BACKGROUND
There is national and international concern for rising caesarean section rates and increasing obstetric intervention in childbirth, particularly in the primiparous population. Repeat caesarean section is a major factor contributing to the increasing caesarean section rate, making primiparous women an important target for strategies that aim to reduce unnecessary intervention and surgeries in childbirth. "Getting the first birth right" has life-long implications for a woman’s physical, psychological, social and financial well-being.

AIM
The aim of this research was to compare outcomes for a cohort of low risk primiparous women who accessed a midwifery continuity model of care with those who received standard public care at the Canberra Hospital.

METHODS
A retrospective comparative cohort study design was implemented drawing on data from two databases held by the hospital for the period 1 January 2010 to 31 December 2011. The main outcome of interest was mode of birth. Categorical data were analysed using the chi-squared statistic and Fisher’s exact test. Continuous data were analysed using Student’s t-test. Comparisons are presented using unadjusted and adjusted odds ratios, with 95% confidence intervals (CIs) and p-values with significance set at 0.05.

RESULTS
There were 5,542 births in the two calendar years 2010 and 2011. Almost 45% of those were to primiparous women with 1,983 receiving standard care and birthing in Delivery Suite and 461 being provided care as part of a continuity midwifery model planning to give birth in the Birth Centre. After the eligibility criteria were applied the sample included 1646 low risk women, 1220 receiving standard care and 426 continuity of care. Please see Figure 1 for a flow diagram illustrating this process.

The study found significantly increased rates of normal vaginal birth (37.7% vs. 48.8%) and spontaneous vaginal birth (18% vs. 22.4%) in the continuity of care group. Regression analysis shows that compared to women in the standard care group, women in the continuity of care model were 66% more likely to have an assisted vaginal birth (27%) and caesarean section (38%) while this was 30% for women in the standard care group. These results are shown in table 1.

The women in the continuity midwifery group were also significantly less likely to experience a number of labour interventions including induction of labour, epidural anaesthesia and use of narcotics in labour, and had significantly increased rates of breast feeding initiation within an hour of birth and early transfer home (within 24 hours of birth) No differences were found in neonatal outcomes including low Apgar scores and admission to neonatal intensive care unit.

CONCLUSION
Strategies for reducing caesarean section rates and interventions in childbirth should focus on primiparous women as a priority. This study demonstrates the effectiveness of continuity midwifery models of care, suggesting that this is an important strategy for improving maternity outcomes in this population.

REFERENCES