



State Health Care Capacity & the COVID-19 Pandemic

April 3, 2020

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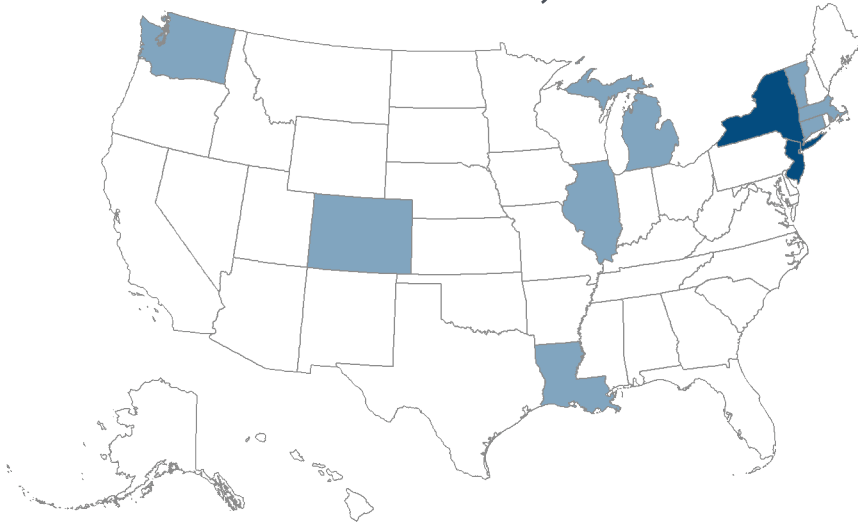
The
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Fund

Co-Authors on Accompanying Brief:

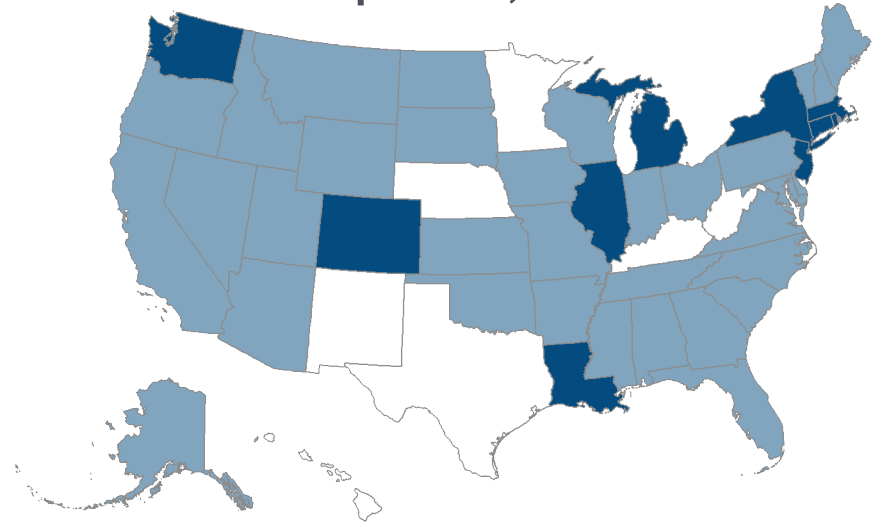
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Confirmed COVID-19 Cases per 100,000 adults

March 26, 2020



April 2, 2020



-  Less than 25 confirmed cases per 100,000 adults
-  25 per 100,000 to 74 per 100,000 adults
-  75+ confirmed cases per 100,000 adults

Assessing state level risk, physician supply & hospital capacity

High Risk Population

- Age 65 and older
- Age 18-64 with a chronic illness
 - COPD or Asthma, Diabetes, Heart disease, severe obesity
- State rates: 36%-53%
- ≈107 million adults

