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**Disability and Death in Divergent Deportation Contexts:
Revisiting the Hispanic Mortality Paradox**

Abstract: The Hispanic Mortality Paradox (HMP) refers to an advantage in life expectancy among Hispanic immigrants (relative to U.S.-born groups) despite lower socioeconomic attainment. The HMP has been well-documented (Riosmena et al. 2015; Riosmena, Wong, and Palloni 2013b): Hispanic immigrants experience a survival advantage—e.g., three-year advantage over U.S.-born whites (Goldman 2016)—compared to U.S.-born counterparts. However, today’s institutional context differs sharply from earlier eras when evidence of the paradox first emerged. Thirty years after the 1980s overhaul of immigration law, Hispanic immigrants—including two-thirds of unauthorized immigrants—are now a long-term, settled population (Taylor et al. 2011). Among Hispanic noncitizens, the possibility of deportation has grown rapidly, while Hispanics have also become concentrated in dangerous jobs (Hall and Greenman 2015) with limited health access (Perreira and Pedroza 2019). In this paper, we explore the paradox among Hispanic immigrants surveyed between 2000 and 2016 to determine whether and where the previously observed advantages to longevity may be losing ground. We pay particular attention to trends in recent years because of the sudden rise in deportations since the early 2000s. First, we use Census data to examine rates of disability among Hispanic immigrants. Then, we present estimated death counts as a function of disability and health indicators. Finally, we describe disability rates and death counts across divergent policy contexts. At one end of the spectrum are places where cooperation with immigration authorities was common, exposing Hispanic immigrants to heightened exclusion. By contrast, other places limited the reach of immigration enforcement. By examining disability and preventable death in divergent contexts, we call attention to the indirect determinants of health in an era of mass deportations.

Disability and health data: We analyze American Community Survey (ACS) data on self-reported disability (Ruggles et al. 2018). The data provide prevalence estimates for six measures of disability (i.e., cognitive, ambulatory, independent living, self-care, vision, or hearing difficulty). Among metro residents in 2016, 12.5% report at least of one these disabilities, 5.9% report two or more difficulties, and 3.3% report three or more. Respondents also report health insurance status. By 2016, 91.4% of metro residents report having any health insurance, up from 85.5% in 2012. Among those with insurance coverage in 2016, 57.7% only had private insurance, 21.6% only had public insurance, and 12.0% had both.

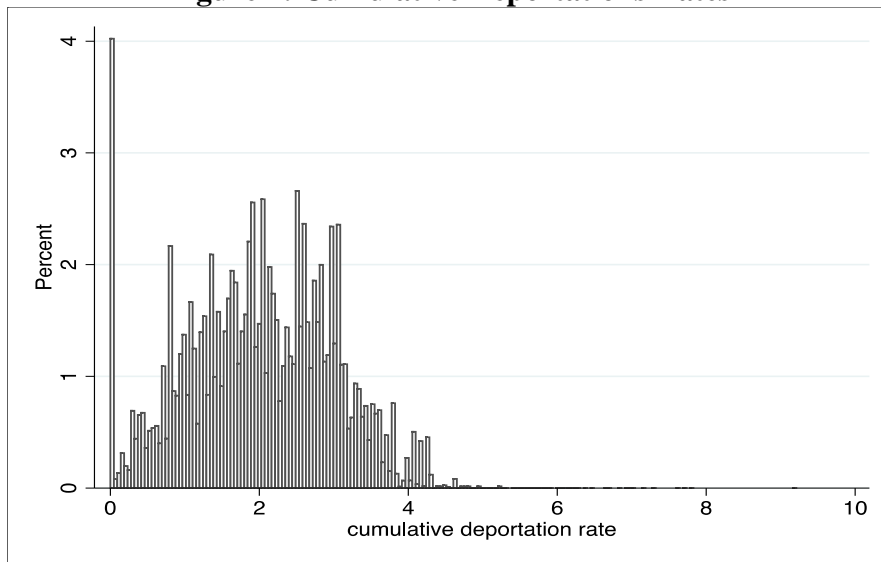
Deportation data: This paper measures cumulative deportation rates [Figure 1] to capture the variation across metro areas in immigration enforcement under the Secure Communities

program. Deportation rates equal the number of deportations reported in each county since its local jail activated the Secure Communities program. The rate is adjusted for (a) the number of days each metro area had participated in the program in subsequent years and (b) the size of the noncitizen population. Deportation rates (D ; mean: 1.98; standard deviation: 0.97) equal:

$$D = \log \left(\left\{ \frac{\text{cumulative removals and returns}}{\text{noncitizens per thousand}} \times \frac{\text{days since initial activation}}{365} \right\} + 1 \right)$$

