Certificate-of-need (CON) laws require healthcare providers to obtain permission before they open or expand their practices or purchase certain devices or new technologies. Applicants must prove that the community “needs” the new or expanded service, and existing providers are invited to challenge would-be competitors’ applications. CON laws have persisted in spite of mounting evidence from health economists, regulatory economists, and antitrust lawyers showing that these laws fail to achieve their intended goals. The following charts are based on studies comparing outcomes in states that have CON laws with outcomes in those that do not. These comparisons account for socioeconomic differences and differences in the underlying health of the populations across states. The studies give some insight into what is likely to happen in a Connecticut without CON laws.

**HEALTHCARE SERVICES THAT REQUIRE A CON IN CONNECTICUT**

- Acute Hospital Beds
- Ambulatory Surgical Centers (ASCs)
- Cardiac Catheterization
- Computed Tomography (CT) Scanners
- Linear Accelerator
- Radiology
- Long-Term Acute Care (LTAC)
- Magnetic Resonance Imaging (MRI) Scanners
- Mobile Medical Imaging
- Positron Emission Tomography (PET) Scanners
- Psychiatric Services
- Radiation Therapy
- Substance/Drug Abuse
Research finds that CON laws are associated with higher healthcare spending per capita and higher physician spending per capita.

**SPENDING**

Estimated changes in annual per capita healthcare spending patterns in Connecticut without CON

- **TOTAL HEALTHCARE SPENDING**
  - $283 SAVED W/OUT CON

- **PHYSICIAN SPENDING**
  - $101 SAVED W/OUT CON

**ACCESS**

Comparing rural areas in CON states with rural areas in non-CON states, research finds that the presence of a CON program is associated with fewer rural hospitals. A subset of CON states specifically regulate the entry of ambulatory surgical centers (ASCs), which provide healthcare services and compete with traditional hospitals. These states have fewer rural ASCs.

Research also finds that states with CON programs have fewer hospitals in general (in rural and nonrural areas alike), and states with ASC-specific CON regulations have fewer ASCs in general.

**Table: Estimated changes in access to healthcare facilities in Connecticut without CON**

<table>
<thead>
<tr>
<th></th>
<th>WITH CON</th>
<th>WITHOUT CON</th>
<th>ASCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals</td>
<td>43.0</td>
<td>61.0</td>
<td>45.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RURAL FACILITIES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.0</td>
<td>4.3</td>
<td>4.0</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Supporters of CON suggest that these regulations positively impact healthcare quality, but research finds that the quality of hospital care in CON states is not systematically higher than the quality in non-CON states. In fact, mortality rates for pneumonia, heart failure, and heart attacks, as well as patient deaths from serious complications after surgery, are statistically significantly higher in hospitals in states with at least one CON regulation.

Connecticut is one of 32 states with four or more CON restrictions. The effects of CON regulations may be cumulative, meaning states with more entry restrictions may experience larger quality differences than states with fewer restrictions. Research finds that states with four or more CON laws have systematically lower-quality hospitals than non-CON states. The effect is evident across other quality indicators, including the share of patients surveyed giving their hospital the highest overall quality rating, heart failure readmission rate, and heart attack readmission rate.

Findings on heart failure readmission rates, heart attack readmission rates, and the percentage of patients giving their hospital a 9 out of 10 or 10 out of 10 overall rating were statistically significant only in the restricted sample of states that regulate four or more services with certificate of need.

This study uses an identification strategy that exploits the fact that, on occasion, a local healthcare market is divided between two states, one with a CON law and the other without. Four is the median number of CON laws for CON states in this subsample.

Mortality Rate
- Heart Attack: 14.2% (W/CON) vs. 14.5% (W/OUT CON) [0.3% decrease]
- Heart Failure: 11.1% (W/CON) vs. 11.4% (W/OUT CON) [0.3% decrease]
- Pneumonia: 10.5% (W/CON) vs. 11.0% (W/OUT CON) [0.5% decrease]

Readmission Rate
- Heart Attack: 18.5% (W/CON) vs. 18.8% (W/OUT CON) [0.3% decrease]
- Heart Failure: 23.2% (W/CON) vs. 23.5% (W/OUT CON) [0.3% decrease]
- Pneumonia: 10.5% (W/CON) vs. 11.0% (W/OUT CON) [0.5% decrease]

Patient Ratings
- Estimated increase in proportion of patients who would rate their hospital at least 9 out of 10 without CON: 4.8%

Post-Surgery Complications
- Estimated decrease in rate of deaths from post-surgery complications without CON: 5.8%
Thomas Stratmann and Matthew C. Baker look at the relationship between CON and the imaging claims of Medicare beneficiaries, which constitute only a portion of the total market for medical imaging services. However, CON laws limit the supply of imaging technologies to all consumers, meaning the results here underestimate the total effect of CON regulation on the utilization of medical imaging services.

While CON programs are associated with reduced use of imaging services by nonhospital providers, they were found to have no statistically significant effect on the use of imaging services provided by hospitals. This suggests that CON laws protect hospitals from nonhospital competition. The net effect is to lower the overall use of imaging services.

The effect of CON on MRI and CT scans per 1,000 Medicare beneficiaries was statistically significant at the 15% level. The effect of CON on a patient's probability of traveling outside the patient's county of residence for PET services was also statistically significant at the 15% level. All other variables were statistically significant at levels ranging from 1% to 5%.

Some states have added CON requirements for particular services since these analyses were conducted; the states with such new requirements are not visualized. For the latest information on which states regulate which procedures through CON, see Christopher Koopman and Anne Philpot, “The State of Certificate-of-Need Laws in 2016,” Mercatus Center at George Mason University, September 27, 2016.