The incidence of very low birthweight babies (VLBW - less than 1500g) being born in pregnancies conceived with the aid of assisted conception techniques, between 1995 and 2007, was 2.8 times more likely than in pregnancies conceived without the aid of assisted conception techniques (This difference is statistically significant - odds ratio 3.74; 95% confidence limits 3.51, 3.98) (Figure 22, Tables 17 and 18)

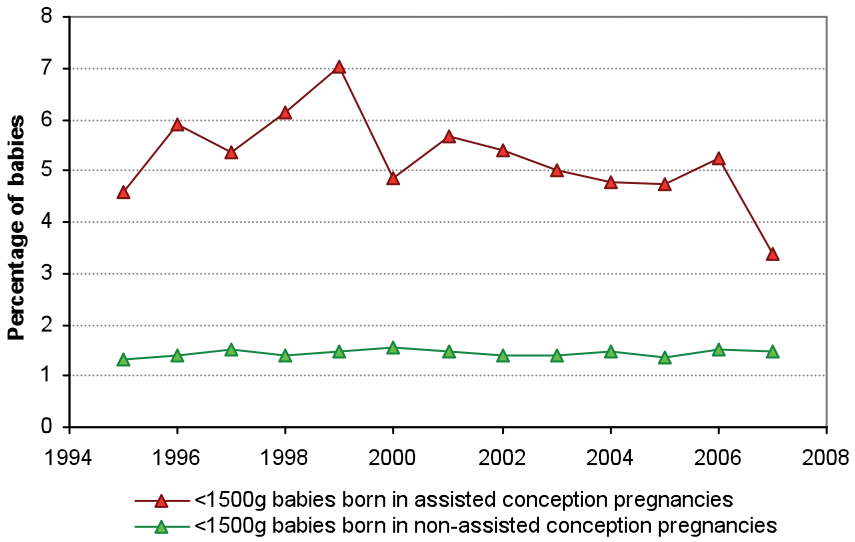

Fig 22: Incidence of very low birthweight (VLBW less than 1500g) babies born in assisted conception and non-assisted conception pregnancies in Queensland 1995-2007 (refer Tables 17 and 18)

The incidence of low birthweight babies (LBW - less than 2500g) being born in pregnancies conceived with the aid of extracorporeal assisted conception techniques, between 1995 and 2007, was 1.2 times more likely than in pregnancies conceived without the aid of AIH/AID and/or ovulation induction assisted conception techniques. This difference is statistically significant (odds Ratio 1.18; 95% confidence limits 1.10, 1.27). (Figure 23, Tables 19 and 20).

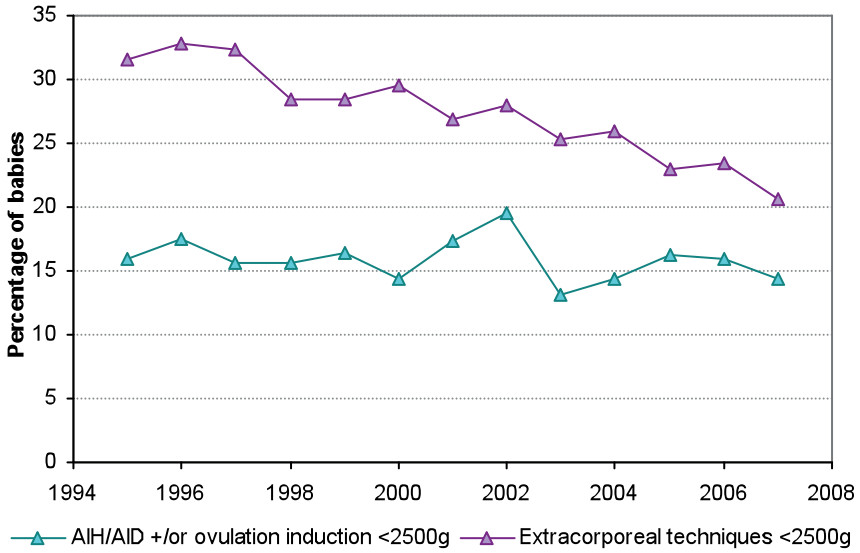

Fig 23: Incidence of low birthweight (LBW less than 2500g) babies born in assisted conception pregnancies In Queensland 1995-2007 by type of assisted conception (refer Tables 19 and 20)

The incidence of very low birthweight babies (VLBW - less than 1500g) being born in pregnancies conceived with the aid of extracorporeal assisted conception techniques, between 1995 and 2007, was 1.7 times more likely than in pregnancies conceived with the aid of AIH/AID and/or ovulation induction assisted conception techniques; this difference is statistically significant - odds Ratio 1.79; 95% confidence limits 1.57, 2.04 (Figure 24, Tables 19 and 20).

