

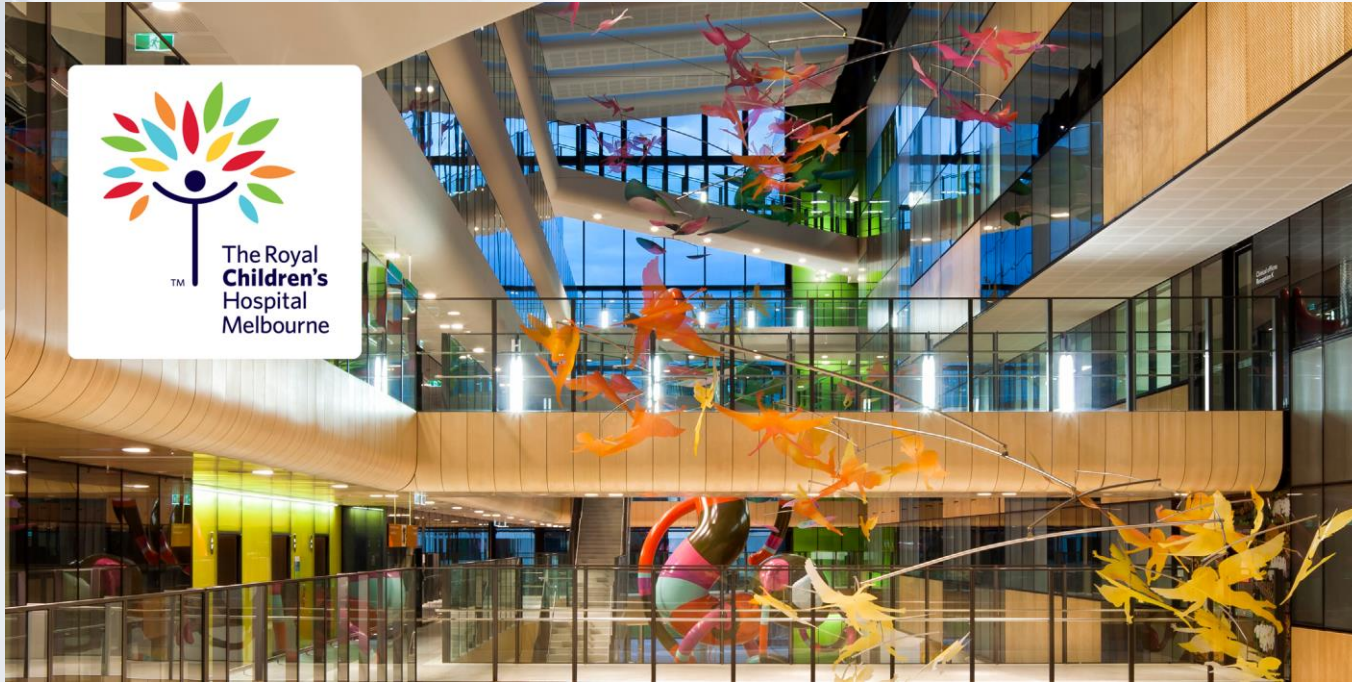


Which women with placenta previa should be transferred?

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Who is PIPER



™ The Royal
Children's
Hospital
Melbourne

PIPER



- **6000 referrals /year**
 - Perinatal, Neonatal, Pediatric and “returns”
 - Perinatal – 1200/year, about half are transferred

What happens after urgent transfer?



