

Antepartum considerations:

1. Screen as early for **pre-existing diabetes** as possible using HbA1C.
2. Engage a **multidisciplinary team** that includes representatives from internal medicine, social work/ perinatal mental health and obstetric anaesthesia.
3. Screen for and prevent complications from **gestational diabetes (GDM) and hypertensive disorders of pregnancy**
 - a. Consider screening for GDM at 16 weeks in addition to routine 24-28 week screening.
 - b. Commence low-dose aspirin (162mg) daily at bedtime from <16 weeks until 36+ weeks; encourage regular BP testing using appropriately sized cuffs and reporting of warning signs of severe preeclampsia even in the absence of markedly elevated blood pressure.
4. Counsel women that their fetuses are at an increased risk for **congenital anomalies**. Ensure folic acid is commenced pre-conceptionally. Routine (transabdominal) scan at 18-20 weeks; consider an additional 16-week early anatomy transvaginal ultrasound. If views are suboptimal, consider referral to specialized centres +/- fetal echocardiogram.
5. Since these women are at increased risk for **preterm birth**, consider (serial?) assessment of cervical length and appropriate referral/ management.
6. **Fetal surveillance** should include serial assessment of fetal growth, biophysical profile and fetal Doppler assessments with a consideration for cerebro-placental ratios.
7. Women that have had **bariatric surgery** may be allowed to conceive even before maximum weight loss is achieved (12-24 months). They have lower adverse pregnancy outcomes than those without surgery, but are at risk for nutritional deficiencies (iron, B-complex, calcium, vitamin D, zinc, omega-3 fatty acids and folic acid) requiring supplementation. They are also at risk for GDM, although the glucose tolerance test is not recommended due to poor tolerance (dumping syndrome) and wide variations in glucose excursions; consider capillary blood glucose measurements. These women are also at increased risk for fetal growth restriction and surgical complications (small bowel obstruction) in pregnancy.

Peripartum considerations:

8. **Individualized peripartum care plan** - discuss risks and uncertainties, timing and mode of delivery; refer for anaesthesia consult and consider referral to centres of surgical excellence.
9. **Managing labour** in women with increased weight requires a change in our understanding of 'normal' labour and our attitude. Latent phase might be extremely prolonged. Avoid early

admissions and early rupture of membranes in the latent phase. Consider epidural analgesia and ensure its effectiveness; use opioids sparingly especially in those with obstructive sleep apnoea. Labour curves are not the same as those for women with BMI<25; allow time for labour to progress as long as mother and baby are well.

10. **Augmentation of labour:** Response to oxytocin may be poor; avoid prolonged use of oxytocin especially in the latent phases of labour and monitor the response to oxytocin using an intrauterine pressure catheter (IUPC). Consider wash-out periods if oxytocin has been given for prolonged periods. Higher doses of oxytocin may be required for longer durations. Difficult trade-off between early rupture of membranes and monitoring with scalp electrodes and IUPCs. Maternal monitoring should include pulse-oximetry especially with obstructive sleep apnoea.
11. Cohort studies still seem to support **induction of labour (IOL)** over planned caesarean deliveries. Even in the absence of other indications, IOL at 39 weeks in women with higher weight may reduce stillbirths, emergency caesarean deliveries and costs. In these women, IOL could involve a multi-step approach over days. IOL should probably begin with mechanical methods and followed by prostaglandins, with prostaglandin E1 seemingly more effective than Prostaglandin E2. Consideration may need to be given to higher doses of prostaglandins.
12. A **perioperative bundle for caesarean delivery** should consider
 - a. Appropriate (higher/ weight-based) dose of pre-operative antibiotics
 - b. Infraumbilical transverse skin incisions
 - c. Entry as bloodless and atraumatic as possible and appreciation of anatomical differences.
 - d. Minimization of tissue handling and operative time. Use a self-retaining (Möbius) retractor.
 - e. Transverse uterine incision as low on the uterus as possible; use of a vacuum to deliver the fetal head.
 - f. Meticulous haemostasis; liberal use of uterotonics and anti-fibrinolytics (tranexamic acid).
 - g. Inclusion of the posterior rectus fascia during closure. Multiple layer closure of the subcutaneous tissue, leaving no dead space.
 - h. Subcuticular skin sutures and a Negative Pressure Wound Therapy Dressing
 - i. 48-hour broad-spectrum antibiotic cover. Individualized plan for thromboprophylaxis especially with regard to timing of administration.
 - j. Post-operative monitoring on a high-dependency unit; cautious use of opioids.