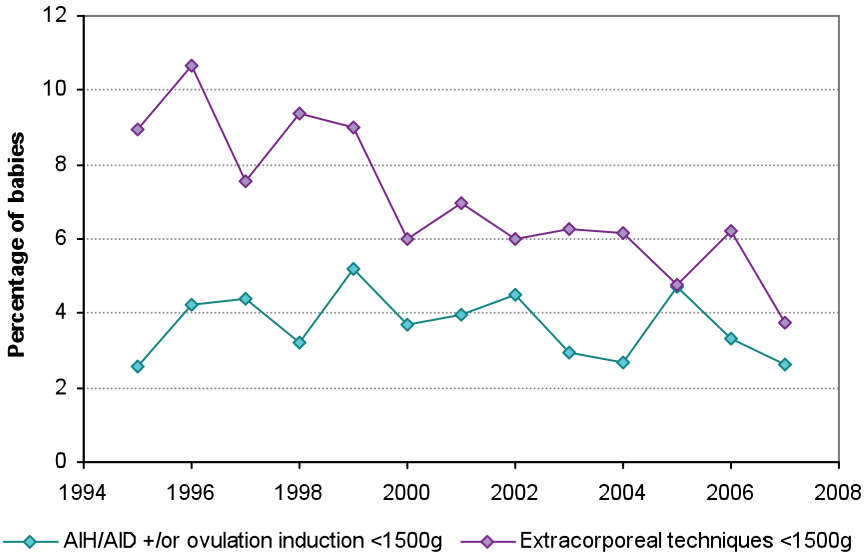

Fig 24: Incidence of very low birthweight (VLBW less than 1500g) babies born in assisted conceptionpregnancies in Queensland 1995-2007 by type of assisted conception (refer Tables 19 and 20)

When the influence of multiple pregnancy is removed and only singleton births from pregnancies conceived with and without the aid of assisted conception techniques are examined, the incidence of babies born with birthweight between 2500g and 3999g are found to be equivalent in the two groups (Figure 25, Tables 21 and 22). Though there are differences in the incidence of birthweight less than 2500g (Figure 26, Tables 21 and 22) and 4000g or more (Figure 25 Tables 21 and 22), these differences are small when compared with the overall differences. Thus, the majority of the difference in the incidence of low birthweight babies in pregnancies conceived with the aid of assisted conception techniques relates to the high incidence of multiple pregnancies with assisted conception techniques.

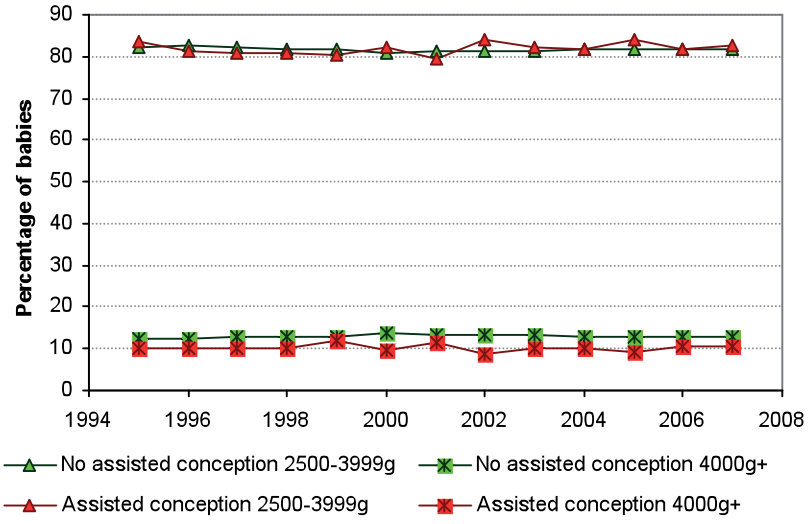

Fig 25: Incidence of birthweight categories 2500g or more of babies born in singleton pregnancies conceived with assisted conception and without assisted conception (refer Tables 21 and 22)