Delivered within 24 hours :15%

Delivered more than 24 hours to 7 days :20%

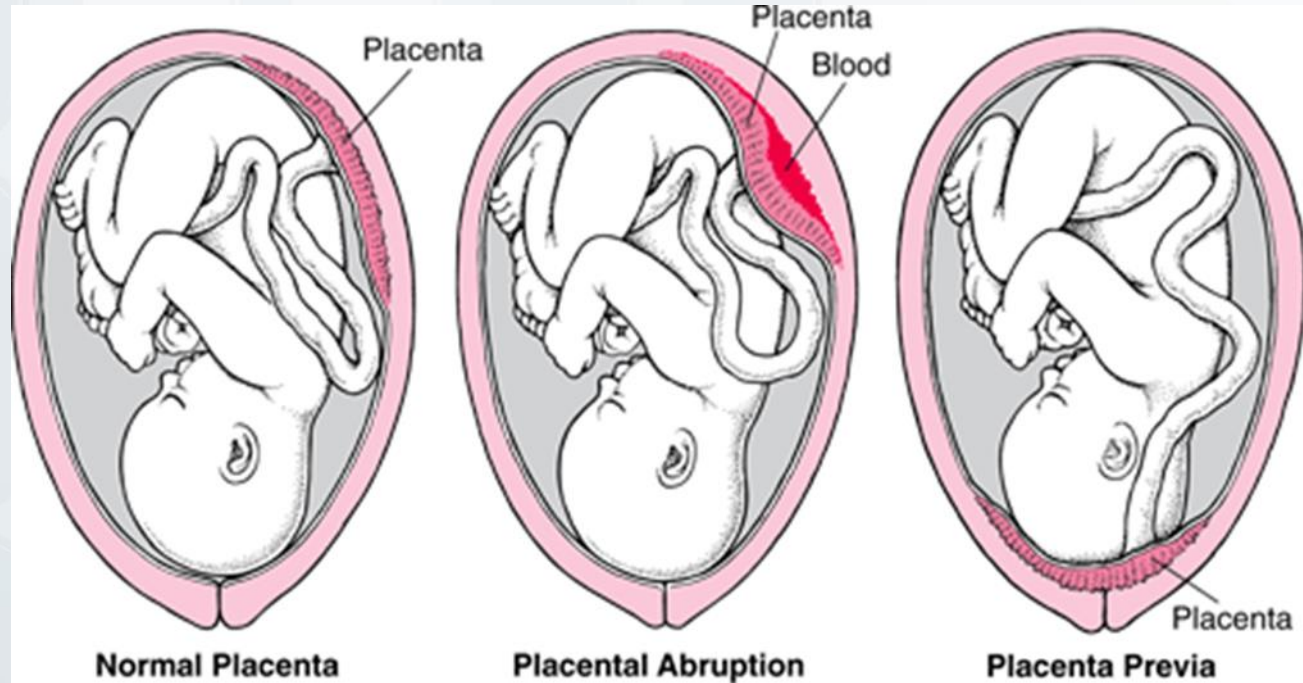
Discharged undelivered within 7 days: 25%

Remain inpatient undelivered 7 days: 40%

Antepartum haemorrhage – bleeding after 20 weeks gestation



- Placenta previa
- Abruptio
- other



When should someone who has bleeding and placenta preavia be delivered?



- Gestation
- Blood loss/tranfusion
- Contractions
- Prediction of bleeding risk

Background



- Placenta previa is associated with preterm delivery (RR 5.3)
- The mean gestational age at birth is 35-36 weeks
- 67% deliver at term, and 13% delivered before 32 weeks.
- 25% of preterm births are iatrogenic, and of these about 4% are for placenta previa

Research question: Of women with placenta previa, who have bleeding, and are transferred , how many will deliver preterm?

