring
CS	Caesarean Section
DE	Diabetes Educator
DM	Diabetes Mellitus
ECS	Elective Caesarean Section
GDM	Gestational Diabetes Mellitus
GP	General Practitioner
GPSCP	General Practitioners Shared Care Program
IGT	Impaired Glucose Tolerance
LARC	Long-Acting Reversible Contraceptive
LSCS	Lower Segment Caesarean Section
MDT	Multidisciplinary team
MGP	Midwifery Group Practice
NDSS	National Diabetes Services Scheme
OGTT	75g 2-hour Oral Glucose Tolerance Test
PCOS	Polycystic Ovarian Syndrome
QID	<i>Quater-In-Die</i> (four times per day)
RMO	Resident Medical Officer

## Section 4 – Responsibilities

The multidisciplinary team (MDT) of healthcare providers involved in managing a woman with GDM within SESLHD adhere/refer to this guideline to guide in periconceptual, antenatal, intrapartum, and postpartum management.

### Medical staff

#### **Endocrinologists/Obstetric Physicians and APTs/BPTs are responsible for:**

- Ensuring initial consultation with woman with GDM within 1-2 weeks of seeing the DE and Dietitian
- Explaining results of diabetes testing and plan target BGL
- Explaining potential maternal and fetal/neonatal complications of GDM
- Advising about the potential short and long-term implications of GDM
- Describing management regimen during pregnancy and birth
- Educating woman on the importance of exercise to assist with the management of her diabetes. This will require regular review, guidance, and individual planning to meet the woman's needs
- Taking an appropriate history and performing an examination
- Identify and manage any maternal complications (e.g. hypertension, renal impairment, eye disease)
- Ensuring there is a review at least every 4 weeks. These reviews can be done by DE or GPs in diet controlled or low risk women
- Ensuring liaison with obstetrician/midwife/GP performing antenatal care
- Referring woman to obstetric ANC if insulin or oral hypoglycaemic medication are commenced or diabetic control is considered sub-optimal.

#### **Obstetric Consultants/Registrars/RMO's are responsible for:**

- Ensuring initial consultation with woman with GDM who requires insulin/oral hypoglycaemic pharmacotherapy, is non-compliant or who does not have good diet control
- Ensuring accurate dating of pregnancy
- Following up consultations regularly as per antenatal care schedule, involving midwifery consultations on a case-by-case basis
- Explaining the potential maternal and fetal/neonatal complications of GDM requiring pharmacotherapy or poorly controlled GDM
- Organising routine and any additional obstetric investigations as needed
- Assessing mode and timing of delivery for woman on insulin/oral hypoglycaemic pharmacotherapy, or suboptimal control evidenced by BGL control, fetal complications, or other obstetric indications
- Ensure woman is aware her neonate will need BGL monitoring in the first 24 hours postpartum.

### Midwifery/nursing staff

#### **Diabetes Educators are responsible for:**

- Providing general education about the nature of GDM
- Enrolling woman with NDSS if not already registered

- Instructing woman in the techniques of BGL monitoring four times a day (QID) i.e. fasting and 1 or 2 hours postprandial and explain BGL target range
- Educating woman on the importance of exercise to assist with the management of her diabetes. This will require regular review, guidance, and individual planning to meet the woman's needs
- Conducting regular review of woman's BGLs in person, by telephone, or electronically
- Educating woman who has been prescribed insulin by the endocrinology/obstetric medicine team on self-administration
- Educating woman treated with insulin about hypoglycaemia
- Providing antenatal education resources to woman about the benefits of breastfeeding with diabetes

**Midwives are responsible for:**

- Providing access to antenatal education and support through the appropriate model of care
- Reviewing BGLs and engagement in diabetes management for the woman who has GDM. If she has good control with diet and exercise and no other obstetric risk factors, she is at no greater risk obstetrically, therefore, this woman does not need to be managed in an obstetric medical model of care and can remain in midwifery/GP model for antenatal visits
- Ensuring woman is referred to endocrinology/obstetric medicine team **and** Obstetric ANC:
  - when commences pharmacotherapy i.e. insulin or metformin
  - is not adhering to management recommendations
  - does not have good glycaemic control
  - has additional obstetric risk factors
- Educating woman about the benefits of breastfeeding with diabetes and encourage antenatal breast stimulation/expressing from 36/40 weeks gestation provided there are no obstetric contraindications
- Encourage frequent breastfeeding postpartum, to prevent hypoglycaemia in the neonate
- Ensure woman is aware her neonate will need BGL monitoring in the first 24 hours postpartum
- Providing antenatal education to woman about the benefits of breastfeeding with diabetes, including the importance of exclusive breastfeeding for at least six months postpartum and to continue to breastfeed while solid foods are introduced

