Objective: To measure the contribution of market-level prices, utilization, and health risk to newborn spending variation among Texas Medicaid-insured newborns.

Study population: Medicaid live births between January 1, 2014 and December 31, 2014 with birth weight of at least 400 grams.

Methods: The study used Texas Medicaid claims, encounters and enrollment files linked to birth and death certificates for Medicaid newborns. Newborn care spending was defined as spending per newborn hospital stay including between hospital transfers until first discharge to home or death, and categorized by service category into inpatient facility and related professional spending. Regional variation in newborn care spending was decomposed into price and utilization accounting for input price and health risk using the method by White (2012) and Franzini et al (2014).

Results: The contributions of price to newborn spending variation was 44% and differed by service category. Hospital facility spending variation was driven by prices, while professional spending variation was driven by utilization. Utilization accounted for 56% of spending variation which was further decomposed into 29% by health risk and 27% by health risk-adjusted utilization.

Conclusion: We find that significant regional spending variation exists in Medicaid newborn care across Texas. Identifying regions of high price and excess utilization may improve efficiency in newborn care.