



Cost of Birth in New Zealand

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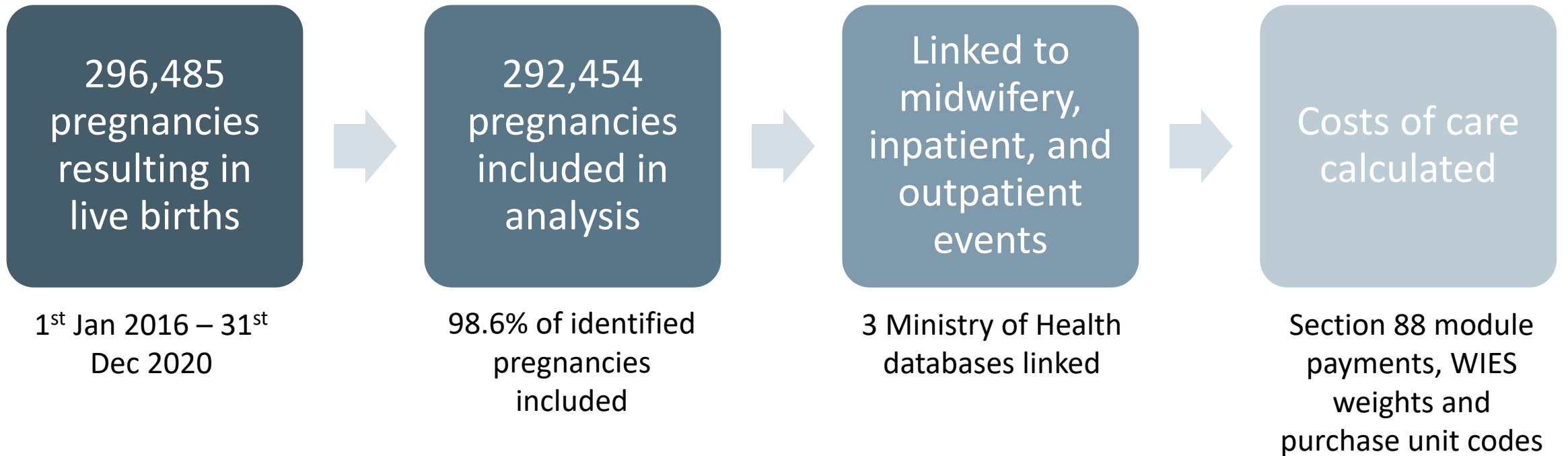
[Research thesis for the fulfilment of a Master of Public Health]