**Allied Health**

**Dietitians are responsible for:**

- Educating woman about the appropriate diet for managing her diabetes
- Providing information on appropriate weight gain during pregnancy
- Ensuring adequate and balanced diet during pregnancy
- Outlining basis of long-term healthy eating for reducing risk of diabetes in the future

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## TARGET AUDIENCE

All healthcare providers involved in the treatment and management of GDM during pregnancy, postpartum and neonatal period including, but not limited to:

- Obstetricians/obstetric registrars/obstetric RMOs
- Endocrinologists/Obstetric physicians/Physicians with an interest in diabetes/APTs/BPTs
- Neonatologists
- General Practitioners
- Midwives and Nurses
- Diabetes Educators
- Dietitians
- Lactation Consultants
- Pharmacists



## Section 5 – Management

### 5.1 Preconception

It is recommended that a woman deemed at high risk for GDM seek preconception advice from a health professional to cover:

- Testing prior to pregnancy to diagnose any pre-gestational diabetes or IGT
- Modification of any lifestyle factors, such as obesity, to reduce risk of GDM once pregnant
- Advice regarding preconception supplements, including folate and iodine.

### 5.2 Screening

#### Pre-gestational Diabetes

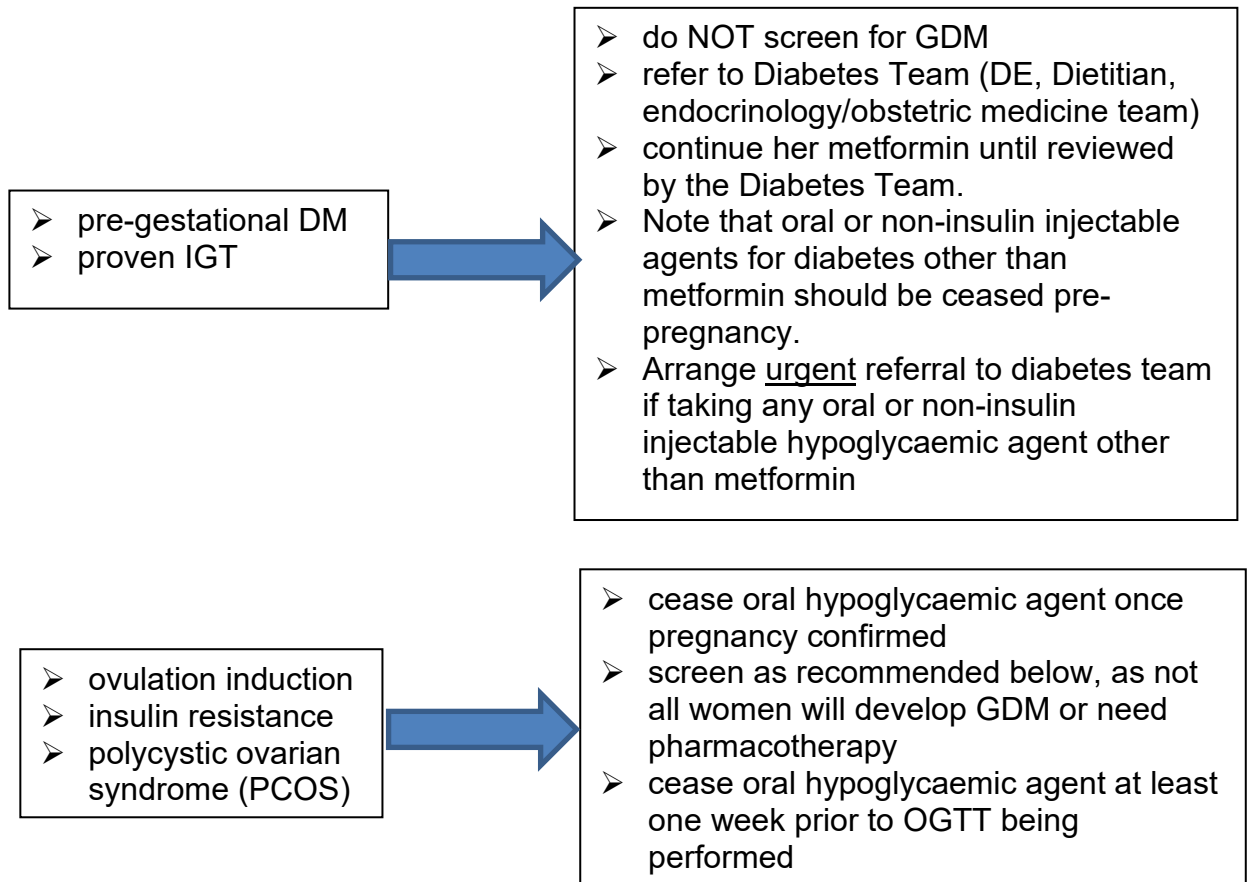
A woman with pre-gestational diabetes (Type 1, Type 2, or other) does NOT need screening as she is managed as having Diabetes in Pregnancy (refer to [SESLHDGL/116 - Management of Pre-Existing Diabetes in Pregnancy](#))

