

ECONOMIC FINDING

When Nurses Travel: Labor Supply Elasticity During COVID-19 Surges

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Increased compensation is key to getting nurses to travel long distances to meet demand in other locations. This work suggests that mobility across an integrated national market is helpful for re-allocating workers when demand surges.

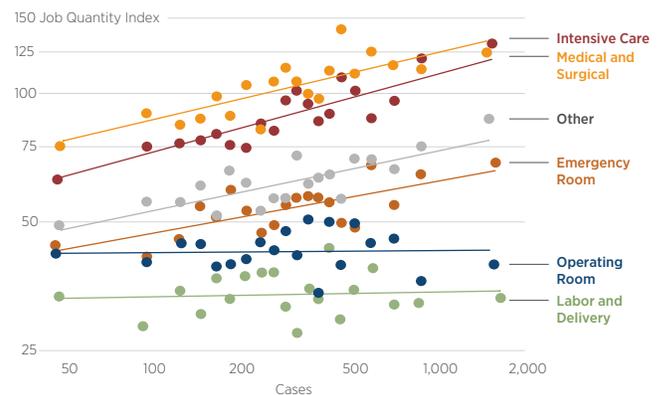
The COVID-19 pandemic has led to a surge in demand for medical care, and healthcare systems across the United States have faced the risk of being overwhelmed. This creates an opportunity to study the labor markets that hospitals use to manage temporary staffing shortages. How effective are short-term labor markets at re-allocating workers to where they're needed most?

Using data from a healthcare staffing firm, the authors study flexibility of nurse supply across the United States. At different points throughout the spring and summer, hospitals in affected regions needed more nurses to deal with pandemic-related surges. The authors find that job postings for temporary nurse positions tripled from their usual rate at the height of the pandemic's first wave, and increased even faster in places facing extreme pandemic conditions. In New York state, job postings increased eightfold, while the compensation almost doubled.

The differences across states and across nursing specialties allow the authors to study workers' flexibility in this market. For example, there was little-to-no increase in wages for nurses working in labor and delivery units, as the first wave of the pandemic did not change the number of women who were already pregnant. In contrast, demand skyrocketed for nurses in intensive care units (ICU) and emergency rooms (ER). For these specialties, the number of job openings and compensation rates are positively associated with state-level COVID-19 case counts. In other words, more acutely ill COVID-19 patients implies increased need for traveling nurses, and higher payments required to recruit them. Based on one estimate, ICU jobs increased by 239 percent during the first wave of the pandemic, while compensation increased 50 percent. ER jobs increased by 89 percent while compensation increased by 27 percent.

The large size of the United States, and nurses' ability to work in different states, appears to be an important part of how this market adapted to the first waves of demand for COVID-19 nursing. An analysis by the

Figure 1 • Graphical Supply Estimates by Specialty
Job Postings vs. COVID-19 Cases — Fixed Effects



Notes: Regression of log (weekly visits/day) on week-by-traffic size dummies and firm dummies. Traffic size category is computed based upon number of visits per day in January 2020, in each state-industry category.

authors demonstrates that the increases in quantity may understate the willingness of ICU and ER nurses to travel, given relatively higher compensation. In economic terms, they find nursing supply to be highly elastic, which suggests that price signals are an effective way of reallocating nurses to the parts of the country with increased staffing needs. Likewise, they find that workers who accept such postings travel longer distances from their homes to job locations when pay is higher.

This work suggests that a national staffing market may offer timely flexibility to accommodate demand shocks. When demand increases in specific geographic areas, nurses' ability to move can help mitigate a local shortage. That said, adjusting to a simultaneous national demand shock is harder. If numerous different regions experience simultaneous COVID-19 surges, meeting demand may require more than mobility across regions. Even though some nurses can travel, there is still a limited national supply of those with skills in demand.