Supervisors: Dr Richard Edlin, Dr Lynn Sadler

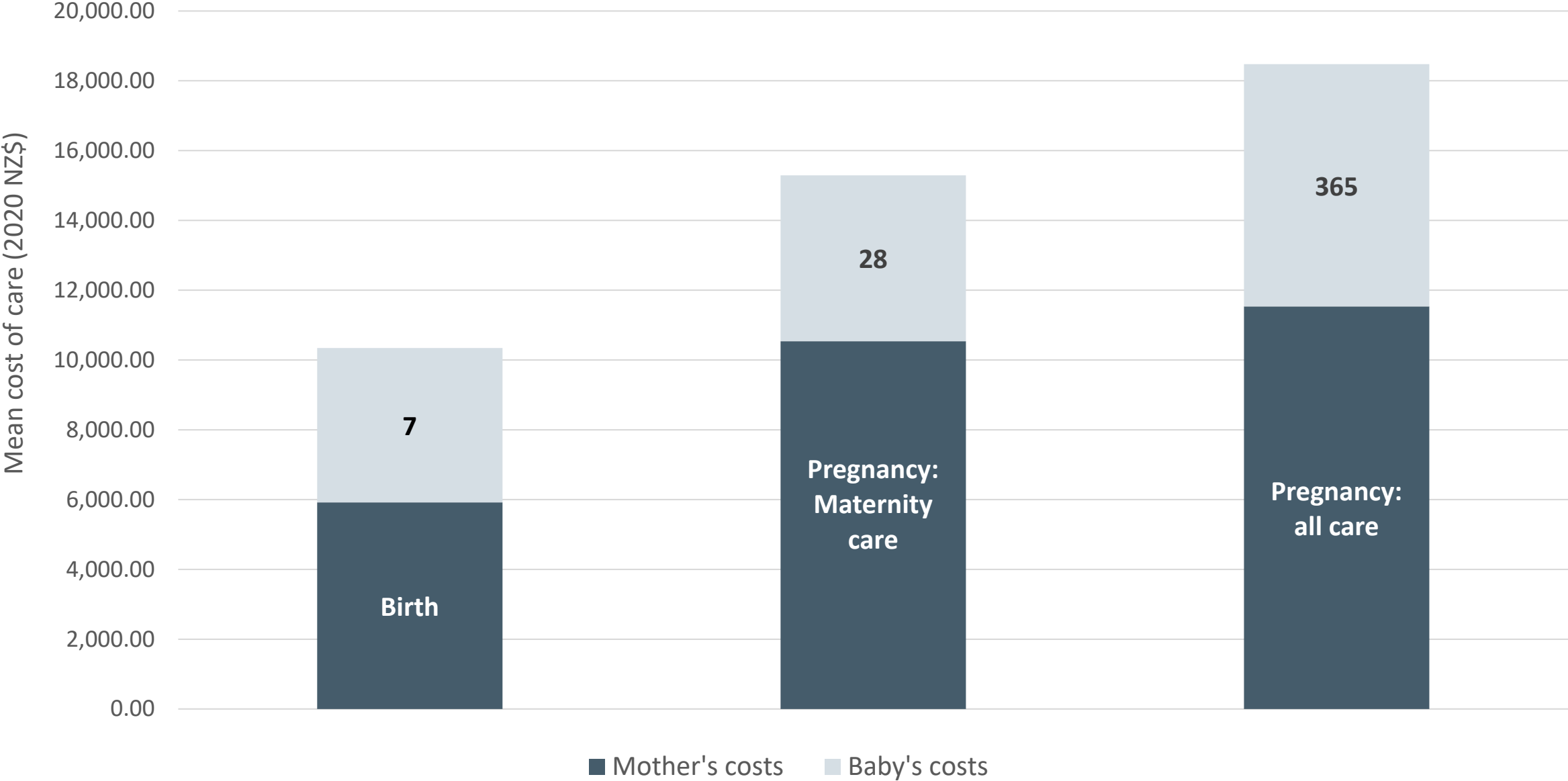
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- Increasing importance of health economics in health decision making
- No existing literature on the cost of birth in New Zealand context

