

CON ANALYSIS AND IMPACT STUDY

PREPARED AT THE REQUEST OF THE
ALASKA HOSPITAL & HEALTHCARE ASSOCIATION

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SUMMARY OF THE REPORT



What Is Certificate of Need?

Certificate of Need (“CON”) laws are a healthcare planning and regulatory mechanism used by many states to balance healthcare access and cost. Because healthcare does not operate like a free market, regulatory constraints are deemed necessary to ensure that expensive, unneeded services and facilities are not developed and that underserved populations have sufficient access to care. Further, many studies that attempt to examine the impact of CON laws are designed with faulty methods and assumptions and thus produce misleading conclusions.

SUMMARY OF THE REPORT

Alaska, like many other states that have CON laws, is routinely lobbied by those who argue against the effectiveness of these regulatory controls. For decades, proponents for and against CON laws have disagreed over whose arguments and analyses are right and whether CON laws are good or bad, with neither side able to definitively prove their position. It is difficult to draw conclusions about the benefits, or lack thereof, of CON laws because there are so many complex variables associated with healthcare services, and it is impossible to isolate the statistical impact of CON from other variables. In this report, Ascendient Healthcare Advisors (“Ascendient”) examines the risks of CON repeal, data pertaining to Alaska that contradict arguments promoting CON repeal, the CON debate, and the methods and assumptions underlying many anti-CON papers.

Critical to evaluating the CON debate is understanding that any analysis that considers CON status as a binary choice—and most do—is grossly oversimplified. Among the 35 states with CON laws, there are huge variations in services covered, enforcement, administrative policies, and threshold levels. The differences in timing of repeal among states, coupled with the differences in which services were regulated when, makes it virtually impossible to know what facilities and services existed or were developed with or without CON regulation and what impact that has on the variables typically analyzed in CON studies, such as utilization, cost and spending.

Based on the analysis and findings in this report, **Alaska should maintain Certificate of Need laws** as CON repeal would *irreparably* harm access to healthcare for Alaskans.



Risks of CON Repeal

There are real risks to CON repeal. Despite the limitations,¹ this study has obtained sufficient data to examine the impact of CON repeal in three states: Georgia, Pennsylvania, and Ohio. **Georgia** repealed CON for single-specialty ASCs in 2008. The impact was immediate and significant. Georgia added more than 180 single-specialty ASCs in the first year of repeal, in addition to the 49 CON-approved ASCs that existed in 2007 (54 CON-approved ASCs when including GI/Endo). Within five years of repeal, the number of ASCs in Georgia had grown by nearly 500 percent, while the volume of cases per facility declined for both the CON-approved ASCs and the single-specialty ASCs.

Although it is difficult to isolate the impact of the single-specialty ASC CON repeal on hospital closures in Georgia, there is some indication that it was likely a factor. According to the Sheps Center for Health Services Research, no Georgia hospitals closed in the three-year period leading up to CON repeal, 2005 to 2007. However, nine Georgia hospitals are reported as closed since repeal in 2008. All but two of those hospitals were adjacent to a county—often more than one county—with multiple single-specialty ASC development after repeal. The least impact was near North Georgia Medical Center in Ellijay, where adjacent counties went from zero CON-approved ASCs to four single-specialty ASCs. The greatest impact was near Northridge Medical Center in Commerce, Georgia, where 40 single-specialty ASCs were developed in adjacent counties, in addition to an inventory of four CON-approved ASCs.

