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Birth Weight and Place: The Impact of Structural Level Characteristics on Infant Health Outcomes

To date, research has not addressed geographic differentials in birth weight due to individual- and structural-level characteristics based on a national sample of births in the United States. Results from international and local studies indicate that the risk of low birth weight falls unevenly across space and for the infant population. Further, if the health care needs of infants and children are to be understood in order to inform policy decisions about infant health, an analytic approach capturing how both individual- and structural-level inequalities operate to influence birth weight is needed. This research attempts to eliminate this gap by analyzing multilevel models using various structural level characteristics. One of these county-level structural characteristics is selected in an attempt to test for the influence of endogenous effects on birth weight outcomes. Other structural level characteristics are chosen to tease out the nature of disparities in infant health outcomes that may occur based on the local characteristics of the places in which parents and infants live. Results indicate that biological characteristics at the individual-level largely contribute to birth weight differentials, with little support for the use of structural-level characteristics in explaining variation in birth weights. However a similar theoretical framework and methods are advocated for the examination of other infant and child health outcomes.