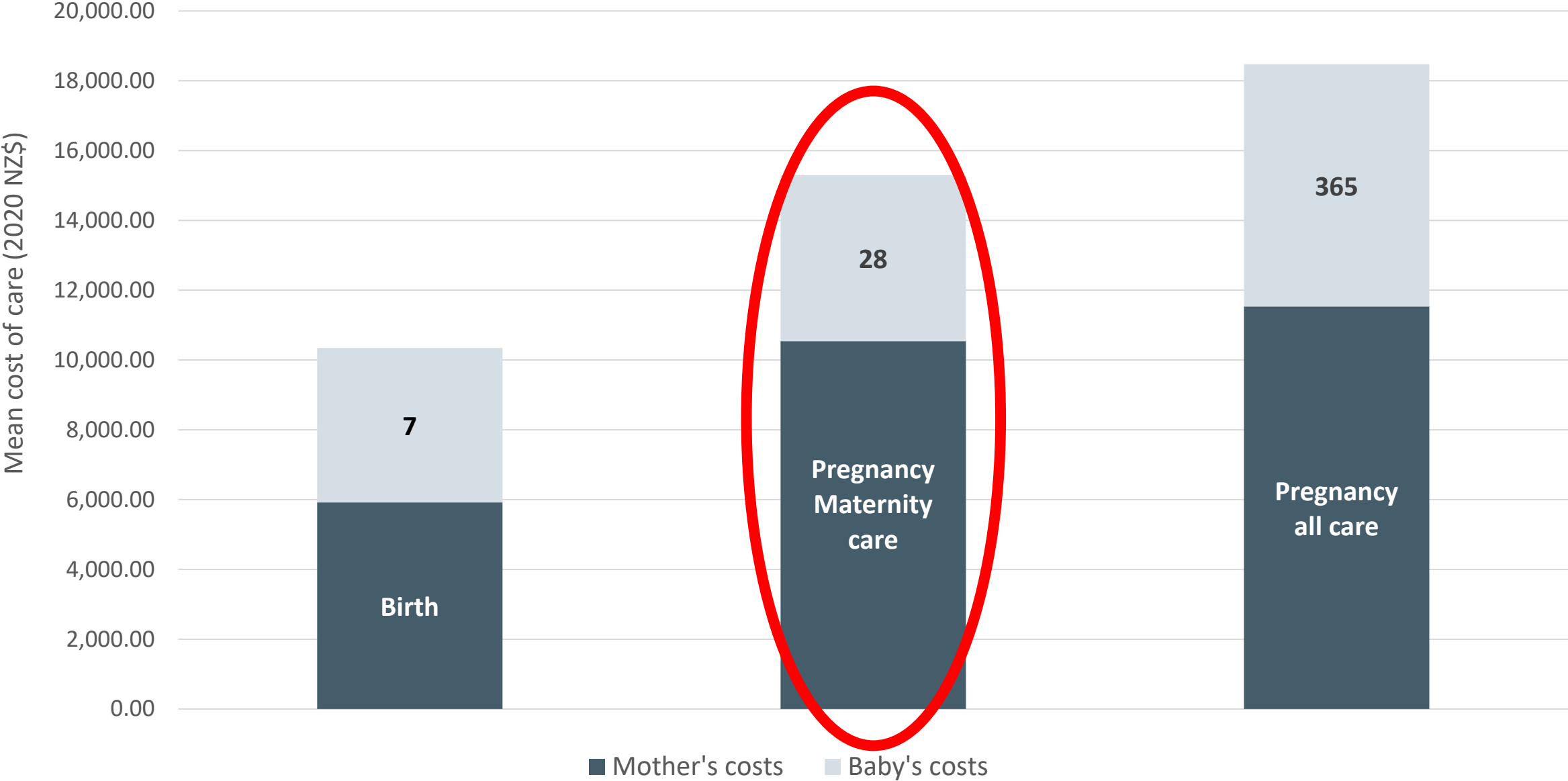
- Methodology
- Levels of care inclusion
- How does cost differ by:
 - Gestation at birth
 - Caregiver
 - Mode of delivery (actual and intended)