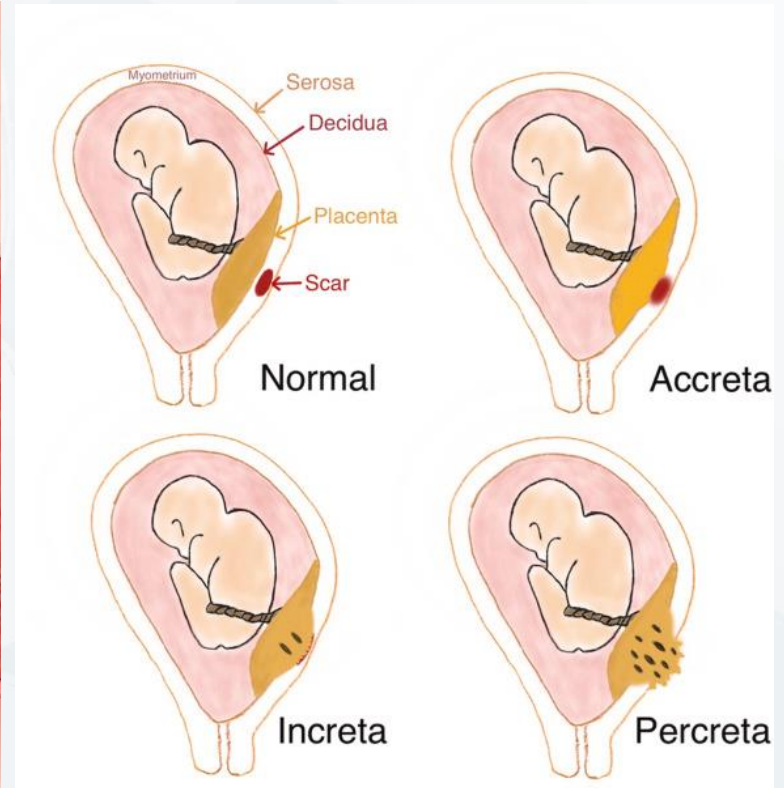
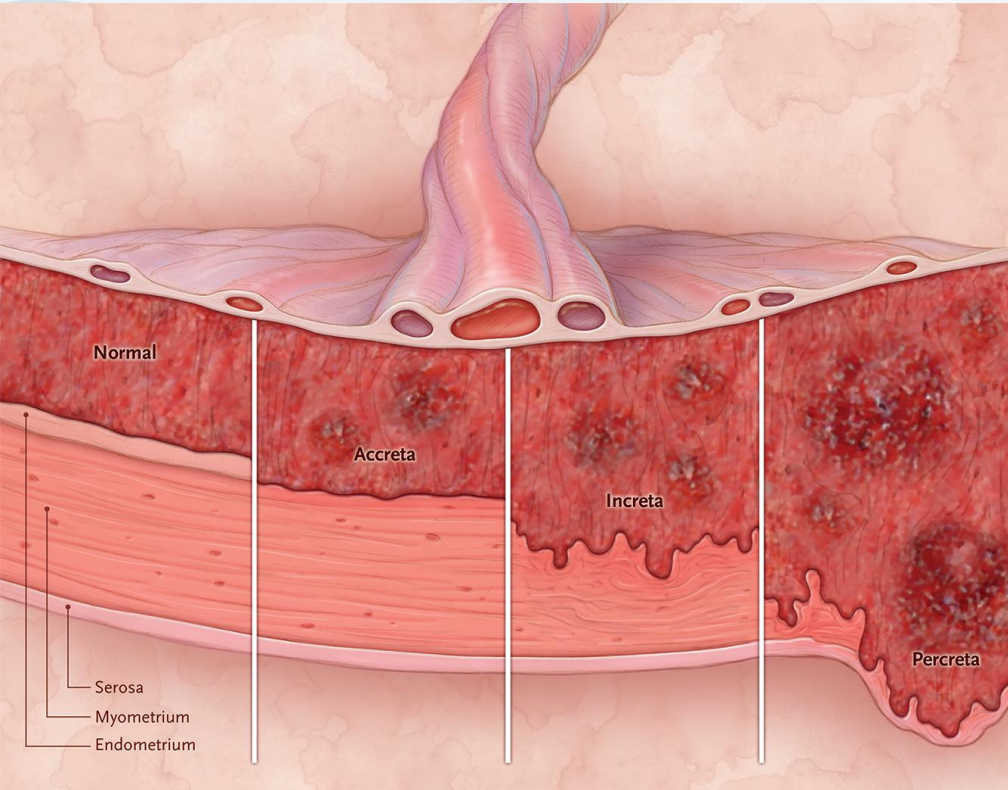
How does this information inform transfer practices?



