

## **Implementation in the real world: Current screening for gestational diabetes is failing to detect women at risk of adverse birth outcomes**

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### **Oral and poster abstract text**

#### **Background**

Defined as glucose intolerance beginning or first detected in pregnancy, Gestational Diabetes Mellitus (GDM) increases risk of poor birth outcomes. It affects 10% of Australian pregnancies. Universal screening using the 75g oral glucose tolerance test (OGTT) at 24-28 weeks gestation and earlier if high-risk factors are present is recommended to facilitate detection and management of GDM in order to reduce adverse outcomes.

#### **Objectives**

To assess the effectiveness of real world OGTT in detecting adverse GDM-related perinatal outcomes in regional and remote Western Australia.

#### **Method**

Forty-one primary healthcare clinics across Western Australia recruited 608 pregnant women, 40% Aboriginal women, aged 16 years or over, without confirmed diagnosis of diabetes at first antenatal visit. OGTT collection and measurement was conducted following local guidelines. Two study General Practitioner Obstetricians, blinded to routine investigations, independently determined if adverse perinatal outcomes were likely related to GDM.

#### **Results**

Only 61% of women were screened according to local guidelines. Glucose levels from OGTTs were significantly lower than the study on which the guidelines are based. In contrast, rates of adverse birth outcomes potentially due to GDM were higher than expected (20% with one or more outcome) and most were in women not diagnosed with GDM by OGTT (79%). Longer time-to-analysis of samples leads to lower glucose levels (median delay 4.4 hours in this study). The combination of incomplete adherence to screening guidelines and delay in analysis reduce the real world effectiveness of OGTT as a screening test. We are working with sites to improve sample processing.