#### Impaired Glucose Tolerance (IGT)

- IGT is diagnosed when an OGTT prior to pregnancy has a 2-hour result 7.8-11.0 mmol/L
- A woman with a current diagnosis of IGT i.e. a recent OGTT, does NOT need further screening and should be treated as GDM and referred to DE/Diabetes Team
- A woman with suspected but unproven IGT who has NOT had an OGTT PRIOR to pregnancy, requires an early OGTT once pregnancy is confirmed

### Oral Hypoglycaemic (e.g. metformin) Use

- If a woman is taking an oral hypoglycaemic agent (e.g. metformin) prior to pregnancy for:



- Metformin use for first trimester miscarriage prevention is still not conclusive and should not be routinely continued on these grounds. However, metformin may be considered in some circumstances (e.g. to reduce preterm delivery for woman with increased risk for preterm birth, and limit excess gestational weight gain in women with PCOS). Women should be counselled that the consequences of metformin exposure on long-term offspring health remain unclear and there is a suggestion of increased childhood weight, although causality is not certain <sup>5</sup>

### Woman who has undergone BARIATRIC surgery<sup>6</sup>

- Refer to dietitian for individualised dietary advice and Obstetric Medicine/Endocrinology clinic
- OGTT should be avoided
- Screen as either 'High Risk Factors' or 'Routine' criteria below, but instead of OGTT, refer to DE to monitor capillary BGL for one week with glucometer
  - HbA1c and fasting glucose may be performed to test for overt diabetes early in pregnancy, but is NOT recommended as a screen for GDM<sup>7,8</sup>
  - For GDM screening, one week of capillary BGL monitoring with glucometer should be performed after 13 weeks gestation, and repeated at 24-28 weeks if the initial screening was normal

- If the woman is not able to undertake a week of monitoring, then discuss an individual plan with the DE and medical team

### **High Risk Factors for GDM**

An OGTT should be performed in early pregnancy (ideally  $\geq 13$  weeks gestation) in a woman with any of the following risk factors:

- Ethnicity: Aboriginal/Torres Strait Islander, Asian, South Asian, Pacific Islander, Māori, Middle Eastern, non-white African
- Insulin resistance (e.g. associated with PCOS)
- Maternal age  $\geq 40$  years
- Medications e.g. corticosteroids, antipsychotics
- Periconceptual or initial booking BMI  $\geq 30$
- Previous adverse pregnancy outcome suggestive of undiagnosed GDM e.g. shoulder dystocia, unexplained stillbirth
- Previous baby with birth weight  $> 4.5\text{kg}$
- Previous GDM
- Strong Family History Diabetes (e.g. first degree relative with diabetes; or sister with GDM)

If the test is negative, a 75g 2-hour OGTT should be repeated at 24-28 weeks gestation.

### **Routine GDM Screening**

ALL other women should have 75g 2-hour OGTT at 24-28 weeks gestation.

### **Oral glucose tolerance test (OGTT)**

- There is no need for a 3-day high carbohydrate diet before the OGTT
- Advise the woman that:
  - The 75g OGTT will take over 2 hours and that she must stay at the laboratory during that time
  - The OGTT is performed in the morning and requires blood to be drawn three times. A fasting BGL is performed and then an oral glucose load of 75g is given in the form of a drink. A further BGL is performed at both 1 hour and 2 hours post glucose load.
- Vomiting at time of OGTT :
  - If a woman vomits at time of 75g OGTT, consider the fasting glucose level and other risk factors
  - If fasting glucose  $< 4.7\text{mmol/L}$  the woman is unlikely to have GDM and decision making regarding management should assess risk factors<sup>9</sup>
  - If in 'high risk' category, refer woman to DE to monitor capillary BGL for one week
  - If low risk – give woman option of repeat OGTT or refer to DE to monitor capillary BGL for one week
- False Negatives:
  - If clinical features are suspicious of GDM despite negative screening test, refer to DE for capillary BGL monitoring

### 5.3 Diagnostic Criteria for GDM

GDM is diagnosed if the following criteria are met:

- OGTT results:
  - Fasting BGL  $\geq 5.1$  mmol/L \*
  - 1-hour BGL  $\geq 10.0$  mmol/L
  - 2-hour BGL  $\geq 8.5$  mmol/L

If the following tests are incidentally performed at any stage in pregnancy PRIOR to OGTT and show the following results, do NOT perform OGTT, but refer as diagnostic of GDM or possible pre-existing DM.

