SESLHD GUIDELINE COVER SHEET

NAME OF DOCUMENT	Management of Pre-existing Diabetes Mellitus in Pregnancy
TYPE OF DOCUMENT	GUIDELINE
DOCUMENT NUMBER	SESLHDGL/116
DATE OF PUBLICATION	February 2024
RISK RATING	High
LEVEL OF EVIDENCE	National Safety and Quality Health Service Standards Standard 1 Clinical Governance Standard 4 Medication Safety Standard 5 Comprehensive Care Standard 6 Communicating for Safety
REVIEW DATE	February 2026
FORMER REFERENCE(S)	SESLHDPD/283 - Management of Pre-existing Diabetes Mellitus in Pregnancy
EXECUTIVE SPONSOR	Clinical Stream Director, Women's and Children's Health
AUTHOR	A/Prof Helen Barrett, Dr Wendy Hawke SESLHD Diabetes in Pregnancy Working Party
POSITION RESPONSIBLE FOR DOCUMENT	CMC Women's and Children's Clinical Stream Alison.brown3@health.nsw.gov.au
FUNCTIONAL GROUP(S)	Women and Babies
KEY TERMS	Diabetes in Pregnancy; Gestational Diabetes. Pre-Existing diabetes
SUMMARY	A document to guide the management of a woman with pre-gestational diabetes mellitus (Type 1 or 2, other) covering: • preconception advice • management of diabetes during the gestational period • management during delivery • postpartum requirements

Management of Pre-existing Diabetes Mellitus in Pregnancy

Section 1 – Background

- This guideline provides information for SESLHD management of **pre-existing diabetes mellitus (Type 1 or 2, or other)** covering, preconception advice, management of diabetes during the gestational period, delivery, and postpartum period.
- It contains principles that are recommended for all relevant SESLHD employees
- For Management of Gestational Diabetes, refer to: SESLHDGL/117 - Management of Gestational Diabetes Mellitus (GDM)
- The document provides guidance for management of a pregnant woman with pre-existing/pre-gestational diabetes mellitus:
    - Type 1 Diabetes Mellitus (T1DM)
    - Type 2 Diabetes Mellitus (T2DM)
    - Other types of pre-existing diabetes

Section 2 – Principles

- To provide consistent appropriate services to a woman and her neonate(s) at risk of the maternal and fetal/neonatal complications of PRE-EXISTING diabetes in pregnancy [1,2,]
- To provide a structured pathway for education which includes diet, exercise, medication, self-care, and blood glucose level (BGL) monitoring to a woman with PRE-EXISTING diabetes in pregnancy[3,4]
- To optimise glycaemic control for a woman with PRE-EXISTING diabetes in pregnancy
- To detect and manage appropriately any maternal or fetal complication of PRE-EXISTING diabetes manifesting during pregnancy
- To prevent or shorten hospitalisation for a woman and her neonate(s) by providing stabilisation through appropriate services
- To liaise with Obstetricians, 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 PRE-EXISTING diabetes in pregnancy
- To ensure equal and appropriate access to all women within SESLHD

EXCLUSIONS

Women with gestational diabetes

Section 3 – Definitions

ADIPS	Australasian Diabetes in Pregnancy Society
ANC	Antenatal Clinic
APT	Advanced Physician Trainee
BGL	Blood Glucose Level
BMI	Body Mass Index
BPT	Basic Physician Trainee
BS	Birthing Service
CBR	Clinical Business Rule
cEFM	Continuous Electronic Fetal Monitoring
CGM	Continuous Glucose Monitoring
CSII	Continuous Subcutaneous Insulin Infusion
CS	Caesarean Section
DE	Diabetes Educator
DM	Diabetes Mellitus
ECS	Elective Caesarean Section
GDM	Gestational Diabetes Mellitus
GP	General Practitioner
IGT	Impaired Glucose Tolerance
IOL	Induction of Labour
LARC	Long-Acting Reversible Contraceptive
LSCS	Lower Segment Caesarean Section
MDI	Multiple Daily Injection
MDT	Multidisciplinary Team
NDSS	National Diabetes Services Scheme
OGTT	75g 2-hour Oral Glucose Tolerance Test
QID	*Quater-In-Die* (four times per day)
T1DM	Type 1 Diabetes Mellitus
T2DM	Type 2 Diabetes Mellitus
RDI	Recommended Dietary Intake
RMO	Resident Medical Officer