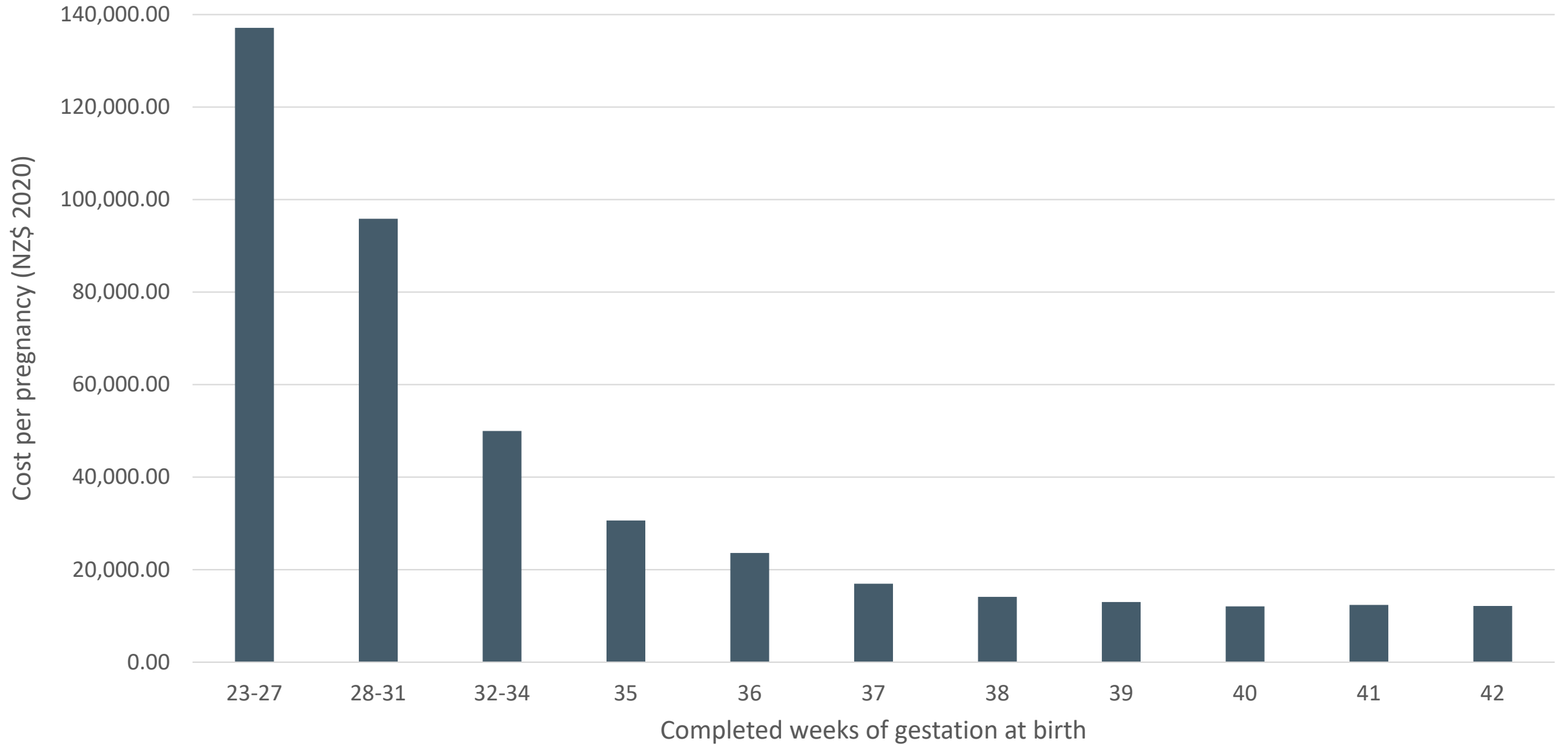
Costs attributable to mother and baby across levels of analysis