- Fasting BGL: (< 13 weeks gestation)  $\geq 6.1$  mmol/L \*  
( $\geq 13$  weeks gestation)  $\geq 5.1$  mmol/L
- Random BGL (glucometer or formal BGL)  $\geq 11.1$  mmol/L (i.e. beyond 2 hours postprandial)

*\* if OGTT or fasting BGL is performed < 13 weeks gestation and fasting BGL 5.1- 6.0 mmol/L, this may be physiological and may require further evaluation. Discuss with, or refer to, DE/Diabetes Team for further advice.<sup>10</sup>*

### 5.3 Antenatal Management

#### a) Referral

A woman with a positive result must be referred promptly (preferably within a week) to the Diabetes Educator (DE) and Dietitian. Once GDM is diagnosed the woman requires review as indicated in Table 1.

It is recommended that diabetes and antenatal care are delivered through multidisciplinary clinics where possible to minimise the number of separate appointments that the woman must attend, hereby improving patient attendance and compliance and improving coordination of care and management.

Individualised clinic appointments may be necessary due to language or other needs. A woman newly diagnosed with GDM should have access to resources for patient information in a format that is culturally and health literacy level appropriate.

**Table 1: Antenatal Management of a Woman with GDM**

Guideline only. All other obstetric and medical risk factors must be considered for each woman.

Activity	Oral hypoglycaemic medication or insulin	Diet If glucose levels above target or suboptimal engagement	Diet If glucose levels at target and optimal engagement
1. Review by DE	At diagnosis, then recommend 1-4 weekly or as instructed by diabetes team		
2. Review Dietitian	At diagnosis, then as required		
3. Review by Endocrinology/Obstetric Medicine team	<ul style="list-style-type: none"> <li>1-2 weeks post DE/Dietitian initial consultation</li> <li>Commencement of pharmacotherapy and then 1-4 weekly</li> </ul>	<ul style="list-style-type: none"> <li>1-2 weeks post DE/Dietitian initial consultation</li> <li>At recognition of poor control and then 1-4 weekly</li> </ul>	1-2 weeks post DE/Dietitian initial consultation
4. Review by Obstetric ANC	When commences pharmacotherapy	At recognition of poor control	Nil
5. Obstetric Model of Care	Obstetric ANC (with midwifery input at the discretion of obstetric ANC)	Obstetric ANC (with midwifery input at the discretion of obstetric ANC)	Remain with usual low risk model of care (e.g. MGP, GPSC, other)
6. Morphology Ultrasound	Usual care		
7. Fetal Echocardiogram	Not required		
8. Ultrasound Surveillance	Once on pharmacotherapy, every 4-6 weeks in 3 <sup>rd</sup> trimester	Consider 4-6 weekly in 3 <sup>rd</sup> trimester, with advice from ANC/Diabetes team	Not required
9. HbA1c/ Fructosamine	Consider in 3 <sup>rd</sup> trimester with advice from ANC/Diabetes Team		Not required
10. Administration of Corticosteroids	<p><u>On Insulin:</u></p> <ul style="list-style-type: none"> <li>Consult endocrinology/obstetric medicine team for plan</li> <li>Continue QID BGL</li> <li>Increase insulin dose at time of first dose of corticosteroids if required and review dose after 24h hours</li> <li>Continue for 48 hours after first dose of corticosteroids and then return to usual insulin dose</li> </ul> <p><u>On Oral Hypoglycaemic Medication:</u></p> <ul style="list-style-type: none"> <li>Consult endocrinology/obstetric medicine team for plan</li> <li>Continue QID BGL</li> <li>Consider temporary treatment with insulin for 48 hours, especially if woman demonstrates hyperglycaemia after dose of corticosteroids</li> <li>hyperglycaemia after dose of corticosteroids</li> </ul>	<ul style="list-style-type: none"> <li>Consult endocrinology/obstetric medicine team for plan</li> <li>Continue QID BGL</li> <li>Consider temporary treatment with insulin for 48 hours, especially if woman demonstrates hyperglycaemia after the first dose of corticosteroids</li> </ul>	

**Table 1: Antenatal Management of a Woman with GDM (continued)**

*This is a guideline only and all other obstetric and medical risk factors must be considered for each woman*

