



International Conference on Geographies of Health and Living in Cities: Making Cities Healthy
for All, Healthy Cities 2016

Disability, Insurance Coverage, Area Deprivation and Health Care: Using Spatial Analysis to Inform Policy Decisions

Henan Li^{a,*}

^aBrandeis University, 415 South Street MS 035, Waltham, MA 02453, USA

Abstract

In the United States, people with disabilities with public insurance are often unable to find suitable health care providers nearby, resulting in needing to travel long distances to large health centres to access necessary health care. This barrier is even more pronounced to those with disabilities living in deprived areas. Using Census data and Area Deprivation Index (ADI) developed by University of Wisconsin-Madison's ADI project, OLS and Geographically Weighted Regression (GWR) regression analyses showed that high area deprivation index (ADI) and high percentage of public-only health insurance coverage predict disability prevalence. While ADI, public-only insurance coverage percentage and disability prevalence do not significantly predict the number of hospitals, they slightly improved the fit of the GWR model, which was significantly predictive. Future research should continue exploring related factors, and address the challenges of having limited access to hospitals in poorer suburban and rural areas faced by people with disabilities, who are also more likely to have public-only health insurance.

© 2016 Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the organizing committee of Healthy Cities 2016

Keywords: Disability; Health insurance; Area deprivation, Health care, Geographic information system (GIS)

1. Introduction

Access to health care is a topic of great importance to many socially-disadvantaged groups in the United States. The Affordable Care Act (ACA) mandates that all Americans have health insurance and that health care be accessible to all, regardless of geographic location, socioeconomic status, or disability¹. However, for those with disabilities

* Corresponding author. Tel.: +1-781-736-3858; fax: +1-781-736-3773.
E-mail address: lhnl@brandeis.edu

living in deprived areas, considerable barriers continue to exist^{2,3}. It was hypothesized that being in deprived areas and having only public health insurance (Medicare, Medicaid etc.) coverage contributed significantly to the access barriers. Economically deprived areas typically have fewer hospitals, resulting in poorer health care access for local residents⁴. Similarly, people with disabilities with public insurance are often unable to find suitable health care providers nearby, resulting in needing to periodically travel long distances to large hospitals to access necessary routine or specialty care^{5,6}. The aim of this present study is to explore the predicting effects of disability prevalence, public-only insurance coverage, and area deprivation index (ADI) on the access to hospitals in the New England region of the U.S.

This study examines the New England region, which is an area with a total population of 11,477,279 (2014 data), spanning six Northeastern U.S. states: Connecticut (CT), Maine (ME), Massachusetts (MA), New Hampshire (NH), Rhode Island (RI) and Vermont (VT)⁷. Despite having several highly-ranked health care systems in the area, many residents with disabilities still experience a great deal of difficulties accessing care due to factors such as lack of reliable transportation and traffic congestions⁸. For instance, a recent report showed that about 54% of Massachusetts residents with disabilities and their family members or caregivers indicated that transportation to health care was very problematic⁹. Respondents reported they cannot access needed medical care when affordable, reliable transportation is unavailable or inaccessible⁹.

Being far away from care providers and subsequently lacking timely access to health care can translate into delayed or foregone primary, preventive and specialist care^{10, 11}. Delayed or foregone care are associated with multiple negative outcomes for people with disabilities, such as development of preventable secondary conditions¹², prolonged untreated active diseases¹³ and higher risks of physical and mental health problems⁶. Studying the geographical aspects of existing systems is of critical significance for the New England disability community⁹.

2. Data

The data analyzed in this study were 2010-2014 U.S. Census/American Community Survey (ACS) 5-year estimate data⁷, as well as Area Deprivation Index data, from University of Wisconsin-Madison’s HIPxChange program^{14, 15}. Disability is defined as having limitations in vision, hearing, cognitive, ambulatory, self-care, or independent living⁷. Area deprivation is defined as the socioeconomic deprivation experienced by a neighborhood, which takes into accounts factors such as median family income, home/rent value, education/profession/employment, and percent of households with access to motor vehicles. Public insurance coverage is defined as only having Medicare or Medicaid. Names and locations of hospitals located in the six states were provided through the Geographic Names Information System (GNIS)¹⁶. The analytical framework is presented below (Fig.1).

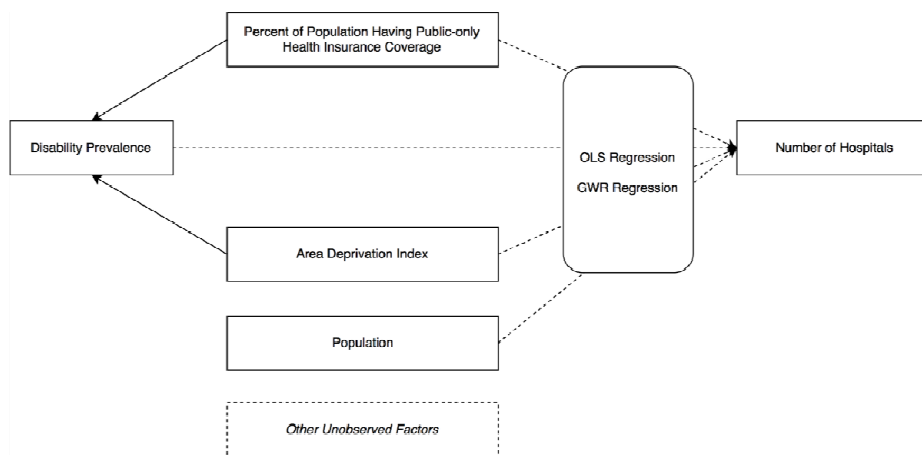


Fig. 1. Analytical Framework

Download English Version:

<https://daneshyari.com/en/article/4401318>

Download Persian Version:

<https://daneshyari.com/article/4401318>

[Daneshyari.com](https://daneshyari.com)