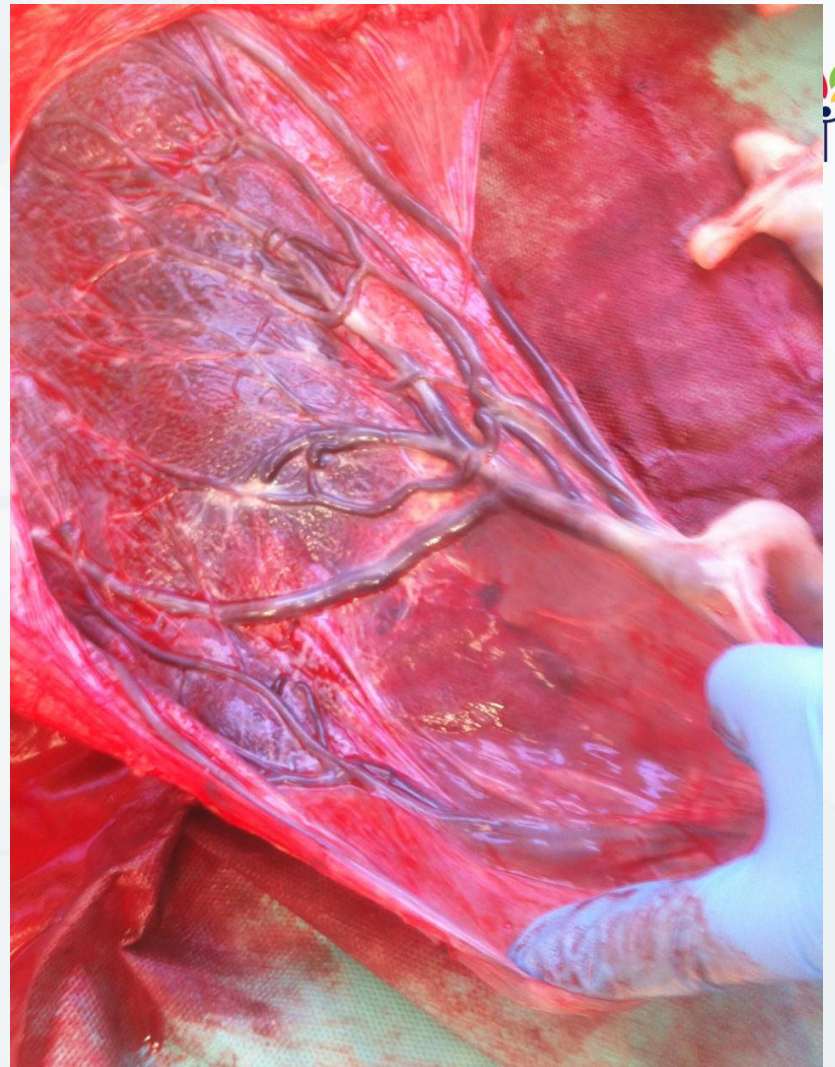
Statewide data- placenta previa births

Gestational age at birth	Placenta praevia births. N= 485 (n,%)	All births n = 118. 705 (%)
24-27	3 (0.6)	0.5
28-31	18 (3.7)	0.6
32-36	117 (24.1)	6.2
37-41	347 (71.6)	92.4
42+	0	0.3

Placenta accreta



Vasa Previa





- Placenta praevia – placenta close to or overlying cervix – maternal bleeding
- Placenta accreta – placenta growing into myometrium - maternal bleeding at surgery
- Vasa praevia – fetal blood vessel over cervix -fetal bleeding
- Abruptio – concealed bleeding -fetal hypoxia

13000 records

2,500 women with
antepartum bleeding

495 placenta praevia
transferred

Classify according to outcome

- Delivered in 24 hours
- Delivered in 24 hrs to 7 days
- Discharged undelivered before 7 days
- Remain inpatient undelivered at 7 days

Who delivered ?