Section 4 – Responsibilities

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

Medical staff

Endocrinologist/Obstetric Physician and APTs/BPTs are responsible for:

- Explaining potential maternal and fetal/neonatal complications
- Taking an appropriate history and performing an examination
- Reviewing the presence of potential long-term implications of diabetes
- Identifying and managing any maternal complications (e.g. hypertension, renal impairment, eye disease)
- Considering suitability for commencing CGM for woman with type 1 DM, if woman has not already commenced preconception.[3] If deemed eligible/appropriate, then initiate process in consultation with DE
- Explaining and planning target BGLs pre-pregnancy and during pregnancy
- Educating the woman on the importance of exercise and diet to assist with the management of her diabetes. This will require regular review, guidance, and individualised planning to meet the woman's needs
- Ensuring liaison with obstetric ANC
- Describing and planning the management regimen for diabetes during pregnancy and birth in liaison with other members of the multidisciplinary team
- Ensuring there is an insulin adjustment plan included in woman's discharge planning

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

- Ensuring accurate dating of pregnancy
- Ensuring taking appropriate pregnancy supplements[4]
- Explaining the potential maternal and fetal/neonatal complications
- Organising routine and any additional obstetric investigations as needed
- Reviewing regularly as outlined in antenatal care schedule
- Assessing mode and timing of delivery evidenced by BGL control, fetal complications, or other obstetric indications
- Ensuring woman is aware her neonate will need BGL monitoring for at least 24 hours postpartum
- Discussing postpartum plans for contraception and planning for future pregnancies

Midwifery/nursing staff

Diabetes Educators are responsible for:

- Providing general education about the nature of diabetes in pregnancy
- Checking if woman is enrolled in NDSS, and enrol if not already
- Considering suitability for commencing CGM for woman with type 1 DM, if the woman has not already commenced preconception.[3] If deemed eligible/appropriate, then initiate process in consultation with endocrinologist/obstetric physician
- Reviewing BGL monitoring technique and any modifications required for pregnancy

- Educating woman on the importance of exercise and diet to assist with the management of her diabetes. This will require regular review, guidance, and individual planning to meet the woman's needs[4]
- Reviewing administration technique of insulin, if not already familiar, then provide self-administration education. In most cases, the woman will require insulin therapy which will be prescribed by the endocrinologist/obstetric physician
- Review self-management of continuous subcutaneous insulin infusion (CSII). Educating the insulin treated woman about hypoglycaemia, hyperglycaemia and ketosis
- Educating and reinforcing the relationship between blood glucose monitoring, carbohydrate intake, insulin dose adjustment, hypoglycaemia and breastfeeding
- Reviewing sick day management plan
- Providing antenatal education to woman about the benefits of breastfeeding with diabetes[5]

Midwives are responsible for:

- Ensuring woman has access to midwifery education and ongoing psychological screening throughout her pregnancy. Ideally this would be 2-3 visits antenatally at the discretion of the obstetric ANC
- Educating woman about the benefits of breastfeeding with diabetes.
- 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
- Promoting adequate nutrition postpartum to promote breast feeding/adequate milk supply

TARGET AUDIENCE

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

- Obstetricians/obstetric registrar/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 with pre-existing diabetes seek advice from a health professional to cover below in addition to routine pre-pregnancy planning:

- Use of reliable and effective contraception (e.g. LARC) until diabetes management is optimal for conception
- Use of reliable method of documenting menstrual/conceptual record when attempting to conceive e.g. diary, app
- Maintaining HbA1c < 6.5% (48mmol/mol) to minimise risk of miscarriage and congenital malformation
- Review all medications for appropriateness in periconception and pregnancy
- Consider suitability for commencing CGM, and if deemed eligible/appropriate, then to initiate process with endocrinologist/obstetric physician[3]
- Advice regarding preconception supplements, including:
  - high dose folate (2.5-5mg folic acid daily, not to exceed 5mg total daily dose including folate from all pregnancy supplements) from preconception until 13 weeks gestation
  - iodine supplement in line with Australian RDI (220mcg total intake daily[4]). Most supplements contain 150mcg which is usually adequate as the remainder is obtained from dietary intake
- Advice regarding the use of low dose aspirin once pregnancy confirmed
- Health professional review as indicated
- Modification of any lifestyle factors, such as raised BMI (if applicable) and improving diet quality