Activity	Oral hypoglycaemic medication or insulin	Diet <u>If glucose levels above target or suboptimal engagement</u>	Diet <u>If glucose levels are at target and optimal engagement</u>
11. Timing of delivery	<p>This will require an individualised plan for each woman regarding gestation and mode of delivery, in discussion with the obstetric ANC consultant involved with MDT</p> <p><u>40-41 weeks:</u> Well controlled with <u>no other</u> obstetric risk factors on:</p> <ul style="list-style-type: none"> <li>low dose insulin (&lt;0.5 Units/kg current weight)</li> <li>oral hypoglycaemic medication</li> </ul> <p><u>By 40 weeks:</u> High dose insulin (≥0.5 Units/kg current weight) Suboptimal control e.g.</p> <ul style="list-style-type: none"> <li>variable BGL</li> <li>macrosomia/polyhydramnios</li> </ul> <p>Any other obstetric/medical risk factors e.g. AMA, raised BMI, south Asian ethnicity</p>	By 40 weeks	<ul style="list-style-type: none"> <li>Consult with low risk model of care obstetric ANC at 40 weeks e.g. MGP, GPSC, other</li> <li>Usual postdates if no other obstetric risk factors</li> </ul>
12. Antenatal Breastfeeding Support	<p>Educate antenatal women on benefits of breastfeeding using the resources outlined in Section 7. Ensure women have access to ongoing breastfeeding information and support. Refer to Lactation Consultant, or midwife by 30 weeks gestation to ensure antenatal stimulation and expression of colostrum is commenced from 36 weeks gestation<sup>11,12,13,14</sup></p>		
13. Follow up Baby	<p>Provide additional breastfeeding support to enable exclusive breastfeeding. Ensure any expressed colostrum accompanies the woman and is readily available for use if required. Encourage rooming-in on postnatal ward to limit separation of woman and neonate, unless medically indicated in <a href="#">SESLHDPD/158 - Rooming in for Healthy Babies</a><sup>15</sup> Arrange monitoring and management for neonatal hypoglycaemia as outlined in local CBR:</p> <ul style="list-style-type: none"> <li>RHW CBR: <a href="#">Hypoglycaemia in a Neonate-Monitoring &amp; Management of at Risk Neonates</a><sup>16</sup></li> <li>SGH WCH BR <a href="#">097 Hypoglycaemia - Neonatal Management – SGH</a><sup>17</sup></li> <li>TSH WCH BR <a href="#">005 Hypoglycaemia - Neonatal Management - TSH</a><sup>18</sup></li> </ul>		

### **b) Treatment Targets**

A woman's range of acceptable BGL may vary according to other risk factors. The individualised targets for each woman should be communicated to the woman and the rest of the MDT via the woman's BGL diary or recording sheet as per the local clinical procedure. Depending on clinical situation the targets may change as the pregnancy progresses.

The following self-monitoring treatment targets are suggested, with the lower target taken from the ADIPS national guideline<sup>1</sup>, although clinical factors may influence glucose targets and advice should be sought from the Endocrinologist/Obstetric Physician/Diabetes Educator:

- Fasting BGL:  $\leq 5.0$  (or target up to 5.5 mmol/L)
- 1-hour BGL after commencing meal:  $\leq 7.4$  (or target up to 8.0 mmol/L)
- 2-hour BGL after commencing meal:  $\leq 6.7$  (or target up to 7.0 mmol/L)

### **c) Administration of corticosteroids to woman with diabetes**

- Administration of corticosteroids for fetal lung maturation to woman with diabetes is associated with an increase in BGLs
- For management details see **Table 1; Section 10: Administration of Corticosteroids**

### 5.5 Intrapartum Management or Pre-Caesarean Regimen for Woman with GDM

- If planned (elective) CS, ideally book on a morning operating list.
- Irrespective if operating list is morning or afternoon, there is no need to admit the night before.
- A woman with diabetes in pregnancy requires a detailed diabetes care plan for the time of delivery, considering the mode and timing of delivery is unpredictable (Table 2). This should include details about management in the immediate postpartum period and follow up arrangements