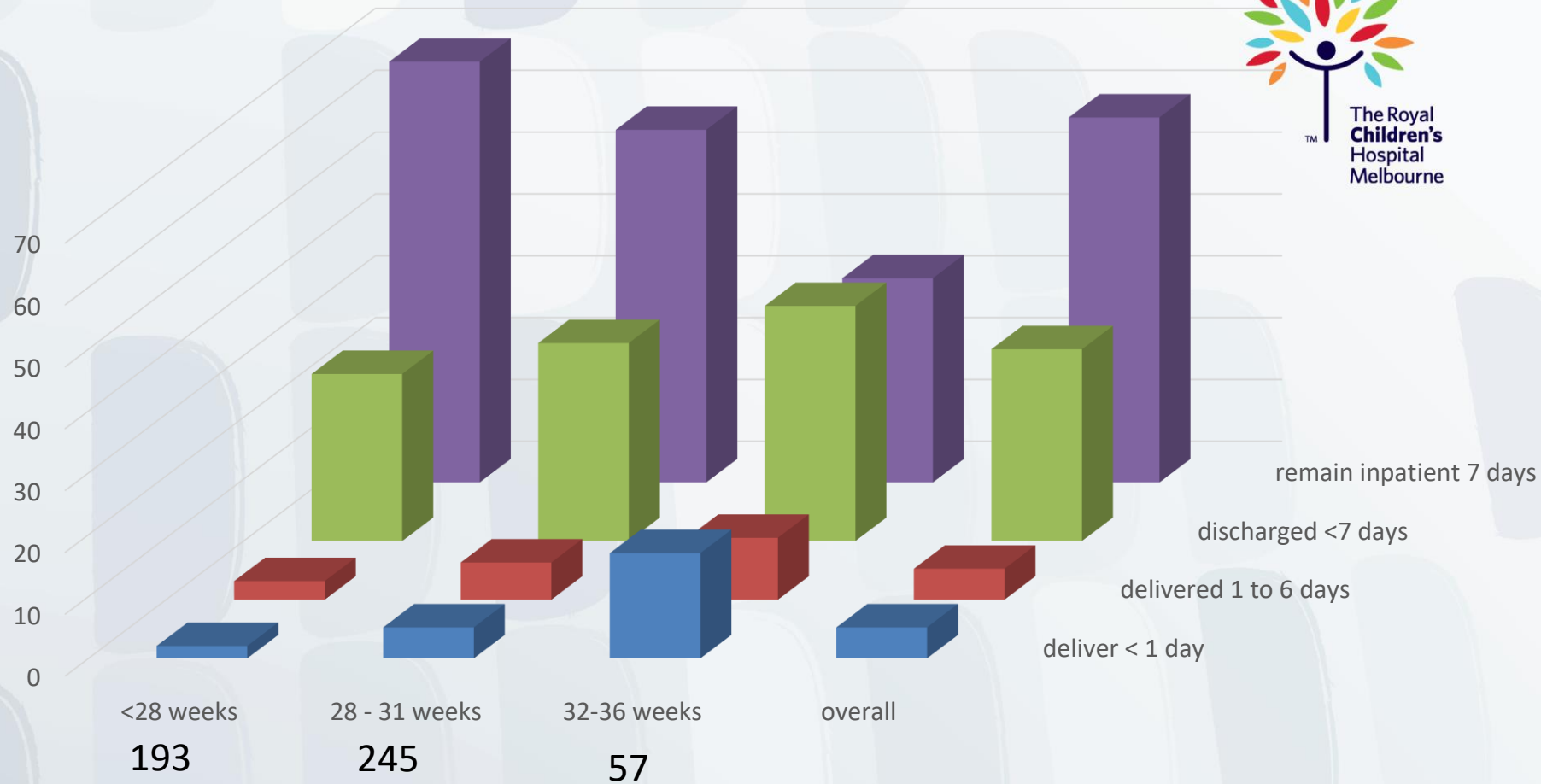
27 (5.4%) delivered within 24 hours

26 women (5.3%) delivered after more than 24 hours and less than 7 days

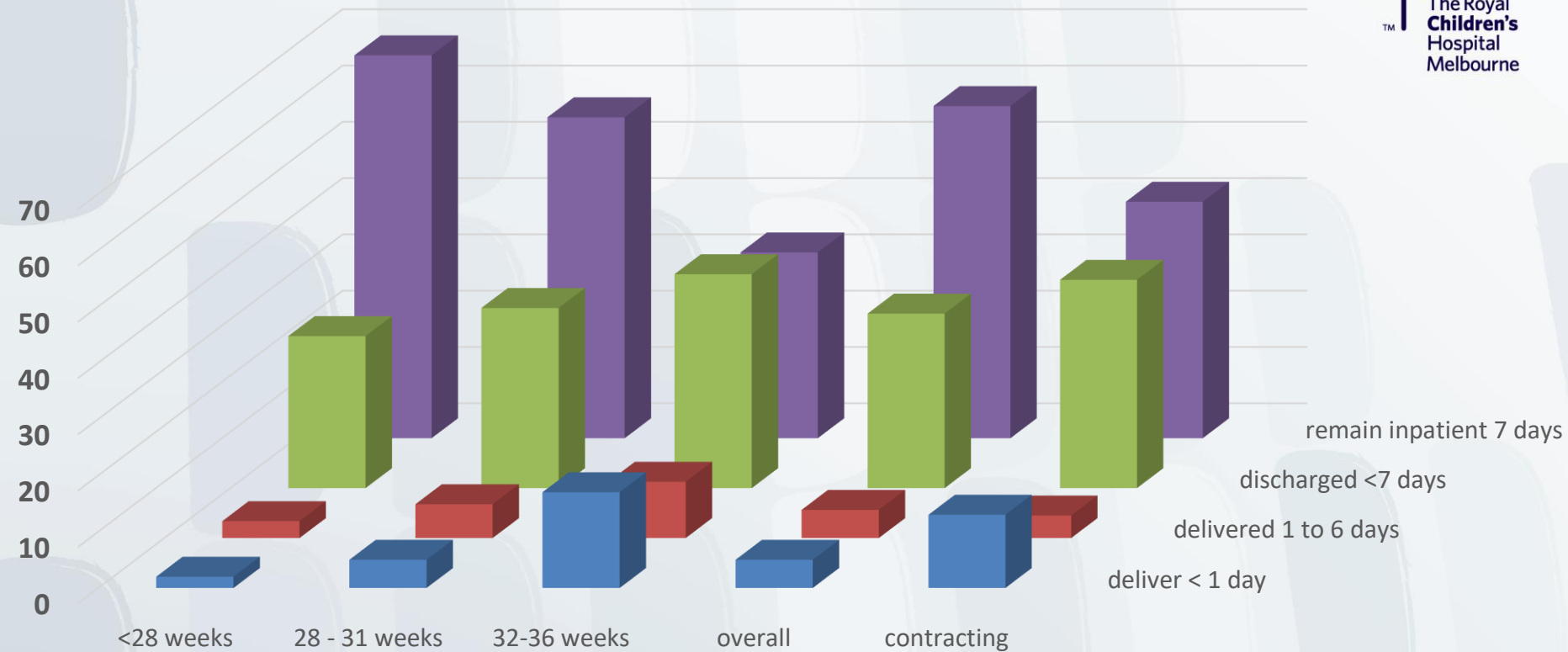
153 (30.9%) were discharged undelivered from the receiving hospital at less than 7 days

289 (58.4%) remained in the receiving hospital undelivered at 7 days

Outcomes after transfer



Outcomes after transfer



Conclusions



- 9.6% of women who are transferred with APH from isolated PP without contractions deliver within 7 days.
- The rate is higher in women who are contracting at presentation, and lower (5%) under 28 weeks gestation.
- Consideration should be given to providing care in a centre able to manage maternal status, rather than transfer to a tertiary centre for neonatal capability, especially under 28 weeks gestation.

