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DISCUSSION OF "SPATIAL ACCESSIBILITY OF PEDIATRIC PRIMARY HEALTHCARE: MEASUREMENT AND INFERENCE"

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The Affordable Care Act's Medicaid expansions aim to provide primary care to more Americans by changing eligibility criteria and payments to providers. While these reduce financial barriers, Medicaid patients are still more likely than privately insured to report other barriers, including lack of transportation, lack of timely appointments, long clinic waiting times and limited hours [Cheung et al. (2012)]. And removing financial barriers does not necessarily increase primary care utilization; in fact, following health care reform in Massachusetts, emergency department care actually increased [Smulowitz et al. (2014)]. Other authors document preferences for emergency department care among low-income individuals [Kangovi et al. (2013)]. Most relevant to this discussion is that patients reported that hospitals were more accessible than ambulatory primary care.

In the paper under discussion, Nobels, Serban and Swann (2014) focus on *spatial accessibility* of primary care by developing a sophisticated method for assigning patients to nearby primary care physicians, studying three measures of accessibility given these assignments, and fitting spatially varying coefficient models to understand how accessibility varies with measurable factors. I will begin by describing the strengths of the approach and then discuss a few limitations and extensions.

The authors have gone to considerable trouble to build an assignment model that accounts for realistic features of both demand and supply sides. Their approach minimizes travel time subject to realistic constraints on both sides: physicians require a minimum panel size to stay in business, the proportion of physicians that accept Medicaid and Medicaid caseload vary, patients distribute among nearby physicians to minimize congestion, and patients with (without) cars are willing to travel no more than 10 (25) miles for primary care. Conditional on the assignments generated by this procedure, the authors study variation in three access measures: congestion, coverage (having a physician within the allowed travel maximum), and travel time by census tract and population (Medicaid vs. non-Medicaid). They also study policy interventions that alter three key parameters: the proportion of physicians accepting Medicaid, the proportion of Medicaid patients in physicians' panels, and the mobility of Medicaid patients. Finally, the authors consider how their accessibility measures co-vary across space with factors such as household income, racial diversity, unemployment and education.

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