5.2 Antenatal Management

a) Referral and Antenatal Assessment/Surveillance

It is recommended that diabetes and antenatal care is 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 with pre-existing diabetes should have access to resources for patient information in a format that are culturally and health literacy level appropriate.

Arrange review with Diabetes and Obstetric teams as indicated in Table 1 (below). An initial booking appointment should ideally occur at 8-10 weeks gestation.
Diabetes team consists of:

- Diabetes Educator
- Dietitian
- Endocrinologist/Obstetric Physician
- Endocrine Registrar

Obstetric team consists of:

- Obstetrician
- Obstetric Registrar / RMO

- Midwife

Table 1: Antenatal Management of a Woman with Pre-Existing Diabetes

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

Activity	Pre-Existing Diabetes (Type 1 or 2)
1. Review by DE	Referred at first booking (8-10 weeks gestation), then as required.
2. Review by Dietitian	Referred at first booking (8-10 weeks gestation), then as required.
3. Review by Endocrinology/Obstetric Medicine team	Referred at first booking (8-10 weeks gestation), then review 1-4 weekly.
4. Review by Obstetric ANC	Referred at first booking (8-10 weeks gestation), then review as outlined in antenatal care schedule.
5. Obstetric Model of Care	Obstetric ANC with Midwifery input Each hospital will determine the best way to share antenatal visits between doctors and midwives, however it is suggested that obstetric ANC visits occur at a minimum at: - booking - 20 weeks gestation (after morphology ultrasound) - 30 weeks gestation (after 28-30 week ultrasound) - 36 weeks gestation (after 34-36 week ultrasound) And that anaesthetic review is undertaken by 32 weeks gestation And midwives' antenatal visits occur at a minimum at: - 24 weeks gestation - 32 weeks gestation - 37 weeks gestation At each visit, in addition to a standard antenatal assessment, each woman should have weight measured and recorded.
6. Morphology Ultrasound	At Specialised Obstetric Ultrasound Centre.
7. Fetal Echocardiogram	Consider if poor control after discussion with obstetric ANC/diabetes team.
8. Ultrasound Surveillance	Every 4 weeks from 28 weeks, or more often as determined by obstetric ANC.
9. HbA1c/Fructosamine	Every 4-6 weeks after discussion with obstetric ANC/diabetes team.

Table 1: Antenatal Management of a Woman with Pre-Gestational Diabetes (continued)

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

Activity	Pre-Existing Diabetes (Type 1 or 2)
10. Administration of Corticosteroids	On Insulin: **1** Consult endocrinologist/obstetric physician for plan **2** Recommend anaesthetic consult **3** Continue QID BGL **4** Increase insulin dose at time of first dose of corticosteroids if required and review dose after 24 hours **5** Continue for 48hours after first dose of corticosteroids and then return to usual insulin dose 6 Consider admission to hospital if the BGL's are likely to be unstable On Oral Hypoglycaemic Medication: **1** Consult endocrinologist/obstetric physician for plan **2** Continue QID BGL **3** Consider temporary treatment with insulin for 48 hours, especially if woman demonstrates hyperglycaemia after the first dose of corticosteroids
11. Antenatal Breastfeeding Support	Educate antenatal women on benefits of breastfeeding using the Section 7 resources. Refer to Lactation Consultant, or midwife by 30 weeks gestation to ensure antenatal breast stimulation and expression of colostrum is commenced from 36 weeks gestation.5,6,7,8
12.Timing of delivery	Review at 36 weeks for fetal and maternal stability (BGLs, HbA1c, insulin requirement, fetal growth) to determine appropriate time and mode of delivery. Well controlled pre-gestational DM, deliver around 38 weeks gestation. Poorly controlled pre-gestational DM may require delivery prior to 38 weeks gestation and will require an individualised multidisciplinary plan.
13. Follow up baby	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 SESLHDPD/158 – Rooming in for Healthy Babies. [9] Arrange monitoring and management for neonatal hypoglycaemia as outlined in local CBR: • RHW CBR: Hypoglycaemia in a Neonate – Monitoring and Management of at Risk Neonates [10] • SGH WCH BR 097 Hypoglycaemia – Neonatal Management – SGH[11] • TSH WCH BR 005 Hypoglycaemia – Neonatal Management – TSH[12]

