

NCS Research Day Abstract Submission
Category: Recruitment and Retention

Title: Pre-conception, Prenatal, and Postpartum Residential Mobility

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Introduction: Residential mobility is a logistic and scientific problem for longitudinal studies, producing the need for protocols for tracking and data collection outside of the study area. Mobile participants are at high risk of loss to follow-up and mobility contributes to misclassification of environmental exposures.

Methods: We analyzed data from 1,750 women who were pregnant anytime in 2006-2010, were continuously insured, and had livebirths at one Ramsey County hospital.

Results: The mean age of women was 30 years; 56% were non-Hispanic white, 70% were partnered, 77% were born in the U.S., and 24% received Medicaid at delivery. Thirty-nine percent moved at least once during the study period: 23% moved between 1-year prior to conception and pregnancy detection, 13% during pregnancy, and 18% between infant birth and 1-year postpartum. For the prenatal period, 6% moved into more advantaged areas, and 7% into less advantaged areas. Prenatal mobility varied ($p \leq .0001$) by maternal age, with highest mobility in 19-24 year-olds; partner status (11% with a partner vs. 11% without, $p = .001$); Medicaid receipt (19% recipients vs. 10% others, $p \leq .0001$), and race ($p = .0002$; highest among black and Hispanics). Prenatal mobility was not associated with low birthweight, preterm, or small for gestational age infants.

Conclusions: These findings—and those from planned future analyses—will help us better plan field and data collection needs for the Study, as well as estimate the nature and degree of biases that may be introduced by mobility during the critical period surrounding pregnancy and delivery.

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