

# Antenatal management of IVF pregnancies

## Introduction

**Dr Katherine Whitton<sup>1</sup>**

RANZCOG trainee  
1. Gosford Hospital, NSW  
katherine.whitton@trainee.ranzcog.edu.au



**Health**  
Central Coast  
Local Health District

Pregnancies conceived by in-vitro fertilisation (IVF) are at increased risk of adverse perinatal outcomes, including preterm birth, low birth weight and congenital anomalies<sup>1</sup>.

Despite these risks, there is a paucity of guidance on the antenatal management of IVF pregnancies, and variation exists between clinicians.

In the public hospital setting, there are various models of antenatal care available. This audit was conducted to examine who manages IVF pregnancies antenatally in a public hospital, and to determine if any differences exist in patient outcomes.

## Methods

- IVF pregnancies managed publicly at Gosford Hospital, NSW between 2014 - 2018
- Data from the Obstetrix and eMaternity databases
- Multiple pregnancies and private patients excluded

## Results

- 314 IVF pregnancies (2.3% of all pregnancies), 335 total births 22 sets of twins and 26 private patients excluded
- 265 total births included
- 177 (66.8%) had Midwifery-led antenatal care
- 88 (33.2%) had Obstetric-led high-risk antenatal care

	Gosford Hospital Midwifery-led care n(%)	Gosford Hospital Obstetric-led care n(%)	NSW 2017 <sup>2</sup> (% of all births)
<b>Mean maternal age</b>	33.1 years	35.2 years	30.7 years
<b>Maternal age 40+</b>	12 (6.8)	22 (25.0)	4.5
<b>Gestational diabetes</b>	12 (6.8)	25 (28.5)	13.1
<b>Gestational htn or PET</b>	12 (6.8)	6 (6.9)	4.1
<b>Pre-term birth</b>	7 (4.0)	10 (11.4)	7.4
<b>Delivery after 40w</b>	67 (37.9)	13 (14.8)	-
<b>Birthweight &lt;2500g</b>	3 (1.7)	17 (19.3)	6.7
<b>Emergency CS</b>	31 (17.5)	21 (23.9)	12.5

## Conclusion

IVF pregnancies are largely being managed in a midwifery care setting. Compared to the NSW state average in 2017<sup>2</sup>, this lower risk group had a higher percentage of women of advanced maternal age, more developed hypertension in pregnancy and more had an emergency caesarean section.

Poor perinatal outcomes still occur amongst the lower-risk midwifery care group, so development of a guideline for the antenatal management of IVF pregnancies may be beneficial for clinicians, both midwifery and medical.

### References

1. In vitro fertilisation: Perinatal risks and early childhood outcomes. Scientific Impact Paper No. 8, RCOG, May 2012
2. NSW Mothers and Babies 2017. Centre for Epidemiology and Evidence. Sydney: NSW Ministry of Health, 2018