Frame Development and Sample Design for the 2018 National Survey of Children's Health

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Background

- National household survey sponsored by the Health Resources and Services Administration's Maternal and Child Health Bureau
- Conducted via mail and web, no field component
- Two-stage interview
 - 1. Screener: Identify households with children
 - 2. Topical: Age specific questions about the health and well-being of a single child in each household

Frame Development

- U.S. Census Bureau's Master Address File, appended with flags
- Challenge: find households with children
- Solution: used administrative records to create a child present flag
 - Stratum 1 explicit link to a child
 - Stratum 2a no explicit link to a child, but modeled more likely to have a child
 - Stratum 2b no explicit link to a child and modeled unlikely to have a child

Sample Design

- Allocated sample across states with the goal of getting the same number of Topical interviews (approx. 450) from each state
- No sampling in Stratum 2b
- Oversampled Stratum 1 without increasing variance more than 6% beyond that of a design that samples proportionally in both strata
- Factored in expected rates of undeliverable as addressed returns, response rates, and child prevalence rates
- Resulting sample sizes (approx.): 106,000 from Stratum 1; 70,000 from Stratum 2a

Thank You!

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