b) Treatment Targets

A woman's range of acceptable BGL may vary according to other risk factors. The individualised target range for each woman should be communicated to the woman and the rest of the MDT via the woman's record as per the local clinical procedure.

The following self-monitoring treatment targets from the ADIPS national guideline[1] are suggested. However, these should be individualised for the clinical circumstance, especially in the setting of concerns regarding hypoglycaemia and advice should be sought from the Endocrinologist/Obstetric Physician/Diabetes Educator:

- Fasting BGL: 4.0-5.3 mmol/L
- 1-hour BGL after commencing meal: 5.5-7.8 mmol/L
- 2-hour BGL after commencing meal: 5.0-6.7mmol/L

Aim HbA1c < 6.5% in first and second trimester, < 6.0% in third trimester.

If CGM is being used, recommended time in range (3.5-7.8mmol/L) is 70% or greater, and glycaemic variability aim less than or equal to 36%. Time below range: < 4% spent at < 3.5mmol/L, and < 1% spent at < 3.0mmol/L.[1]

c) Falling insulin requirements in the third trimester

If insulin requirements reduce by > 15% in the third trimester, consider increasing obstetric surveillance. The evidence around the significance of this is limited.[1]

Administration of corticosteroids to woman with diabetes

Administration of corticosteroids for fetal lung maturation to a woman with diabetes is associated with an increase in BGLs

For management details see Table 1; Section **10:** Administration of Corticosteroids

5.3 Intrapartum Management or Pre-Caesarean Regimen for Woman With Pre-Existing Diabetes

- If planned (elective) CS, ideally book on a morning operating list. There is no need to admit the night before unless clinical concerns
- Notify endocrinologist/obstetric physician at admission for a planned CS or IOL, and any unplanned admission to BS
- A woman with pre-gestational diabetes in pregnancy requires a detailed diabetes care plan for the time of delivery, considering the mode and timing of delivery is often unpredictable (Table 2). This should include details about management in the immediate postpartum period and follow up arrangements. This plan should either be in writing carried by the woman, or documented in electronic medical records and therefore accessible at all times

Table 2: Intrapartum or Pre-Caesarean Regimen for Woman with Pre-Existing Diabetes

Labour and vaginal delivery	• Inform endocrinologist,/obstetric physician on admission
	• Continue with normal BGL treatment regime until in established labour
	• Cease oral hypoglycaemic at commencement of established labour
	• Review individualised plan for doses of short acting and long-acting insulin
	• When in established labour:
	  ○ initiate cEFM
	  ○ perform capillary BGL second hourly
	  ○ if BGL <4.0 or >7.0 mmol/L, use Supplementary Scale in section 5.4
	  ○ perform capillary ketone measure fourth hourly, or if BGL > 8.0. If ketones > 0.6, notify endocrinologist/obstetric physician and consider commencement of an insulin and dextrose IV infusion[13,14]
	• Notify paediatric team/Special Care Nursery if neonatal admission is anticipated
	• Maintain accurate fluid intake and output chart

C-Section	• Inform endocrinologist/obstetric physician on admission • Continue with normal BGL treatment regime until fasting • Oral hypoglycaemic medication should be ceased once fasting (or prior if required by individualised plan) • Review individualised plan for doses of short acting and long-acting insulin • Perform capillary BGL on admission to BS, and hourly throughout fasting • If BGL <4.0 or >7.0 mmol/L, use Supplementary Scale in section 5.4perform capillary ketone measure fourth hourly, or if BGL > 8.0. If ketones > 0.6, notify endocrinologist /obstetric physician and consider commencement of an insulin and dextrose IV infusion[13,14] • Notify paediatric team/Special Care Nursery if neonatal admission is anticipated • Maintain accurate fluid intake and output chart.
Women with subcutaneous insulin pump	Woman with pre-existing diabetes receiving insulin by continuous subcutaneous pump requires a detailed management plan. If this woman presents unexpectedly in labour or for delivery, please contact the endocrinology/obstetric medicine team on call.

