

In states without in vitro fertilization (IVF) insurance coverage, more embryos are transferred per cycle. This leads to higher risks of multi-fetal pregnancies and adverse maternal and fetal outcomes. This retrospective cohort study examined pregnancy outcomes based on the number of embryos transferred during IVF in Vermont: a state where no insurance mandate exists. Based on the associated outcomes, estimated costs to the hospital (FAHC) and incremental costs per baby gained were calculated.

116 pregnancies met inclusion criteria and produced 152 babies. The highest prematurity and cesarean section rates were found in double embryo transfers (DET) (35.3% RR = 5.6, 95% CI [0.82, 38.04] and 54.9% RR=2.0, 95% CI [0.87, 4.89] respectively), while the lowest rates were found in single embryo transfers (SET) (6.3% and 26.7%, respectively). Premature singletons increased as embryos transferred increased: 6.3% (SET), 9.1% (RR=1.4, 95% CI [0.17, 11.61]) (DET) and 10.0% (RR=1.6, 95% CI [0.16, 16.10]) (triple or quadruple embryo transfers (T/QET)) as did cesarean sections for singletons: 26.7% (SET), 36.6% (RR=1.4, 95% CI [0.55, 3.55]) (DET) and 47.1% (RR=1.8, 95% CI [0.68, 4.79]) (T/QET). 3.9% and 9.1% of term DET and T/QET, respectively, were LBW. The extrapolated costs per cohort were \$639,279, \$1,568,316 and \$1,112,278 for SET, DET, T/QET, respectively. Each baby gained cost \$23,226 and \$17,518 for DET's and T/QET's, respectively.

By attempting to gain babies through multiple embryo transfers, hospitals accrue inordinate bills due to the associated adverse pregnancy outcomes. However, the lack of insurance coverage for IVF makes it financially prohibitive for couples to elect single embryo transfers.