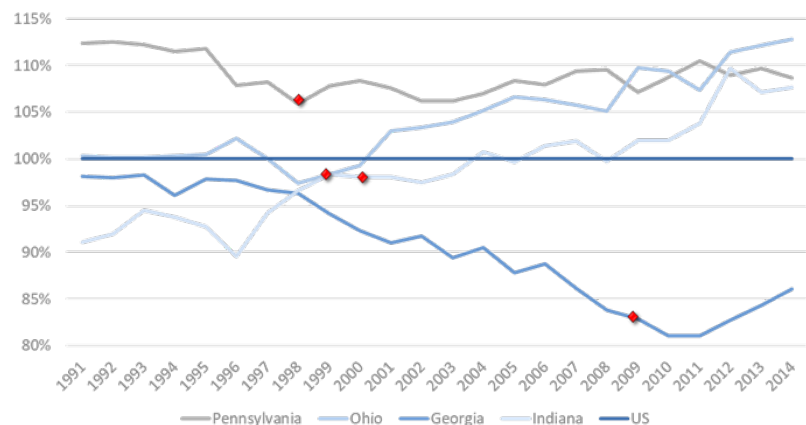
After **Pennsylvania** CON laws were sunset, the number of ambulatory surgery centers increased by almost 200 percent over the next decade. **Ohio** repealed CON with a phased approach from 1995 to 1997. In the first three years following repeal, the number of ambulatory surgery centers increased by more than 500 percent. During the same three years, Ohio lost 14 of its 94 hospitals or 15 percent of the supply of hospitals in the state.

In each of these states, plus Indiana that has repealed and reenacted CON more than once, per capita health expenditures for hospital and physician services grew at a higher rate in the years following CON repeal than the US average growth rate over the same period of time. Prior to repeal, three of the states' expenditures had been growing at a lower rate than the US average, shown by the downward trendlines in the chart above.² Indiana's growth rate was higher than the US average before CON repeal, shown by the upward trendline, and it remained higher than the US after repeal to such a level that the state's per capita cost rose above the US average a few years later.

Case Study States and U.S. Per Capita (2014)

Hospital Care and Physicians and Clinical Services Combined

◆ Year 1 Post-CON Repeal



¹ Limitations in these case studies include limited analysis due to lack of available information both prior to repeal and after CON repeal as well as reliance on third party sources for some information.

² The chart shows each state's actual per capita cost for these services as a percentage of the US cost in the years pre- and post-repeal. Upward trendlines indicate a growth rate in per capita costs that is higher than the US average growth rate and downward trendlines indicate a growth rate that is lower than the US average growth rate.



Mercatus

Most notable among anti-CON proponents is the Mercatus Center at George Mason University. Mercatus has authored many papers that are often released as “provisional findings” and “likely to be republished in an academic journal,” but it is important to note that these papers are not published and do not undergo a traditional, rigorous peer review as would most academic and scientific papers. The most common pitfalls of the methods and assumptions from these studies are summarized here.

Response to Mercatus’ Alaska Findings

Despite the limitations discussed herein, this study highlights the findings and conclusions resulting from an analysis of various healthcare related data for all 50 states and the District of Columbia. More often than not, these data directly contradict the findings of Mercatus regarding the impact of CON in Alaska. As evidenced by the analysis, Mercatus appears to have applied aggregate data regarding No-CON states to Alaska, without ever examining the actual status of healthcare services, facilities, and quality in the state.

- **Alaska has 3 hospitals for every 100,000 residents**, a rate that is 50 percent higher than the No-CON state median.
- The distribution of Alaska’s hospitals is **disproportionately higher in rural areas** compared to the population, ensuring access to residents in more distant communities.
- **Alaska provides 203 acute care hospital beds per 100,000, virtually the same as in No-CON states** and does so efficiently. Alaska hospitals average 66 percent inpatient occupancy, compared with 60 percent among hospitals in No-CON states.
- Alaska’s access to Medicare-certified **ambulatory surgery centers (“ASCs”) is also better than No-CON states**. Mercatus argues that Alaska would have 15.2 ASCs without a CON program, yet Alaska already has 17 ASCs.
- Although Alaska reports the second highest per capita healthcare spending in the US, other goods and services in Alaska are more costly compared to the US as well. The Missouri Economic Research and Information Center’s (“MERIC”) shows that Alaska’s cost of living is almost 30 percent higher than No-CON states and all US states combined, a very similar differential to per capita healthcare costs. The factors contributing to the cost of healthcare in Alaska—access, terrain, small population, higher staffing costs and higher costs of living in the state—are not going to change as a result of CON laws. The average experience of case study states that have more recently fully or partially repealed CON strongly suggests that Alaska’s per capita costs would increase at a rate ~20 percent above the national growth rate with the repeal of CON.
- **Alaska outperforms both its High/Moderate-CON peers and No-CON states**. Using the hospital metrics examined by Mercatus, Alaska outperforms No-CON states. Alaska’s nursing home quality is even more stellar. A comparison of several metrics shows that Alaska’s scores are significantly better than the other comparative groups, including the No-CON states.