References

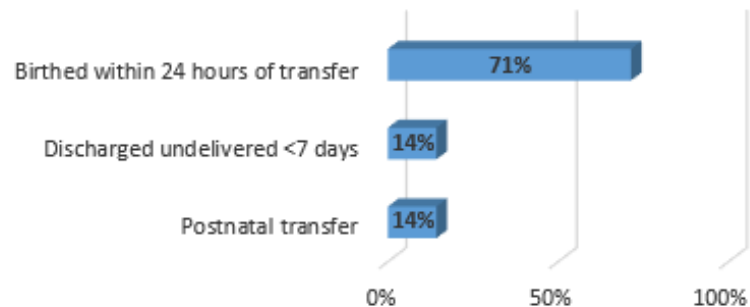


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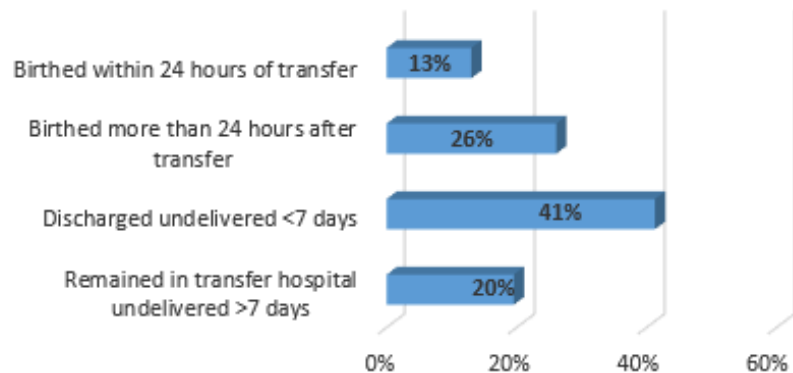
	Delivered less 24 hours	Delivered 24 hours to 7 days	Discharged undelivered less 7 days	Remain inpatient undelivered 7 days
52 women with contractions	7 (13.5)	6 (3.8)	22 (42.3)	17 (3.7)
375 women without contractions or vasa praevia or placenta accreta	17 (4.5)	19 (5.1)	113 (30.1)	226 (61.1)
193 women at less than 28 weeks	4 (2.1)	6 (3.1)	52 (26.9)	131 (67.9)
245 women at 28 to 31 weeks	13 (5.3)	14 (5.7)	79 (32.2)	139 (56.7)
57 women at 32 to 36 weeks	10 (17.4)	6 (10.5)	22 (38.6)	19 (33.3)



Outcomes of Time Critical Transfers



Outcomes of Urgent Transfers





Perinatal

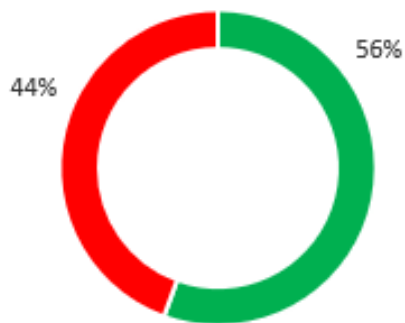
Time Critical Bed Finding

KPI: 30 minutes

90th centile:
34 mins

Median
Mobilisation time:

TC transfers = 7



■ Bed Finding <30mins ■ Bed Finding >30mins

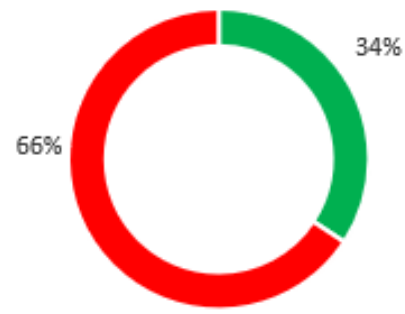
Urgent Bed Finding

KPI: 30 minutes

90th centile:
150 mins

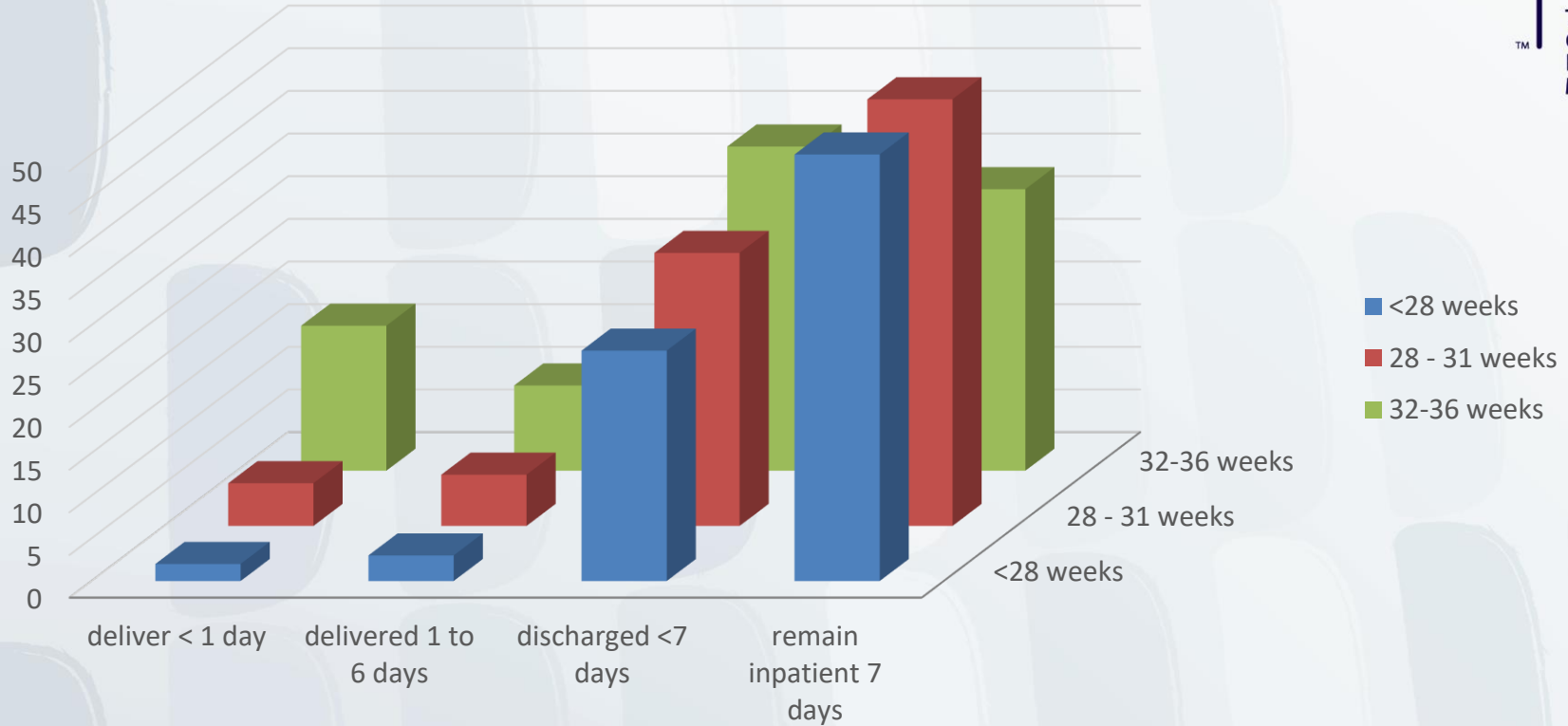
Median Mobilisation
time: **33 mins**

Urgent transfers = 46

