

## Independent Freestanding Emergency Departments and Implications for the Rural Emergency Physician Workforce in Texas

Candice Chen, Qian Luo, and Nicholas Chong

### ISSUE

Independent freestanding emergency departments (IFEDs) have increased over the last decade, mainly in Texas. We examined the IFED physician workforce composition and changes in emergency physician workforce supply across states and in rural Texas throughout IFED proliferation.

### METHODS

We performed a descriptive analysis of the IFED physician workforce and quasi-experimental difference-in-difference analysis of Texas emergency physician inflow/outflow and difference-in-difference-in-difference analysis of the change in emergency physician supply between rural and urban areas in Texas compared to other states. We extracted data on all physicians from Texas IFED websites, the Texas Medical Board lookup tool, and linked to NPPES/PECOS and Medicare Physician Shared Patient Patterns and CareSet DocGraph Hop Teaming for practice locations from 2009 to 2017. We extracted all active emergency physicians from a Healthcare Provider Database, derived from a 5% Medicare claims (1999 to 2017). Our data sources included IFED websites, the Texas Medical Board lookup tool, National Plan & Provider Enumeration System (NPPES) registry, Provider Enrollment and Chain/Ownership System (PECOS) files, Medicare Physician Shared Patient Patterns, CareSet DocGraph Hop Teaming, and Healthcare Provider Database.

### FINDINGS

In 2019, 545 physicians practiced in Texas IFEDs, of which 515 (94.5%) were emergency physicians. We located 533 in previous practice, of whom 522 (97.9%) previously practiced in Disproportionate Share Hospitals and 100 (18.8%) in rural areas. Following legislation to license IFEDs, Texas experienced growth in IFEDs; an inflow increase and outflow decrease of emergency physicians compared to all other states; emergency physicians per population decreased in rural Texas; the difference in emergency physician supply between rural and urban Texas was greater than for other states.

### DISCUSSION

New models of health care organizations, such as freestanding emergency departments, have workforce implications that may further exacerbate rural and underserved workforce and access challenges.

**Key Words:** Health workforce; emergency medicine; emergency services, hospital; economic competition; rural health