Hospital Capacity

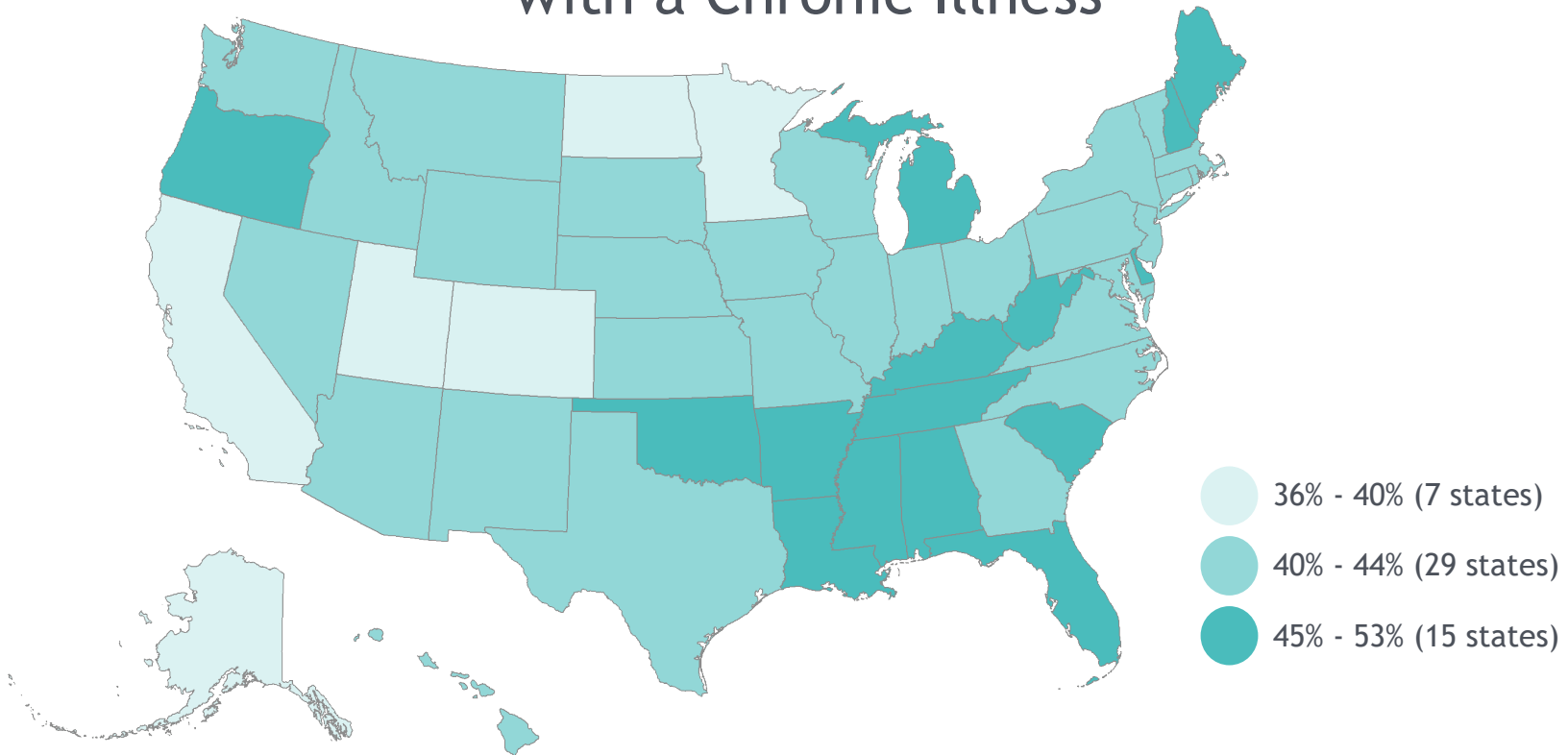
- Acute care bed capacity
- Intensive Care Unit (ICU) bed capacity
- Ventilator supply