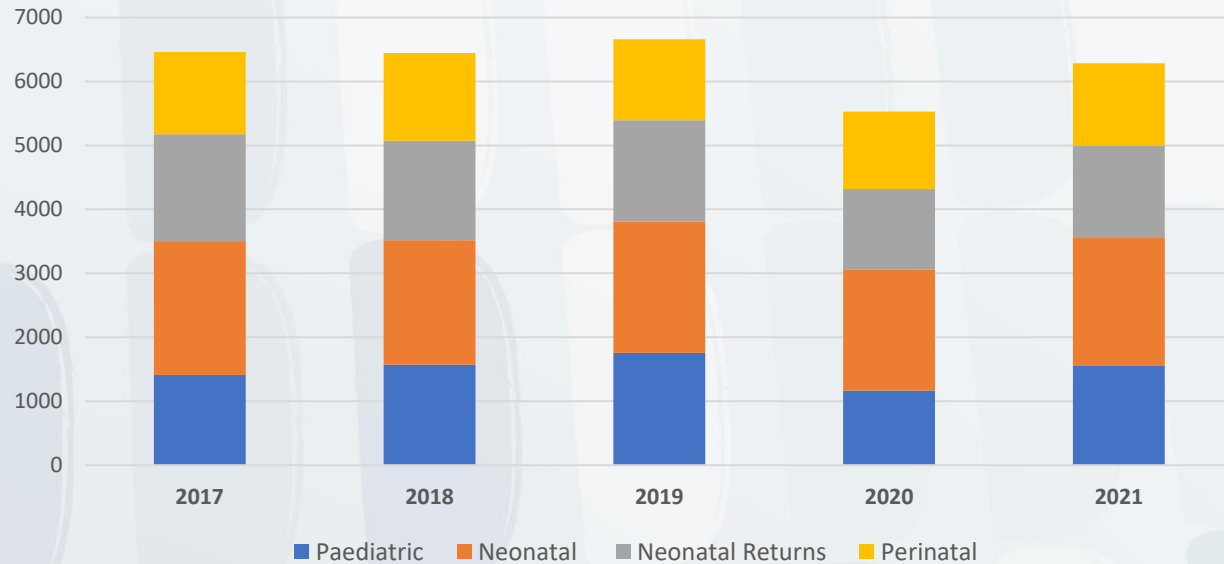


■ Bed Finding <30mins ■ Bed Finding >30mins

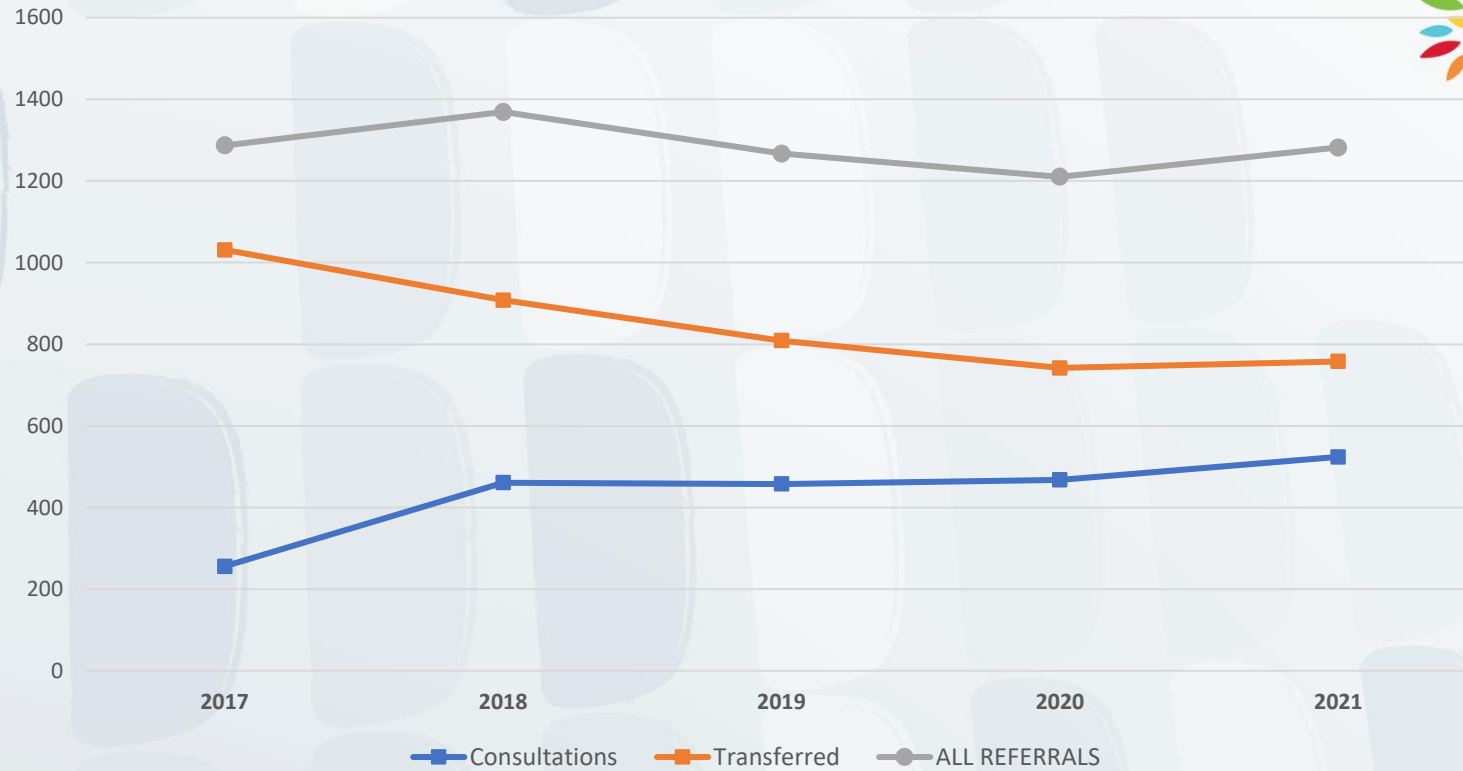
Outcomes after transfer



PIPER Referrals by Service 2017 - 2021



PIPER Perinatal Referrals 2017 - 2021



Outcome of urgent transfers