5.4 Insulin Therapy in Labour or During Caesarean Section

- This can usually be managed with a supplementary scale and subcutaneous route insulin as outlined below
- However, an intravenous insulin infusion +/- concurrent dextrose infusion may also be used at the discretion of the endocrinologist/obstetric physician for a woman with type 1 pre-gestational DM. Use local CBR:
  - RHW CBR - Insulin Dextrose Infusion Protocol for Labour[13]
  - SGH-TSH BR 226 Intravenous Insulin Administration – Adults and Maternity[14]

Supplementary Scale

BGL mmol/L	Action
0 – 3.9	No insulin. Give carbohydrate meal or commence 5% dextrose 84mL/hr and continue until the woman is eating. . Ideally use National Guideline Appendix B Guideline for Treating Hypoglycaemia[15] or local CBR e.g. SGH-TSH BR152 Hypoglycaemia - Management of in Adult Patients[16]
4.0 - 7.0	No insulin No 5% dextrose
> 7.1	Consultation with endocrinologist/obstetric physician and either continue with subcutaneous (s/c) insulin OR consider an IV insulin infusion and concurrent dextrose infusion as required.

5.5 Postpartum and Longer-Term Follow-Up

- Consult individualised Diabetes Care Plan for individual advice on:
  - Capillary BGL monitoring in the immediate postpartum period to continue regularly. Note an increased risk of hypoglycaemia
  - Insulin/oral hypoglycaemic doses in the immediate postpartum period[15]
  - Recommendations and timing for postnatal follow up appointment with diabetes team
- Encourage ongoing healthy eating choices for type 1 DM and type 2 DM post-partum, which will also benefit milk supply if breastfeeding
- For women with type 1 DM, encourage dietitian review post-partum to discuss nutrition and prevention of hypoglycaemia in relation to breastfeeding
- Ensure endocrine/obstetric physician team (if not already aware) are notified of delivery and have regular inpatient review
- Ensure review by senior obstetric registrar or consultant prior to discharge to discuss the following:
  - the importance of good pre-conceptual planning and diabetic control in a future pregnancy
  - the importance of pre-conceptual folate (5mg) in any future pregnancy
  - contraception has been addressed and a plan has been made to have low failure rate contraception in place by 6 weeks postpartum. (e.g. LARC)
  - the woman understands the importance of planning any future pregnancy, with contraception remaining in place until optimal diabetes control
- Re-engagement with the usual diabetes care team
- Advise woman with pre-gestational diabetes, there are also risks of cardiovascular disease, renal disease, and stroke in the long term, and she should have monitoring and management with GP for risk factors for these conditions
- Advise woman to have a check with usual diabetes care team if planning another pregnancy before pregnancy occurs - as per Section 1 - Preconception.

5.6 Future Direction

Standardised referral pathways between sectors

- Improvement of pathology results availability
- mHealth and eHealth opportunities
- Audit maternal and neonatal outcomes annually

5.7 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 NSW Health Policy Directive PD2017_044 - Interpreters - Standard Procedures for Working with Health Care Interpreters[17]

Section 6 – Documentation

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

Section 7 – Education Resources

National Diabetes Services Schemes-Pregnancy – Access to diabetes in pregnancy information in multiple languages

- Having a healthy baby:
  - Type 1 Diabetes booklet - Breastfeeding - page 60
  - Type 2 Diabetes booklet - Breastfeeding - page 50
- APPS
  - PREGNANT with DIABETES
  - CalorieKing
  - myFitnessPal
  - Easy Diet Diary