Lagged deportation rates ($t - 2$ years) are merged with ACS responses for all metro residents. Weighted deportation rates are calculated for metro respondents without a county identifier. To account for variation due to the timing of the program, the analyses focus on five years (2012-2016) when deportation rates corresponded to the vast majority (over 80 percent) of all counties.

Figure 1: Cumulative Deportations Rates



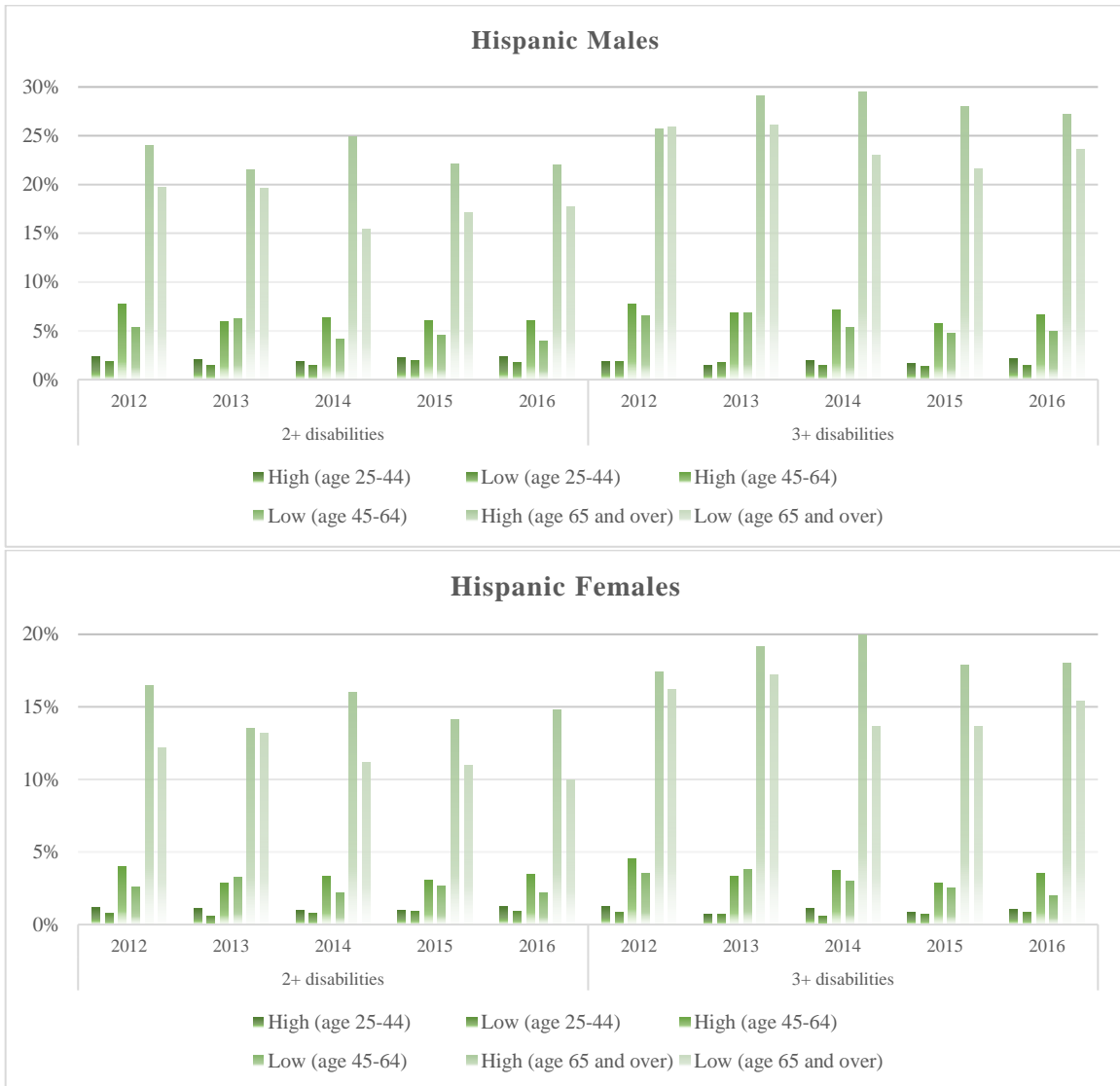
Source: Author's calculations using Secure Communities data across metro areas (2012-2016).