Conclusions Are Often Misleading

For example, in Mercatus’ 2016 study on imaging,³ the authors refer to differences in “utilization” between CON and non-CON states, with the clear implication that residents in the CON states are not getting the vital imaging services that they need. However, data in Mercatus’ own report do not show that CON status results in “less imaging care,”

³ Stratmann, T. and Baker, Matthew C., “Are Certificate-of-Need Laws Barriers to Entry? How They Affect Access to MRI, CT, and PET Scans.” Mercatus Working Paper, Mercatus Center, George Mason University, January 2016.



SUMMARY OF THE REPORT

nor does Mercatus show fewer total scans for CON states. They show only that fewer services are delivered in a non-hospital setting in CON states.

Assumptions Are Often Faulty

Using the Mercatus imaging study as an example, the authors appear to assume that fewer providers of imaging services (in CON states) means that there is less access. The problem with this argument is that the sheer number of providers may be irrelevant when it comes to measuring access. Mercatus' own report data show that hospital providers offer greater access to imaging services, because their output is roughly 10 times greater than non-hospital providers. Health economist Mark Holmes, PhD, Director of the Cecil G. Sheps Center for Health Services Research and Professor and Associate Chair at UNC Gillings School of Public Health, indicates that the economic argument is actually the opposite of what Mercatus cites, because it is more economically productive to have more high-producing providers.⁴ Further, hospital imaging providers offer services 24/7 and are critical for emergent needs.

Study Design Is Often Faulty

At best, the design of these studies is often faulty; at worst, the studies are deliberately designed to achieve the desired results. For example, the previously cited Mercatus imaging report aggregated data, rather than using individual data, which eliminated the ability to control for factors other than CON. Instead of using information on each individual patient – information like age, race, and comorbidities – Mercatus made multiple adjustments to get to state-level averages. In other words, Mercatus chose not to control for individual variables that may have affected utilization and cost despite having the information available in its Medicare claims dataset.

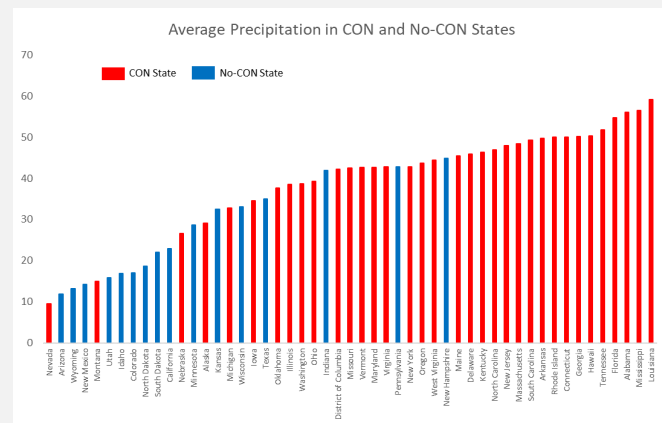
Arguments are Often Faulty

Like study design, these papers often present data analysis centered around speculative or faulty arguments. Using the Mercatus imaging paper again as an example, the study finds that residents of CON states are more likely than residents of non-CON states to travel across state lines for an MRI, CT or PET scan. The authors explain the finding as follows: "The propensity for residents of CON states to travel out of state to obtain medical services can be attributed to any of several factors: higher costs, a smaller selection of services, or lower access to care."⁵

There is another explanation than that offered by Mercatus: geography. 5.2 percent of residents in states with PET CON work out of state, while only 3.2 percent of residents do in states without PET CON. On the East Coast, where

Correlation Does Not Imply Causation

Anti-CON proponents engage in one of the most critical errors in statistical analysis: assuming causation based on mere correlation. To illustrate these flawed analyses, Ascendient evaluated the average precipitation of each state and the state's CON classification as a CON state or No-CON state, as illustrated in the bar chart.