Section 8 – References

1) Rudland VL, Price SAL, Hughes R, Barrett HL, Lagstrom J, Porter C, Britten FL, Glastras S, Fulcher I, Wein P, Simmons D, McIntyre HD and Callaway L. (2020). ADIPS 2020 guideline for pre-existing diabetes and pregnancy. Aust N Z J Obstet Gynaecol, 60: E18-E52. https://doi.org/10.1111/ajo.13265
2) National Institute for Health and Clinical Excellence (NHS) Diabetes in Pregnancy: Management from preconception to the postnatal period. updated 2020 http://www.nice.org.uk/guidance/ng3
3) Feig DS, Donovan LE, Corcoy R, Murphy KE, Amiel SA, Hunt KF et al. Continuous glucose monitoring in pregnant women with type 1 diabetes (CONCEPTT): a multicentre international randomised controlled trial. Lancet November 2017 Volume 390, ISSUE 10110, P2347-2359. https://doi.org/10.1016/S0140-6736(17)32400-5
4) National Health and Medical Research Council, Australian Government Department of Health and Ageing, New Zealand Ministry of Health. Nutrient Reference Values for Australia and New Zealand. Canberra: National Health and Medical Research Council; 2006. Version 1.2 Updated September 2017 Nutrient Reference Values for Australia and New Zealand Including Recommended Dietary Intakes | NHMRC
5) Singh G et al. Effect of Antenatal Expression of Breast Milk at Term in Reducing Breast Feeding Failures. MJAFI 2009; 65: 131-133. https://doi.org/10.1016/S0377-1237(09)80125-1
6) Cox SC. Expressing and storing colostrum antenatally for use in the newborn period. Breastfeeding Review: 2006; 14(3): 11-16
7) SGH-TSH WCH BR004 Antenatal Expression and Storage of Colostrum
8) Forster DA, Moorhead AM, Jacobs SE, Davis PG, Walker SP, McEgan KM, Opie GF, Donath SM, Gold L, McNamara C, Aylward A. Advising women with diabetes in pregnancy to express breastmilk in late pregnancy (Diabetes and Antenatal Milk Expressing [DAME]): a multicentre, unblinded, randomised controlled trial. The Lancet. 2017 Jun 3;389(10085):2204-13. DOI: https://doi.org/10.1016/s0140-6736(17)31373-9.
9) SESLHDPD/158 - Rooming in for Healthy Babies
10) RHW CBR: Hypoglycaemia in a Neonate - Monitoring and Management of at Risk Neonates
11) SGH WCH BR 097 Hypoglycaemia - Neonatal Management – SGH
12) TSH WCH BR 005 Hypoglycaemia - Neonatal Management - TSH
13) RHW CBR - Insulin Dextrose Infusion Protocol for Labour
14) SGH-TSH BR 226 Intravenous Insulin Administration – Adults and Maternity
15) Australian Commission on Safety and Quality in Health Care User guide to the National Subcutaneous Insulin Chart: acute facilities. Sydney: ACSQHC; 2022 Guideline for treating Hypoglycaemia
16) SGH-TSH BR152 Hypoglycaemia - Management of in Adult Patients
17) NSW Health PD2017_044 Interpreters - Standard Procedures for Working with Health Care Interpreters

