

# The detection and management of severe fetal growth restriction – improved with enhanced reporting?

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# Background

Undetected fetal growth restriction (FGR) is the strongest risk factor for stillbirth.

Improving the detection of FGR would be expected to decrease late pregnancy stillbirth.

#### FGR is tracked and reported

Since 2010 in Victoria, the proportion of all severe (birthweight <3<sup>rd</sup> centile) FGR singleton babies that are 'undetected' (defined as born ≥40 weeks gestation) have been reported annually for each hospital in the Perinatal Services Performance Indicator (PSPI) report.

#### **Aim**

To determine whether public reporting of 'undetected' severe FGR has been associated with:

- (i) improved detection of severe FGR
- (ii) any unintended harm

#### **Method**

Retrospective population-based study using the Victorian Perinatal Data Collection.

- Study population: all singleton births in Victoria ≥32 weeks'.
- Outcomes of interest: gestation at birth, type of labour and birthweight centile.

#### Results I

The rate of 'undetected' severe FGR has decreased by 23.6% (p < 0.001), due to increasing intervention.

In 2010	In 2016
40.2%	30.7%
Number (%) of severe FGR pregnancies delivered ≥40 weeks'	

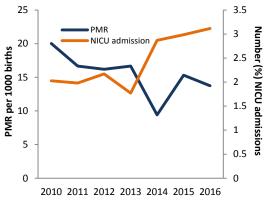
In 2010	In 2016
58.4%	70.3%

Number (%) of severe FGR pregnancies iatrogenically delivered <40 weeks'

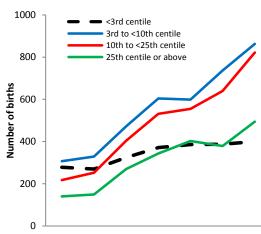
## Results II

The increased intervention for severe FGR is associated with an apparent decrease in perinatal mortality and only a modest increase in NICU admissions (figure 1).

However, the rates of iatrogenic intervention in pregnancies suspected of FGR but have a non-severe FGR baby have also increased and to a greater extent than for true severe FGR pregnancies (figure 2).



**Figure 1:** Perinatal mortality rate (PMR) and NICU admission for severe FGR (<3<sup>rd</sup> centile) babies born 32-43 weeks



2010 2011 2012 2013 2014 2015 2016 **Figure 2:** Number of pregnancies iatrogenically delivered for suspected FGR prior to 40 weeks' by birthweight centile

## Conclusion

Public reporting of 'undetected' severe FGR has been associated with improved detection and outcomes for severe FGR but at the cost of increasing rates of intervention in non-FGR pregnancies. Long-term outcomes of these non-FGR babies being born early will need to be considered.





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