The analysis shows that CON states average 43 inches of precipitation each year, while No-CON states average only 26. The difference between the two groups is highly statistically significant. A false conclusion of this very strong correlation would be that CON increases the amount of precipitation in a state. Clearly, CON is not a causal factor for precipitation.

⁴ Ibid, page 9.

⁵ Stratmann and Baker, page 20



CON predominates, states are more densely populated and more “connected” in terms of commuting patterns. Those who reside in a state where CON is required for PET services are more likely to work outside their home state. The CON law isn’t *causative* here—regulations are not forcing residents out of state for work, nor are they forcing residents out of state for medical care. Instead, CON laws correlate strongly with denser populations and more fluid commuting patterns, but CON laws do not cause those patterns.



PART ONE: RISKS OF CON REPEAL



RISKS OF CON REPEAL IN ALASKA

For decades, proponents for and against CON laws have disagreed over whose arguments and analyses are right and whether CON laws are good or bad, with neither side able to definitively prove their position. It is difficult to draw conclusions about the benefits, or lack thereof, of CON laws for many reasons, a few of which are discussed in Part Three. Given all the factors that make a conclusive argument for or against CON nearly impossible to make, coupled with the myriad of differences between all the states, it is likewise difficult to surmise the exact impact of CON repeal in Alaska. However, there are facts from states that have partially or fully repealed CON more recently than the national repeal decades ago that indicate what potential repeal might mean for Alaskans.

CON Repeal: Case Study States

As noted in Part Three, there are always limitations with studies involving CON. Limitations also exist when analyzing pre- and post-repeal impact in specific states. Despite the limitations,⁶ this study has been able to obtain data sufficient to examine the impact of CON repeal in three states:

- Georgia's partial repeal of CON for single specialty ambulatory surgery centers
- Pennsylvania's CON repeal and the specific impact on ambulatory surgery centers
- Ohio's CON repeal and the impact on ambulatory surgery centers and hospitals

Georgia repealed CON for single-specialty ASCs in 2008. The impact was immediate and significant. Georgia added more than 180 single-specialty ASCs in the first year of repeal, in addition to the 49 CON-approved ASCs that existed in 2007 (54 CON-approved ASCs when including GI/Endo). Within five years of repeal, the number of ASCs in Georgia had grown by nearly 500 percent, while the volume of cases per facility declined for both the CON-approved ASCs and the single-specialty ASCs. Statewide, Georgia hospitals had 69 percent share of outpatient surgical patients in 2007, which dropped to 46 percent share by 2014. Single-specialty ASCs held the majority of the balance at 41 percent and CON-approved ASCs with 13 percent.

Although it is difficult to isolate the impact of the single-specialty ASC CON repeal on hospital closures in Georgia, there is some indication that it was likely a factor. According to the Sheps Center for Health Services Research, no Georgia hospitals closed in the three-year period leading up to CON repeal, 2005 to 2007. However, nine Georgia hospitals are reported as closed since repeal in 2008. All but two of those hospitals were adjacent to a county—often more than one county—with multiple single-specialty ASC development after repeal. The least impact was near North Georgia Medical Center in Ellijay, where adjacent counties went from zero CON-approved ASCs to four single-specialty ASCs. The greatest impact was near Northridge Medical Center in Commerce, Georgia, where 40 single-specialty ASCs were developed in adjacent counties, in addition to an inventory of four CON-approved ASCs.

Pennsylvania CON laws were sunset in 1996, but the most recent data available for analysis is 2001, five years after repeal. Nevertheless, the data demonstrate that the number of ASCs in Pennsylvania increased by more than 150 from 2001 to 2010—about 200 percent—and by another 30 from 2010 to 2019. In total, the number of ASCs in Pennsylvania increased by nearly 200 from 2001 to 2019.

⁶ Limitations in these case studies include limited analysis because of the lack of available information both prior to repeal and after CON repeal and reliance on third party sources for some information.



PART ONE: RISKS OF CON REPEAL

Ohio repealed CON with a phased approach from 1995 to 1997. In the first three years post-repeal, the number of ASCs in Ohio increased by more than 500 percent, or 150 ASCs.