**Table 2: Intrapartum or Pre-Caesarean Regimen for Woman with GDM**

<p><b>Diet Controlled GDM</b></p>	<ul style="list-style-type: none"> <li>• Continue with normal BGL regime until fasting or in established labour</li> <li>• Perform one BGL on admission – no intervention if BGL 4.0-8.0 mmol/L</li> <li>• Continue 4-hourly BGL testing and a diabetic diet in established labour</li> <li>• Insulin will rarely be required at this stage of pregnancy</li> <li>• If BGL &lt;4.0 or &gt;8.0 mmol/L, use supplementary scale in section 7.6</li> <li>• No 5% dextrose is required</li> </ul>
<p><b>Oral Hypoglycaemic Medication</b></p>	<ul style="list-style-type: none"> <li>• Continue with normal BGL regime until fasting or in established labour</li> <li>• Cease oral hypoglycaemic medication at commencement of established labour or when fasting commences</li> <li>• Perform BGL on admission to BS, and 2-hourly throughout established labour or while fasting for CS</li> <li>• When in established labour, consider initiating cEFM based on individual obstetric risk<sup>19,20</sup></li> <li>• If BGL &lt;4.0 or &gt; 8.0 mmol/L, use supplementary scale in section 5.6</li> <li>• <b>If BGL &gt; 8.0 on two consecutive measures, notify endocrinology/obstetric medicine team</b></li> </ul>
<p><b>Insulin Therapy (+/- Oral Hypoglycaemic Medication)</b></p>	<ul style="list-style-type: none"> <li>• Continue with normal BGL regime until fasting or in established labour</li> <li>• Continue usual dose of insulin until fasting or in established labour</li> <li>• Perform BGL on admission to BS, and 2-hourly throughout established labour or while fasting for CS</li> <li>• When in established labour, consider initiating cEFM based on individual obstetric risk<sup>19,20</sup></li> <li>• If BGL &lt;4.0 or &gt; 8.0 mmol/L, use supplementary Scale in section 5.6 or local teams' treatment plan.</li> <li>• <b>If BGL &gt; 8.0 on two consecutive measures, notify endocrinology/obstetric medicine team</b></li> <li>• Notify Paediatric Team/Special Care Nursery if neonatal admission is anticipated</li> <li>• Maintain accurate fluid intake and output chart</li> </ul>



## 5.6 Insulin Therapy in Labour or During Caesarean Section

This can be given by:

- 1) Supplementary scale subcutaneous route – see below
- 2) Intravenous infusion +/- concurrent dextrose infusion. See local CBRs:
  - RHW [Insulin Dextrose Infusion Protocol for Labour](#) <sup>21</sup>
  - [SGH-TSH BR 226 Intravenous Insulin Administration - Adults and Maternity](#) <sup>22</sup>

### Supplementary Scale

BGL mmol/L	Action
0-3.9	No insulin Give carbohydrate meal or commence 5% dextrose 84mL/hour and continue until the woman is eating. Ideally use National Guideline Appendix B <a href="#">Guideline for Treating Hypoglycaemia</a> <sup>23</sup> or local CBR e.g. <a href="#">SGH-TSH BR152 Hypoglycaemia - Management of in Adult Patients</a> <sup>24</sup>
4.0-8.0	No insulin No 5% dextrose
8.1-10.0	6 units rapid acting insulin analogues subcutaneous (s/c) or as directed by endocrine team/obstetric physician. If two consecutive capillary BGL readings > 8.0 then notify obstetric medicine/endocrinology
> 10	Consultation with obstetric medicine/endocrinology and either continue with s/c insulin OR consider an insulin infusion and concurrent dextrose infusion as required

## 5.7 Postpartum and Longer-Term Follow-Up

- Consult individualised Diabetes Care Plan for individualised advice on:
  - BGL monitoring in the immediate postpartum period
  - Any required pharmacotherapy in the immediate postpartum period
  - Recommendations and timing for further testing after pregnancy
  - Recommendations and timing for postnatal follow up appointments with diabetes team
  - If there is no individualised advice plan in place, then diet controlled GDM women should cease monitoring at delivery. For women with pharmacological GDM control initiate postpartum BGL monitoring pre-meal and bedtime for 48 hours and notify endocrinology/obstetric medicine team if any BGLs > 8.0 mmol/L. If all BGLs ≤ 8.0 mmol/L then cease and the woman should have a follow-up 75g OGTT with her GP at 6-12 weeks postpartum
- Ensure contraception plan in place for woman with suspicion of ongoing diabetes OUTSIDE pregnancy (e.g. LARC). To be reviewed by obstetric JMO prior to discharge
- NDSS advises all women with GDM should have a 75g OGTT, preferably 6-12 weeks postpartum. However, this advice may be individualised according to Diabetes Care Plan as stated above
- Advise woman to have regular surveillance for the development of Type 2 DM with an annual check with GP (annual cycle of care). This should be included in hospital discharge information to GP

- Advise woman with GDM are also at increased risk of cardiovascular disease, renal disease, and stroke as well as type 2 diabetes in the long term and should have regular monitoring and management with their GP<sup>25</sup>
- Advise woman to have a check with GP if planning another pregnancy BEFORE pregnancy occurs – as outlined in section 5.1 PRE-CONCEPTION
- Advise women to continue ongoing healthy eating and lifestyle (such as regular exercise and being a healthy weight) to minimise risk of type 2 diabetes in the future

### 5.8 Future Direction

- GP Antenatal shared care, for diet controlled uncomplicated GDM
- Referral pathways
- M Health and eHealth opportunities (e.g. GDM app for mobile phones)
- Audit maternal and neonatal outcomes annually

### 5.9 Cultural Support

When clinical risks are identified for an Aboriginal woman, she may require additional supports. This may include Aboriginal health professionals such as Aboriginal liaison officers, health workers or other culturally specific services.