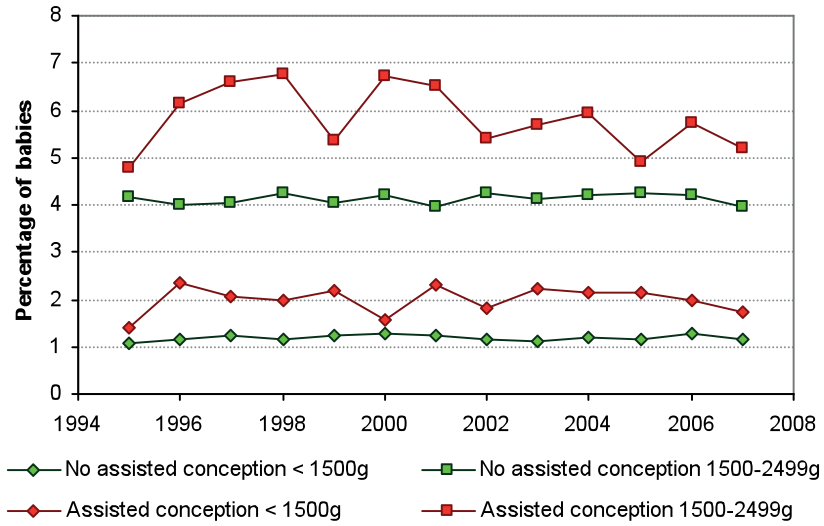

Fig 26: Incidence of birthweight categories less than 2500g of babies born in singleton pregnancies conceived with assisted conception and without assisted conception (refer Tables 21 and 22)

1.8 Onset of labour:

Over the 20 years from 1988 to 2007 there has been a significant reduction in the incidence of spontaneous labour (spontaneous labour vs rest; odds ratio 0.53, 95% confidence limits 0.52, 0.54) and a significant increase in the incidence of elective caesarean section (elective caesarean section vs rest; odds ratio 2.32, 95% confidence limits 2.23, 2.41) (Figure 27, Tables 23 and 24). The incidence of induction of labour has increased marginally over this period of time.

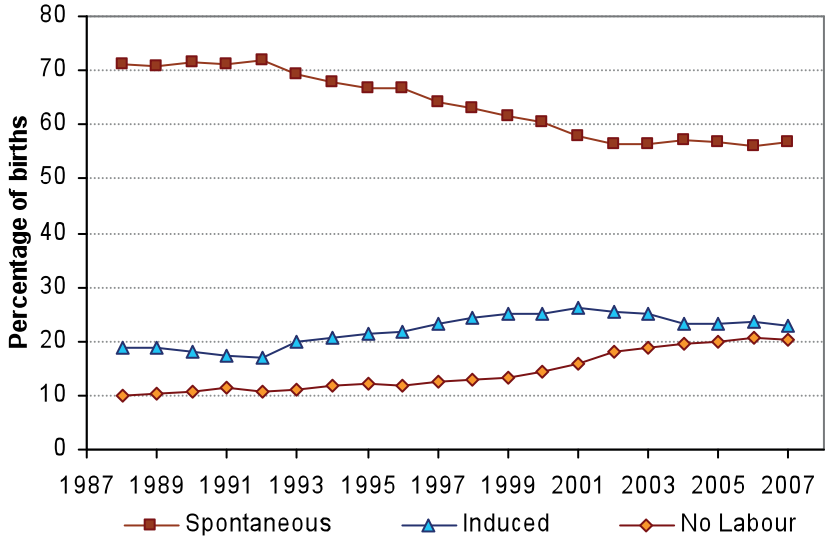

Fig 27: Onset of labour - all births, Queensland 1988-2007 (refer Tables 23 and 24)

The incidence of spontaneous onset of labour has decreased significantly from 73.9% to 63.7% in public hospitals (spontaneous onset of labour vs rest; odds ratio 0.62, 95% confidence limits 0.60, 0.64), and from 60.5% to 40.4% in private hospitals (spontaneous onset of labour vs rest; odds ratio 0.44, 95% confidence limits 0.41, 0.47) (Figure 28, Tables 25 and 26). Labour remains at or near 100% spontaneous in onset in home births.