In addition to data on the impact of repeal on ASCs in Ohio, there is a limited data source showing the impact of repeal on hospitals. Please note the source used for this analysis reports Ohio hospitals with obstetric programs only. In the three years following CON repeal, Ohio lost at least 14 hospitals, or 15 percent of its supply. (Please note the source used for this analysis reports the loss of hospitals with obstetric programs; thus, the total number of hospitals lost could have been higher than the 14 noted here.)

	OH 1997	OH 3-Yr Post- CON Hospitals	% Change
OH TOTAL	94	80	-14.9%

As shown in Part Two, Alaska currently has 2.3 Medicare-certified ASCs per 100,000 population, which is notably higher than the post-repeal rate for Ohio and the same as the post-repeal rate for Pennsylvania. It may be that access was too restricted in those states prior to repeal and more ASCs were needed. Georgia's experience, however, has been quite different, likely resulting from repeal only for single-specialty ASCs that resulted in a proliferation of low-volume facilities. Although the rate of outpatient surgical cases increased significantly with repeal in Georgia, the volume of cases per facility declined for both the CON-approved ASCs and the single-specialty ASCs.

Healthcare "Urbanization"

Almost half of Alaska residents reside in a community identified as rural suburban or smaller (defined as populations of less than 200,000 and not adjacent to more urbanized counties).⁷ Rural residents are typically older, poorer, more dependent on public insurance, and in worse health than urban residents, and may be disproportionately impacted by rural hospital financial distress and closure. These most vulnerable citizens will be disproportionately affected by service reductions, hospital closures, and the "urbanization" of healthcare.

CON repeal appears to contribute to the urbanization trend. According to a study⁸ of the Indianapolis metropolitan area completed by the Center for Studying Health System Change, the repeal of Indiana's CON law led to hospital expansion but this expansion was mostly in affluent suburban communities.

⁷ Please see Appendix B for the geographic classification methodology used in this study.

⁸ Katz, Aaron, Grace Anglin, Emily Carrier, Marisa K. Dowling, Lucy B. Stark, and Tracy Yee, Indianapolis Hospital Systems Compete for Well-Insured, Suburban Patients, Washington, D.C.: Center for Studying Health System Change, December 2011.



“The systems’ growth follows the migration of well-insured patients to growing, affluent suburban communities....According to a January 2010 Indiana Business Journal article, the Indianapolis area has added more than 900 staffed inpatient beds since 2000, a 17 percent increase....As a result of new building, inpatient capacity across the market has increased, particularly in well-insured, suburban communities. Several observers suggested that the increased capacity is leading to rising utilization as hospitals seek to recoup investments by ensuring new facilities are running near capacity....Some observers believed the community as a whole is now overbuilt, with new growth aimed mainly at winning the allegiance of well-insured patients.”

The experience in Indiana is representative of the urbanization of hospital bed distribution in other No-CON states. Of the 13 No-CON states with some population in either large suburban, urban, or large urban communities, a majority skew hospital bed distribution to these more urban communities at a rate nearly twice that of the High/Moderate-CON states (excluding the District of Columbia) that have some population in one of the urban categories.

Physicians, who are not regulated by CON, already overwhelmingly skew away from smaller communities to more urbanized communities. Excluding states with either all rural or all urban populations,⁹ all but two (New Hampshire and Rhode Island) of the remaining 45 states’ physician distribution skews away from rural communities.

These distribution statistics indicate that when not regulated, healthcare services tend to skew toward urban centers, providing reduced access for those who live in rural—and sometimes suburban—communities.

Despite original intentions to expand access to rural, underserved communities, the development of Freestanding Emergency Departments (FSEDs) also appears to contribute to the trend of healthcare urbanization. Texas is a No-CON state that enacted the Texas Freestanding Emergency Medical Care Facility Licensing Act in 2009, which included rules establishing minimum standards for licensing. Since that time, the state has experienced a rapid increase in the number of FSEDs. As shown in the table below, more than 80 percent of FSEDs are located in large suburban, urban, or large urban communities, despite more than half of the state’s 254 counties being defined as small rural for purposes of this study.