For a Culturally and Linguistically Diverse CALD woman, notify the nominated cross-cultural health worker during Monday to Friday business hours

Non-English speaking culturally and linguistically diverse (CALD) women can be supported by offering appropriate interpreters using the Interpreter service<sup>26</sup>

[NSW Health PD2017\\_044 - Interpreters - Standard Procedures for Working with Health Care Interpreters<sup>26</sup>](#)

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## Section 6 – Documentation

- Electronic Medical Records:
  - Obstetric databases e.g. eMaternity, K2 Guardian
  - Antenatal Record
  - Documentation back to GP/Primary care
- Neonatal Care Plan
- Postnatal Clinical Pathways

## Section 7 – Education Resources

- [National Diabetes Services Schemes - Pregnancy](#) – Access to diabetes in pregnancy information in multiple languages
- National Diabetes Services Scheme - [Gestational Diabetes: caring for yourself and your baby](#) Breastfeeding – pg. 35
- APPS
  - [PREGNANT with DIABETES](#)
  - [CalorieKing](#)
  - [myFitnessPal](#)
  - [Easy Diet Diary](#)

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## Section 9 – Version and Approval History


Date	Version No.	Author and approval notes
7 February 2024	3.1	Covered from policy document SESLHDPD/282. Reviewed by Dr Helen Barrett Dr Wendy Hawke and the Gestational Diabetes Mellitus Policy Working Party. References and links updated. Cultural support included. Factsheet removed and hypoglycaemia flowchart added.

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## Section 10 - Appendixes

- a) Diabetes Care Plan
- b) ACSQHC Guidelines for Treating Hypoglycaemia (BGL less than 4mmol/L)
- c) SGH/TSH Clinical Business Rule 152 Hypoglycaemia – Management of in Adult Patients

**Appendix A: Diabetes Care Plan**



SES060407

 <b>Health</b> South Eastern Sydney Local Health District	FAMILY NAME	NRN
	GIVEN NAME	<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE
Facility:	D.O.B. ____/____/____	M.O.
ADDRESS		
<b>DIABETES CARE PLAN:</b>		
<input type="checkbox"/> In labour <input type="checkbox"/> Prior to CS <input type="checkbox"/> Postpartum		
LOCATION / WARD		
COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE		

This woman has:

Gestational diabetes    Pre-gestational type 1 diabetes    Pre-gestational type 2 diabetes

She is being treated with:

Diet alone    Insulin alone    Oral hypoglycaemics alone    Oral hypoglycaemics and insulin

Prior to a planned CS she should receive the following:

Usual dose of insulin or oral hypoglycaemics until fasting

Or

The following: .....

During labour or pre-CS, refer to Table 2 for BSL testing regimen in either:

- SESLHD/DPD282 SESLHD Management of Gestational Diabetes Mellitus (GDM)
- SESLHD/DPD283 SESLHD Management of Pre-gestational Diabetes in Pregnancy

If the BGL is <4.0 mmol/L or >8.0 mmol/L, refer to section titled INSULIN THERAPY IN LABOUR OR DURING CAESAREAN SECTION for management options in either:

- SESLHD/DPD282 SESLHD Management of Gestational Diabetes Mellitus (GDM)
- SESLHD/DPD283 SESLHD Management of Pre-gestational Diabetes in Pregnancy

Contact ..... if advice is needed

For woman with GDM, postpartum:

Continue BGL testing QID for 2 days with NORMAL diet

This woman will/will not require a repeat 2 hour OGTT at ..... weeks postpartum

This woman will/will not require a repeat 2 hour OGTT at 12 months postpartum with GP

For woman with pre-gestational DM, postpartum:

Continue BSL testing ..... hourly on a DIABETIC diet

Commence the following insulin/oral hypoglycaemic when able to eat: Medication/Dose .....

Please notify the endocrinology registrar/obstetric physician for review during her postpartum hospital stay

This woman will/will not require an appointment for the Diabetes Clinic in ..... weeks.

Print Name: ..... Signature: .....