Preliminary results and analysis plan: We first examine the gap in disability rates across deportation contexts. In Table 1, we display Hispanic rates of disability in low versus high deportation contexts ($D < 1$ versus $D > 3$; or \pm one standard deviation from the mean) for men and women. In these figures, we focus on Hispanics at risk of being directly affected by deportations (Mexicans and “other” Hispanics) and exclude Cubans and Puerto Ricans. Among Hispanic men, disability rates in high deportation contexts exceed those in low deportation contexts. The pattern is particularly pronounced among the oldest (age 65 and over) Hispanic males and females.

Preliminary logistic regressions suggest that deportation rates predict Hispanic disability rates—except among Cuban or Puerto Ricans—net of age, sex, and insurance status. In the full paper, we will also employ multilevel models and account for other factors related to disability (e.g., occupation, marital status, employment status, poverty status, and extended family).

In addition to the descriptive and multivariate analyses described above, we will also rely on key predictors of survival—especially functional ability and disability (Goldman, Gleit, and Weinstein 2017)—to estimate variation in death counts by deportation context. Doing so will allow us to explore whether death counts are expected to diverge by deportation context.

Table 1: Disability Rates by Deportation Context (Hispanic male vs. female metro residents)



Source: Author's calculations of disability rates among Mexican and "other" Hispanic female ACS 2012-2016 respondents.

Implications: We examine whether the era of mass deportations may be eroding Hispanics' mortality advantages. Currently, research findings remain at odds regarding whether local factors might account for waning Hispanic health advantages. Restrictive immigration policymaking at the state and local level have been found to exacerbate health inequalities (Perreira and Pedroza 2019)—including mental health morbidity (Hatzenbuehler et al. 2017)—but other work finds little support for a negative relationship between community-level prejudice and Hispanic mortality (Morey et al. 2018). Since it remains unclear how prejudice or attitudes toward immigration control can affect disability or longevity, our study instead explores variation in cumulative rates of deportation. We argue deportation intensity should predict disabilities because high levels of immigration enforcement deprive immigrant communities of social capital (Hagan, Leal, and Rodríguez 2015) and undermine trust in mainstream institutions (Cruz Nichols, Lebrón, and Pedraza 2018). In turn, noncitizens and their networks may experience a

range of difficulties as they lose social support and/or become exposed to hazardous conditions. In our paper, we follow recommendations from a recent review of Hispanic health research by examining the effects of policy on multiple outcomes (e.g., disability and death counts) and across multiple levels (i.e., individual outcomes nested within metro areas) (Philbin et al. 2018).

Our paper builds on research that has uncovered a range of individual and household-level conditions under which the HMP appears to have been eroding. Others have found that duration of stay (Riosmena et al. 2015), self-selection (Riosmena, Kuhn, and Jochem 2017; Riosmena, Wong, and Palloni 2013a), health access and utilization (Bacon, Riosmena, and Rogers 2017; Cervantes et al. 2018), being working versus older age (Sheftel and Heiland 2018), second versus third generation status (Giuntella 2016), and high rates of obesity and diabetes among Hispanics (Goldman 2016) deteriorate the mortality advantage Hispanic immigrants tend to enjoy compared to U.S.-born groups. Contributing to these studies, we aim to examine whether the HMP varies between locations where noncitizens are especially vulnerable to deportation compared to places where noncitizens are generally spared from the highest rates of deportation.

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