

Abstract

The Nurse Licensure Compact (NLC) enables registered nurses to practice across member states under a single multistate license, potentially improving healthcare access. This study examines the population health effects of the enhanced NLC implementation in 2018 using county-level data from 2014-2022 and a quasi-experimental design combining propensity score matching with difference-in-differences estimation.

This study analyzes five states that first adopted the enhanced compact in 2018 compared to seven non-participating states, focusing on four health outcomes: self-reported poor or fair health, poor physical health days, poor mental health days, and preventable hospital stays. The identification strategy is designed to reduce confounding from staggered treatment timing and COVID-19 effects.

Results reveal mixed effects that vary substantially across specifications and county characteristics. The preferred propensity score matching combined with difference-in-differences specification indicates that NLC adoption improved self-reported health status but increased poor mental health days and preventable hospitalizations. Effects exhibit considerable heterogeneity, with high-income counties experiencing more favorable outcomes than low-income areas. While baseline specifications violate parallel trend assumptions, the matched approach substantially improves identification credibility.

These findings extend occupational licensing research beyond labor market outcomes, to examine population health effects, demonstrating that healthcare workforce mobility policies can lead to complex, heterogeneous impacts. The concentration of adverse effects in lower-income areas may raise equity concerns for policy design and implementation of interstate healthcare compacts.

***Key words: Nurse Licensure Compact, population health, United States, difference-in-differences, propensity score matching