Designation: ..... Date: .....

Original – Medical Record      Copy – Patient

DIABETES CARE PLAN:

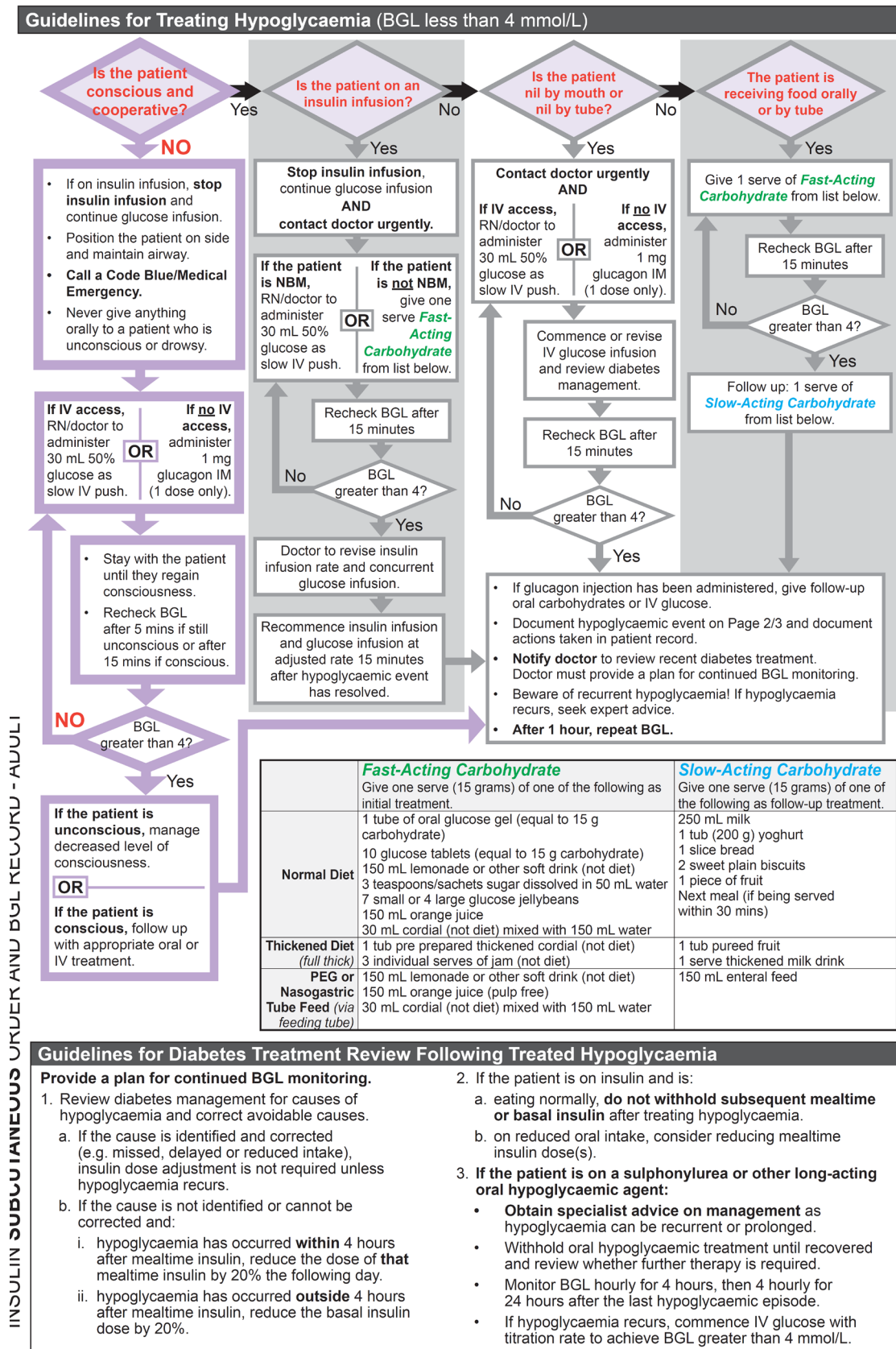
In labour    Prior to CS    Postpartum

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NO WRITING

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## Appendix B: ACSQHC Guidelines for Treating Hypoglycaemia (BGL less than 4mmol/L)<sup>23</sup>



Reproduced with permission from the *National Subcutaneous Insulin Chart*, developed by the Australian Commission on Safety and Quality in Health Care (ACSQHC). ACSQHC: Sydney (2022)



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**Appendix C: SGH/TSH Hypoglycaemia guideline**

[SGH-TSH BR152 Hypoglycaemia - Management of in Adult Patients](#) <sup>24</sup>