Physician Supply

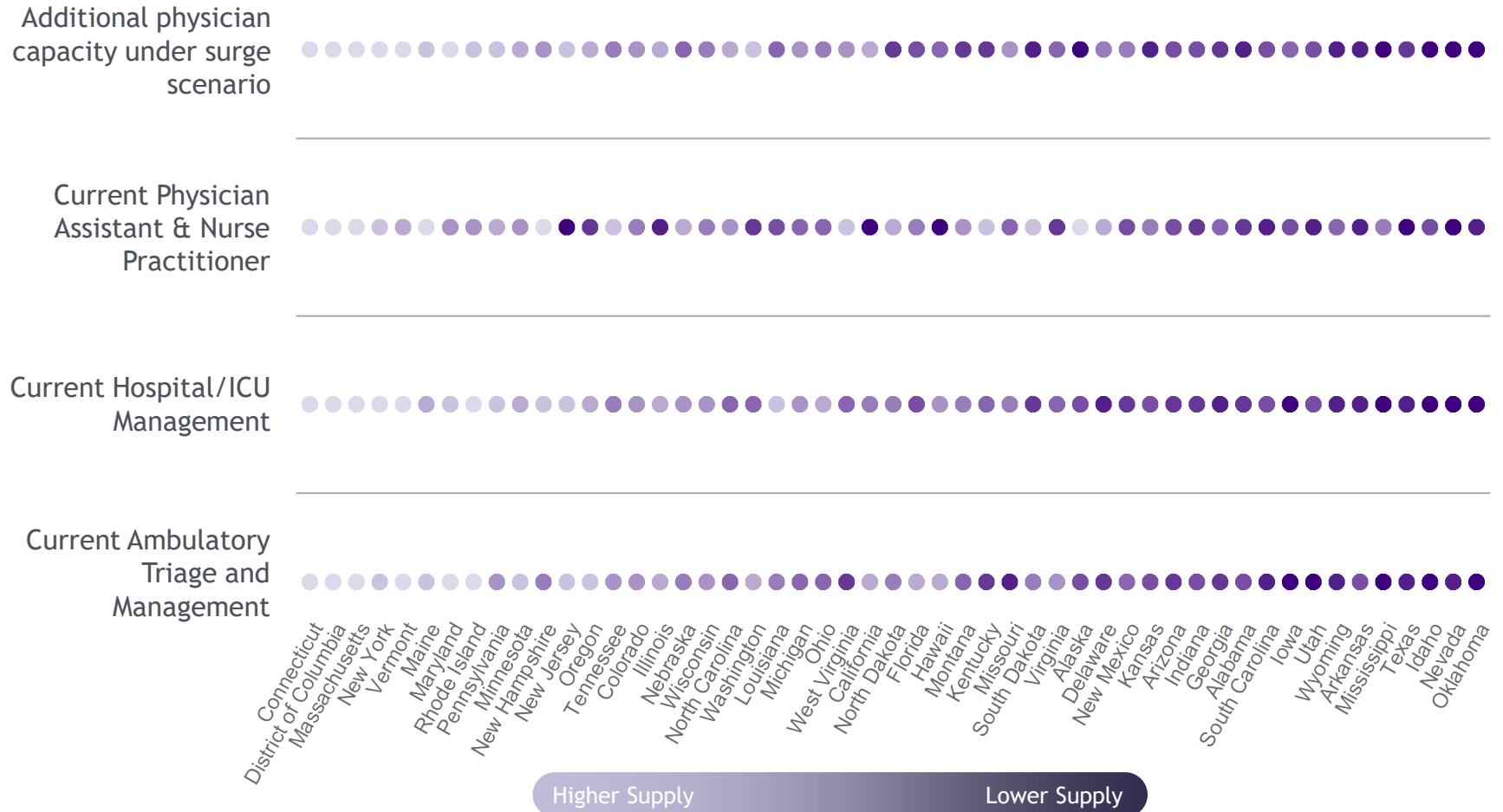
- Current and surge scenarios
- Ambulatory capacity for triage and management
- Hospital-based physicians familiar with admitting and managing patients in inpatient settings