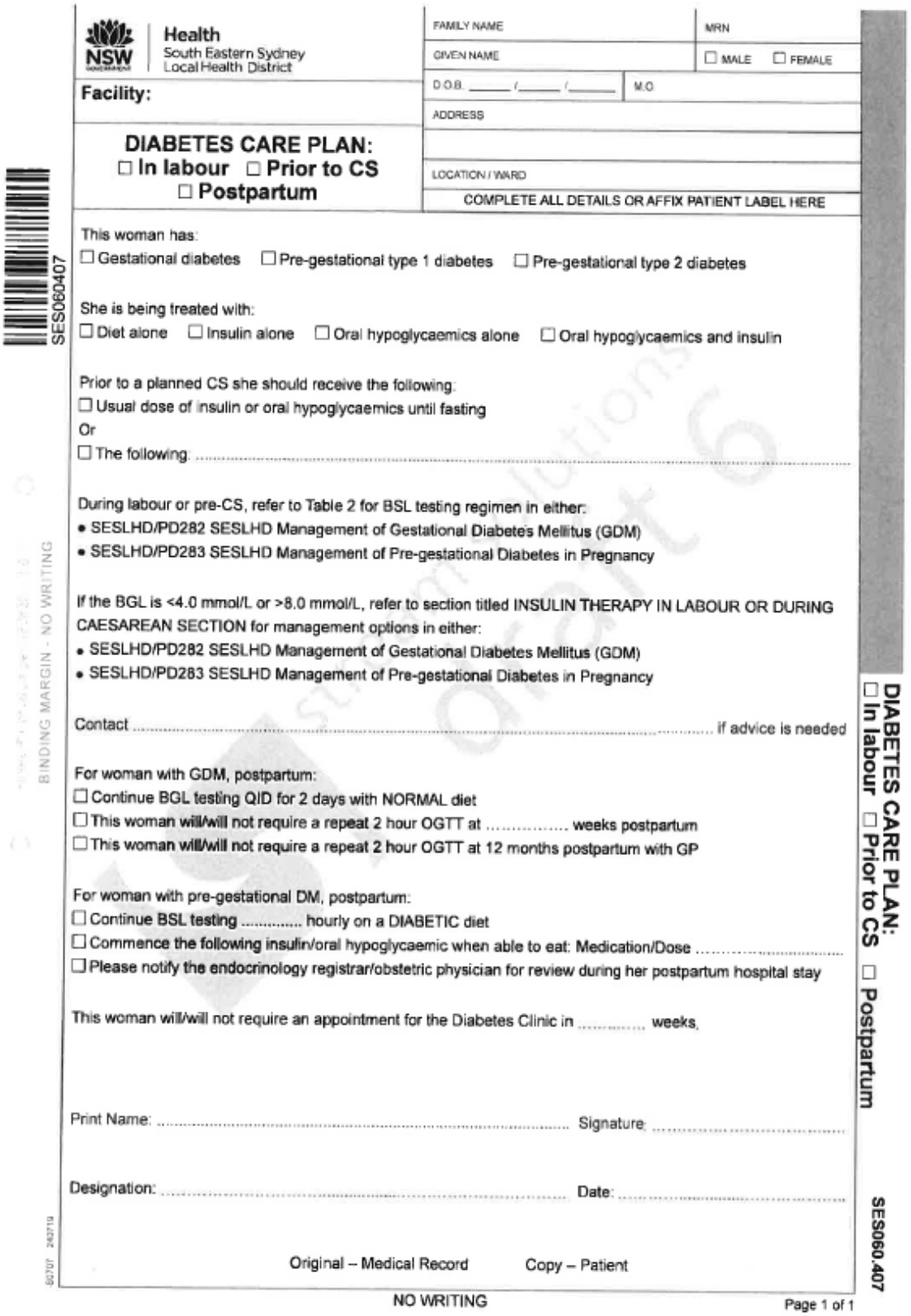
Section 9 – Version and Approval History

Date	Version	Version and approval notes
7 February 2024	3.1	Reviewed by Dr Helen Barrett Dr Wendy Hawke and the Pre-Existing Diabetes Mellitus Policy Working Party. Transferred from policy SESLHDPD/283 to guideline template. Terminology updated. References and links updated. Cultural support included and hypoglycaemia flowchart included as appendix.

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; for diabetes management in Labour, or prior to Caesarean Section and Postpartum



Health
South Eastern Sydney
Local Health District

Facility:

FAMILY NAME | MRN
GIVEN NAME | ☐ MALE ☐ FEMALE
D.O.B. ____/____/____ | M.O
ADDRESS
LOCATION / WARD
COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE

DIABETES CARE PLAN:
☐ **In labour** ☐ **Prior to CS**
☐ **Postpartum**

SES060407

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/PD282 SESLHD Management of Gestational Diabetes Mellitus (GDM)
- SESLHD/PD283 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/PD282 SESLHD Management of Gestational Diabetes Mellitus (GDM)
- SESLHD/PD283 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