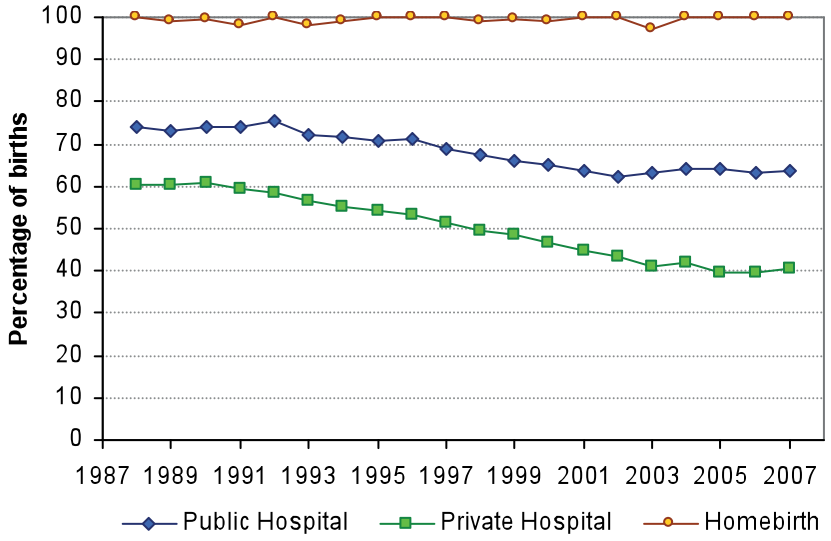

Fig 28: Spontaneous onset of labour by care mode, Queensland 1988-2007 (refer Tables 25 and 26)

The incidence of induction of labour has increased significantly in public hospitals over this 20 year period (induction of labour vs rest; odds ratio 1.35, 95% confidence limits 1.30, 1.40); in private hospitals the incidence has varied but has not changed significantly overall (Figure 29, Tables 25 and 26).

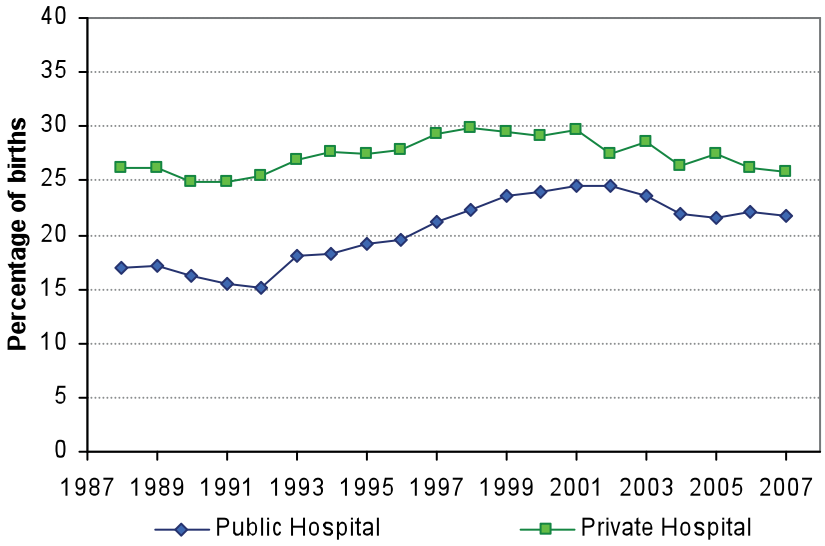

Fig 29: Induction of labour by care mode, Queensland 1988-2007 (refer Tables 25 and 26)

The incidence of elective caesarean section birth has increased significantly (by a factor of 1.6) in public hospitals (elective caesarean section vs rest; odds ratio 1.70, 95% confidence limits 1.62, 1.78), and highly significantly (by a factor of 2.6) in private hospitals (elective caesarean section vs rest; odds ratio 3.36, 95% confidence limits 3.13, 3.61) (Figure 30, Tables 25 and 26).

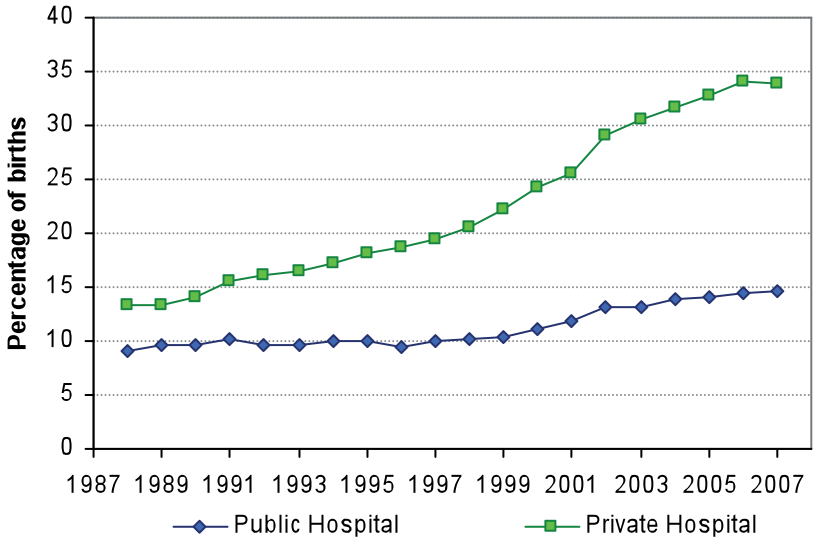

Fig 30: Elective caesarean section by care mode, Queensland 1988-2007 (refer Tables 25 and 26)