High Risk Populations

Share of State Population Age 65+ or Age 18-64
with a Chronic Illness

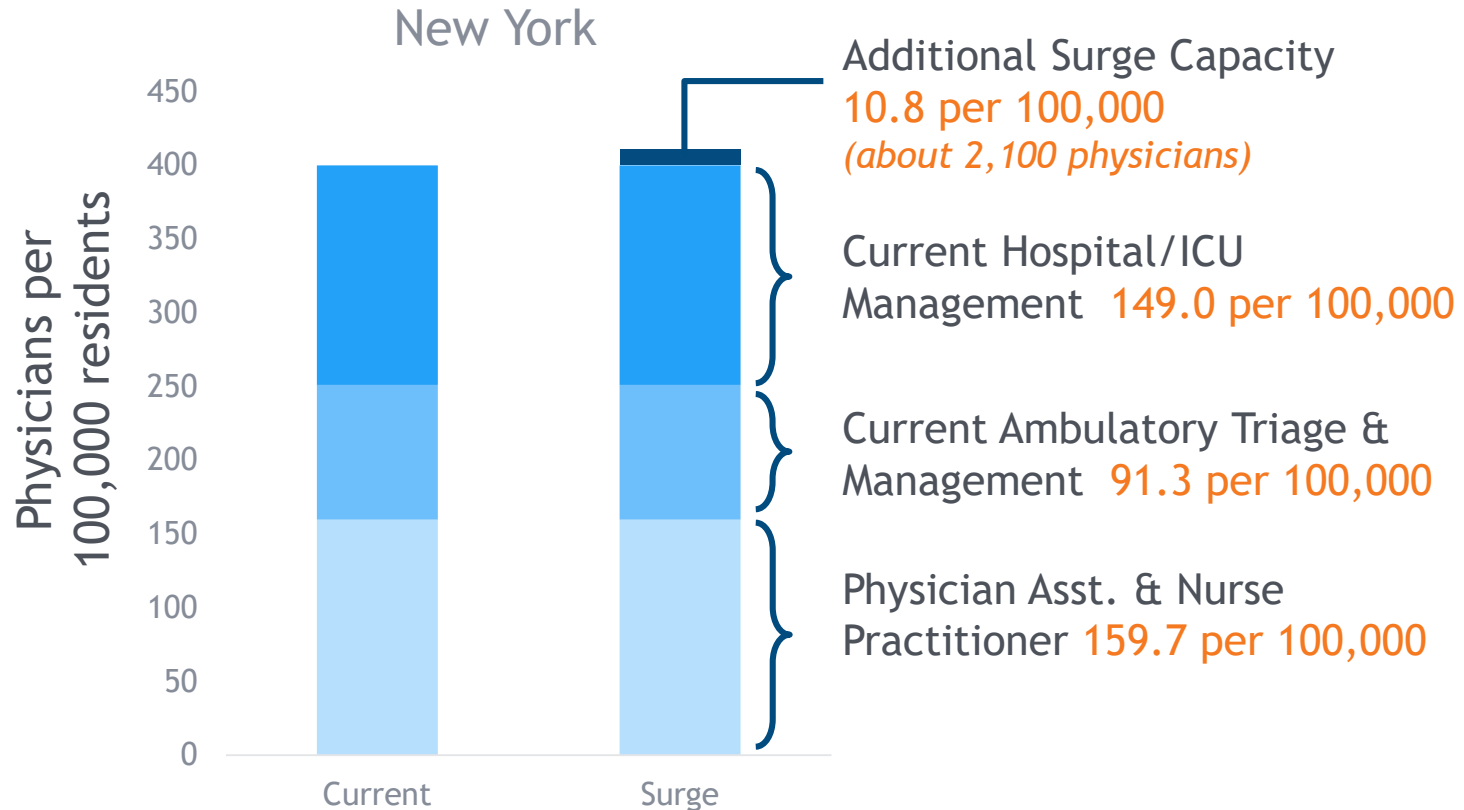


Current and Surge Physician Capacity



Notes: Ambulatory includes General Practice, Family Medicine, and Medical Specialty who work in ambulatory settings; current hospital/ICU includes General Practice, Family Medicine, Medical Specialty, Anesthesiology, Emergency Medicine, and Surgical specialists who work in a hospital setting; Surge scenario includes physicians in categories above who currently work primarily in research, teaching, or administrative roles Data: Area Health Resource File, HRSA, 2018-19 release

Physician Surge Capacity Explained



Notes: Ambulatory includes General Practice, Family Medicine, and Medical Specialty who work in ambulatory settings; current hospital/ICU includes General Practice, Family Medicine, Medical Specialty, Anesthesiology, Emergency Medicine, and Surgical specialists who work in a hospital setting; Surge scenario includes physicians in categories above who currently work primarily in research, teaching, or administrative roles Data: Area Health Resource File, HRSA, 2018-19 release

Hospital Bed and Ventilator Supply



Data: Hospital Bed Supply: Harvard Global Health Institute analysis of American Hospital Association data (2018) and American Hospital Directory (<https://globalepidemics.org/our-data/hospital-capacity/>); Ventilator: Estimated number of full-feature mechanical ventilators owned by acute care hospitals in each state per 100,000 residents; Lewis Rubinson et al. Mechanical ventilators in US acute care hospitals. Disaster Medicine and Public Health Preparedness 4, no. 3 (Oct 2010): 199-206.

Mobilizing health care resources in uncertain times

- Healthcare delivery systems in *all* states facing unprecedented challenges
- Facilities in New York, New Jersey, and Louisiana on the precipice of exceeding the capacity of their health systems and workforce
- State governments have emerged as the locus of policy action to mitigate the virus' spread
 - Enacting social distancing policies,
 - Mobilizing resources and infrastructure