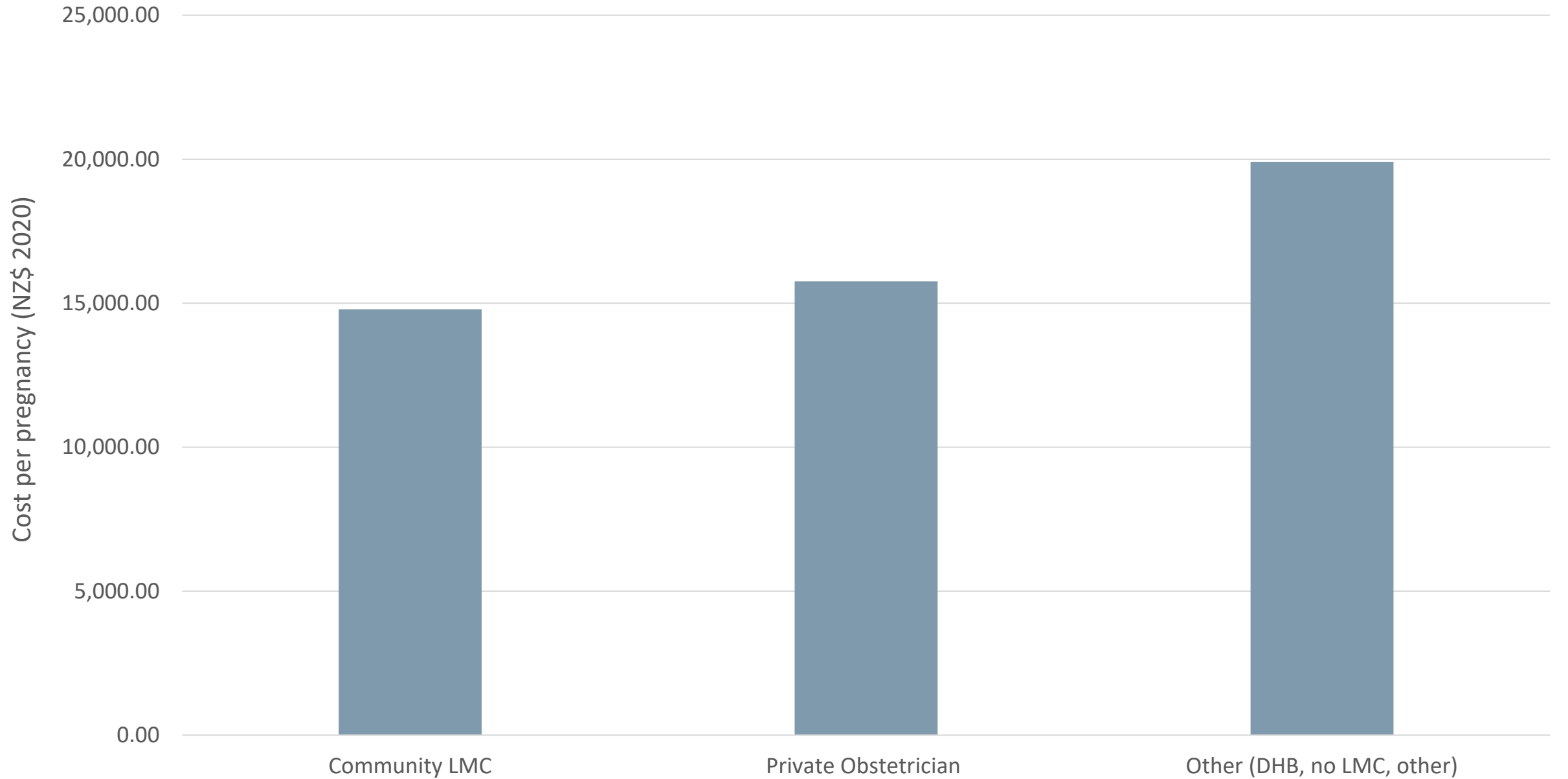
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