NO WRITING

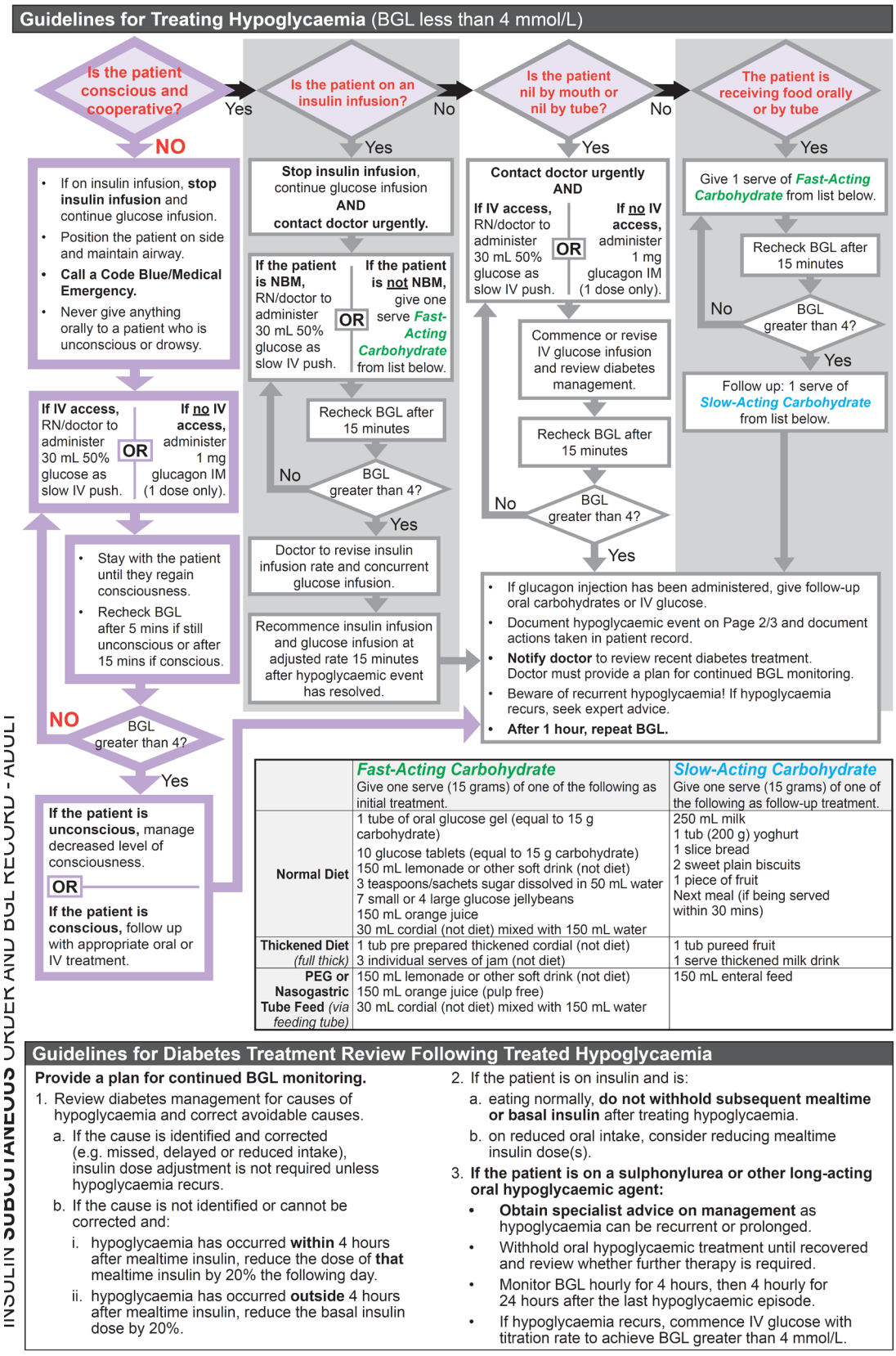
Page 1 of 1

DIABETES CARE PLAN: ☐ In labour ☐ Prior to CS ☐ Postpartum

SES060.407

BINDING MARGIN - NO WRITING

Appendix B: ACSQHC Guidelines for Treating Hypoglycaemia (BGL less than 4mmol/L)[15]



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)*

Appendix C: SGH/TSH Clinical Business Rule Hypoglycaemia guide

SGH-TSH BR152 Hypoglycaemia - Management of in Adult Patients[16]