Presenter:
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Title:
Residential Mobility in Maternal Health: Evaluating its Impact on Health Care Access

Abstract:
In health geography, most epidemiological studies do not incorporate residential histories - a record of an individual's places of residence across a lifetime, and instead assume that the residential address of a patient at the initial point of service (at diagnosis, birth or death) remains fixed throughout the length of the study. However, this assumption may not be valid for a longer period of time (e.g. for maternal health, throughout childhood). Families may decide to relocate when long-term intensive care is needed for a member of their family at a specialty center that is not in the vicinity of their residence. Ignoring residential mobility is likely to bias true travel needed to receive care (including costs) and consequently lead to misidentification of regions with poor geographic access. In this presentation, I evaluate the impact of residential mobility for children with special health care needs -whose families face significant barriers to accessing care compared to children without special needs-, in the state of Florida, using the Florida Birth Defect Registry - a state-wide, population-based, passive surveillance system- and hospital discharge information, from 1998 to 2007. I illustrate the approach using a cohort of infants with Spina Bifida (SB), which is a complex, major birth defect with multiple presentations that typically requires long-term health care. I estimate the percentage of children with SB where the maternal zip code at birth matches the zip code of hospital discharge records. I then impute the new geographic location when the zip code is different from the maternal zip code. This is an important step to estimate the travel time, distance, and costs from the place of residence to the hospital where care was received. Lastly, I compute the difference in geographical accessibility prior and post imputation. The results are particularly informative for public health officials, and/or health services researchers to identify underserved areas and improve health service delivery