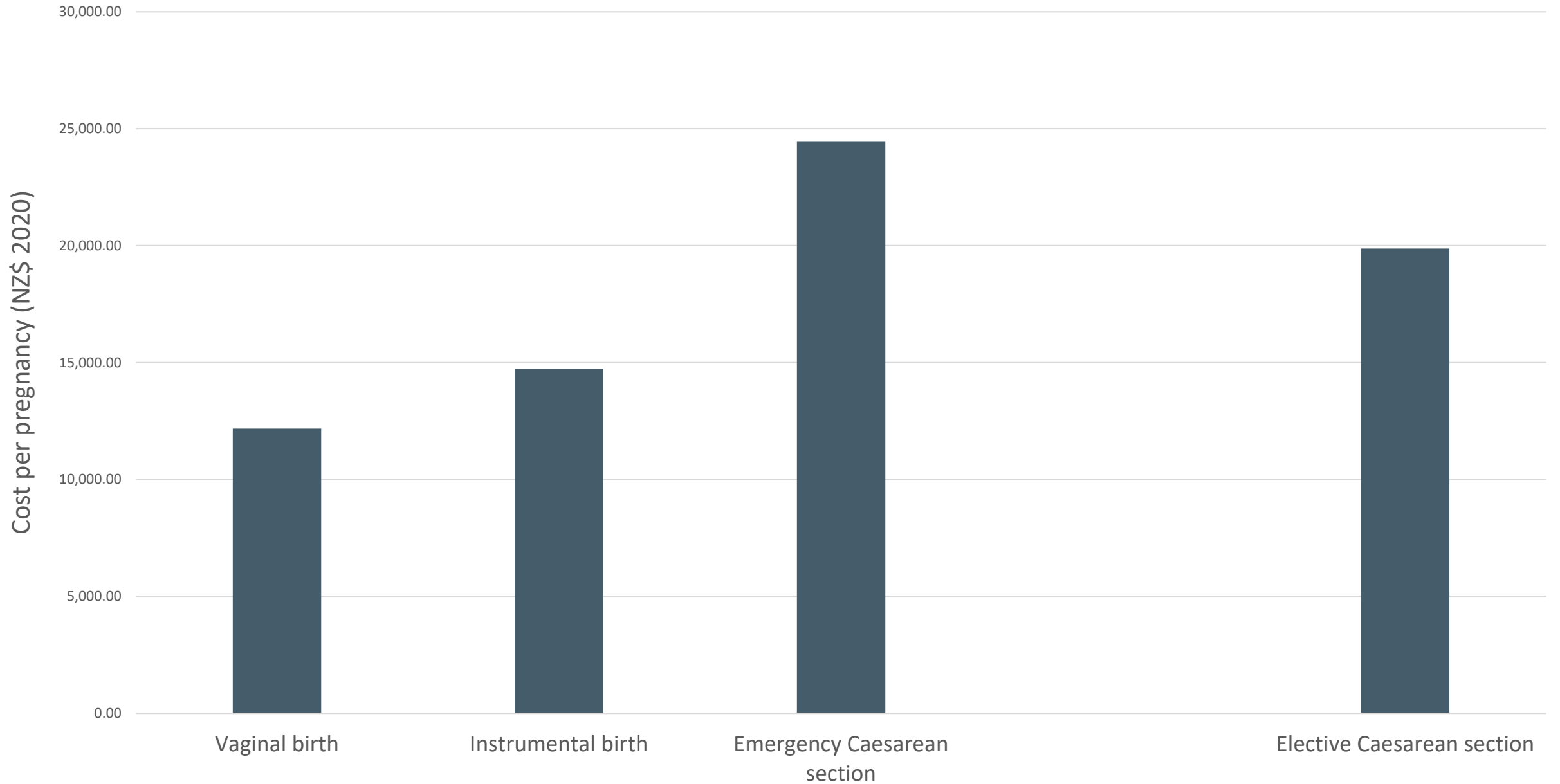
Cost of maternity care by gestation at birth



