

Health and Health Behavior in New Immigrant Destinations in the Midwest

We are seeking funding to hire a graduate student to assist with identifying specific datasets and variables of interest to facilitate our ability to develop a full research proposal to the Central Plains Research Data Center (CPRDC).

Research Interest: As a team, we have been exploring the health outcomes and health behaviors associated with *new destination communities* in Iowa at the ZIP code level to identify disparities. Access to restricted-use microdata would allow us to expand this work beyond Iowa to the Midwest and would allow us to explore additional outcomes and behaviors, to which we have not had access.

Rural areas with previously stable demographics experiencing rapid domestic and foreign migration have been identified as “new destination communities” (Lichter & Johnson, 2009). Changing demographics have coincided with the increase of low-wage agricultural and manufacturing jobs in areas of the Midwest and Southeast which brought internal migration of individuals from established Latino populations within the US (Lichter & Johnson, 2009), but also immigration from rural parts of Mexico and Central America (Lichter & Johnson, 2009). Previous research hypothesizes that new destinations are an important influence on health because of unique stressors faced by new immigrants, as well as challenges faced by local health care, public health and community services in adapting to serve new populations. The demographic shifts have resulted in new residents facing barriers tied to citizenship, including access to health care (Carrasquillo, Carrasquillo, & Shea, 2000) and use of health services (Ortega et al., 2007). New residents living in new destination communities do not have access to established networks and systems which benefit them, including organizations and advocacy groups (Monnat, 2017). Yet, despite the conditions that can lead to significant disparities, few studies have examined the association between new destination communities and the provision of care, health outcomes, and health behaviors.

We have developed a standardized statistical algorithm using publicly available data (Census data at the ZIP code level) to identify new destination communities through an iterative process including the checking of face validity. A new destination community is defined 1) as a ZIP code with at least 10% of the total population in 2011 being Latino/Hispanic and 2) the ZIP code must have experienced at least a 10 point increase in the percent of Latino/Hispanic population from 1990-2011. Rural new destination communities are defined using the ZIP Code approximations for Rural-Urban Commuting Area Codes (RUCAs).

In order to examine hypothesized differences in health and health behavior between new destination and established communities, we need geographically specific data on health and health behavior. Documenting these disparities is a first step in developing interventions to modify health systems, change behavior, and support prevention in vulnerable populations. If the disparities and associated factors are not identified, they cannot be mitigated. We will use the funds to identify datasets available through CPRDC that contain data on health and health behavior at the ZIP code level, and sampling designs that include sufficient representation from new destination areas.

We have been collaborating as a team over the past six months. Our collaborations have resulted in one conference abstract and a grant submission to the Centers for Disease Control and Prevention. Natoshia M. Askelson, MPH, PhD leads the team and provides expertise in rural health, health behavior, and maternal and child health. Nicole Novak, PhD is trained as an epidemiologist and has extensive experience in population studies and immigrant health, particularly in new destination communities.

Suzanne Bentler, PhD provides expertise in the areas of health services research and statistics. Jason Daniel-Ulloa, PhD works in new destination communities and Latino health. Edith Parker, DrPH has conducted significant research in the areas of health disparities and community engagement. Mark Pooley, MS provides expertise in GIS. Grace Ryan, MPH is a PhD student who has provided statistical support. Laura Seegmiller, MPH provides research and logistical support related to cancer prevention and control topics.

Benefit to the Census: We are not applying to use restricted Census data.

Proposed Research Tasks: The graduate student will report directly to Dr. Askelson and Dr. Novak. The student will be asked to identify datasets (and eventually variables within those datasets) which address health and health behavior, have geographic resolution that is compatible with ZIP-code level new destination criteria, and are available for the timeframe of our interest.

The student would start by reviewing what is publically available for datasets from NCHS including National Health Interview Survey, National Health and Nutrition Examination Survey, National Immunization Survey, National Survey of Family Growth, or Vital Statistics Birth Certificates and from AHRQ such as the Medical Expenditure Panel Survey. Because the populations in new destinations communities tend to be relatively young, we would be focusing on health outcomes that are relevant for young, generally healthy populations (e.g. vaccinations, cancer screening, subclinical measures of child growth and development). We will also focus on antecedents to health outcomes such as health behaviors.

- Carrasquillo, O., Carrasquillo, A. I., & Shea, S. (2000). Health insurance coverage of immigrants living in the United States: Differences by citizenship status and country of origin. *American Journal of Public Health, 90*(6), 917-923. doi:10.2105/AJPH.90.6.917
- Lichter, D. T., & Johnson, K. M. (2009). Immigrant gateways and Hispanic migration to new destinations. *International Migration Review, 43*(3), 496-518. doi:10.1111/j.1747-7379.2009.00775
- Monnat, S. M. (2017). The new destination disadvantage: Disparities in Hispanic health insurance coverage rates in metropolitan and nonmetropolitan new and established destinations. *Rural Sociology, 82*(1), 3-43. doi:10.1111/ruso.12116
- Ortega, A. N., Fang, H., Perez, V. H., Rizzo, J. A., Carter-Pokras, O., Wallace, S. P., & Gelberg, L. (2007). Health care access, use of services, and experiences among undocumented Mexicans and other Latinos. *Archives of Internal Medicine, 167*(21), 2354-2360. doi:10.1001/archinte.167.21.2354