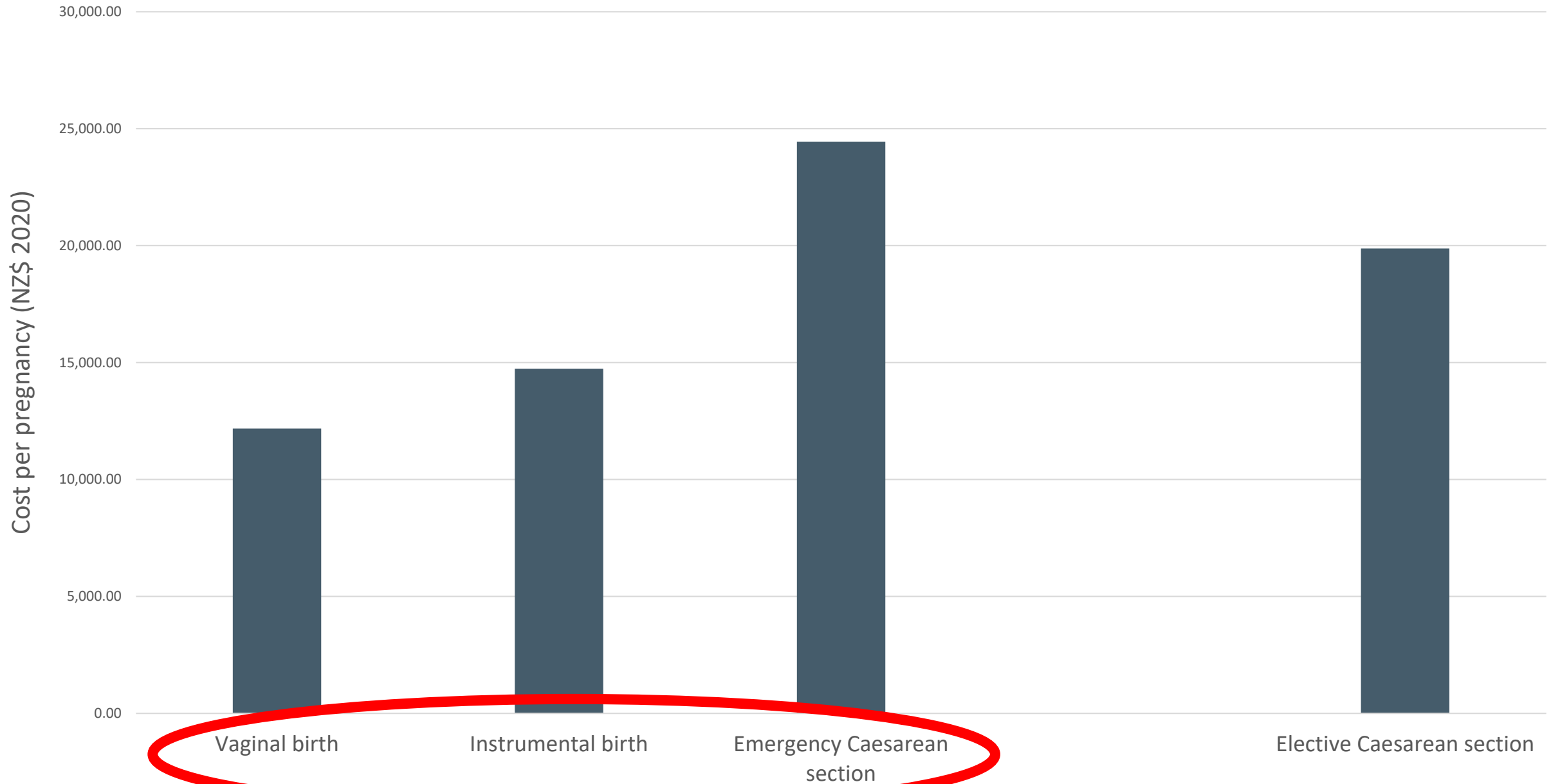
Cost of maternity care by caregiver



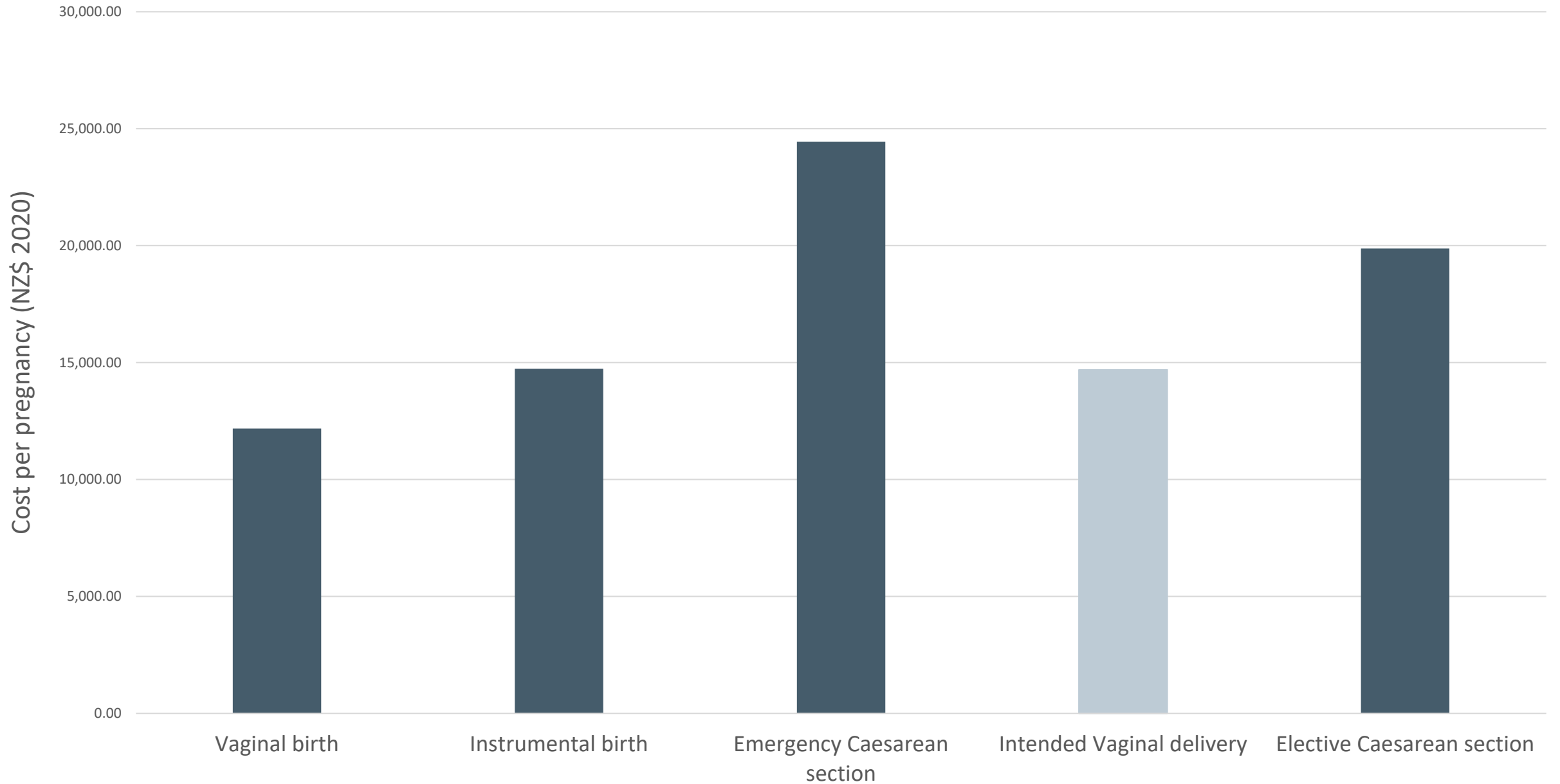
Cost of maternity care by mode of delivery



Cost of maternity care by mode of delivery



Cost of maternity care by mode of delivery



	Community LMC (Midwifery, GP)			Private Obstetrician		
	N = 252,772			N = 13,523		
	%	Mean cost NZ\$ 2020	Average length of stay birth admission	%	Mean cost NZ\$ 2020	Average length of stay birth admission
Full sample		14,788			15,760	
Vaginal birth	63.8	11,925	1.65	35.1	11,253	1.32
Instrumental birth	9.2	14,623	2.57	11.9	12,998	1.96
Elective Caesarean section	11.0	19,668	3.22	31.4	17,557	2.91
Emergency Caesarean section	15.6	23,693	4.22	21.3	22,195	3.72

Summary

- Utilizes a large, routinely collected dataset

(>90% correlation on key datapoints with ADHB electronic maternity clinical record)

- Approximately 2/3 of cost of maternity is in birth admission and very early neonatal period

- Substantial decrease in cost with increasing gestation to 37 weeks then plateaus

- deliveries at late preterm gestations (35-37 weeks) are more dependent on clinical decision making and thus knowledge of the economic impacts may influence a change in practice

- Elective caesarean section more expensive than intended vaginal delivery regardless of what mode of delivery a woman actually ends up having

- Further research...
 - Multivariable analysis of cost:
 - Intended mode of delivery
 - Caregiver
 - Ethnicity