⁹ Five states and the District have either all rural (defined as small rural, rural, and rural suburban) or all urban (defined as large suburban, urban, and large urban) populations.



PART ONE: RISKS OF CON REPEAL

Freestanding Emergency Departments in Texas by Year of Opening and Geography

Year	Small Rural	Rural	Rural Suburban	Suburban	Small Urban	Urban	Large Urban	Total
2010	-	-	-	-	-	1	2	3
2011	-	-	-	-	-	-	1	1
2012	-	-	-	-	-	-	6	6
2013	-	-	-	-	-	-	8	8
2014	-	1	-	-	6	3	3	13
2015	-	2	2	3	5	4	12	28
2016	-	1	2	1	9	3	12	28
2017	-	-	4	3	5	1	7	20
2018	-	5	5	5	7	4	19	45
2019	-	-	2	3	4		13	22
2020	-	-	-	-	3	6	19	28
2021^	-	-	-	-		3	4	7
Total	-	9	15	15	39	25	106	209
% of Total	-	4.3%	7.2%	7.2%	18.7%	12.0%	50.7%	100.0%

^Year-to-date as of April 1, 2021.

Note: All geographic classifications based on current definitions.

Source: Texas Health and Human Services, Directory of Freestanding Emergency Medical Care Facilities as of April 1, 2021.

In a study analyzing where FSEDs were dispersed throughout the three states with the highest number of FSEDs (Colorado, Ohio, and Texas), FSEDs were located in zip codes with a profitable payer mix and higher incomes.¹⁰ In Texas, “FSEDs are highly concentrated around metropolitan areas; specifically, they are located in zip codes with:

- Higher median incomes
- Higher rates of private health insurance coverage
- More physician offices
- More hospital-based EDs
- More physician visits
- Higher health care spending.”¹¹

¹⁰ Alexander A.J., Dark C. Freestanding Emergency Departments: What Is Their Role in Emergency Care?; Annals of Emergency Medicine, Volume 74, Issue 3, 325 – 331.

¹¹ <https://www.unitedhealthgroup.com/content/dam/UHG/PDF/2017/Freestanding-ER-Cost-Analysis.pdf>



As such, the presence of FSEDs in Texas is not expanding access to communities who have historically been underserved either due to geographic barriers or insurance limitations. Instead, FSEDs are developing in areas that have a solid base of commercially insured patients with existing alternatives to care. The proliferation of FSEDs in many of these communities has resulted in an increase in ED use rates, rather than FSEDs serving to decompress existing, overcrowded EDs. In addition, the unnecessary proliferation of FSEDs in urban and suburban markets may serve to pull volume from already-struggling rural or suburban facilities, further jeopardizing their viability.

Notwithstanding the urbanization trends in No-CON states, the development of FSEDs in rural communities that cannot support an inpatient hospital may be a good solution to ensuring access to needed care, though financial viability must be determined on a market-by-market basis. FSEDs can be effective at providing a critical entry point, particularly in markets where there is no other access to care within a reasonable distance.

Cost of Healthcare “Urbanization”

Other studies have examined the impact of hospital closures in rural areas and the resulting urbanization of healthcare access. Kaiser Family Foundation examined the impact of three rural hospital closures, one each in Kentucky, South Carolina, and Kansas. The study¹² found, in part, among these communities:

“similar economic and demographic trends that contributed to the closures. They cited high poverty and uninsured rates in rural communities, high rates of Medicare and Medicaid coverage, and declining populations. In each community, poverty rates were higher than state and national averages and median incomes were lower, and the population was shrinking. Stakeholders also noted the loss of major employers, the “evaporation” of local industry (i.e., mining, textiles, manufacturing and agriculture), and the subsequent rise in unemployment and loss of employer health coverage as factors contributing to the closures. The communities’ economic difficulties were exacerbated by the recent recession. With the disappearance of jobs, many young adults have left town in search of other opportunities, leading to further population decline and to a graying population with greater health care needs.”

The study went on to find that access to care, particularly emergency care, was greatly diminished as a result of the hospital closures.

[T]he hospitals’ EDs had also served as a safety-net for people with acute mental health or addiction treatment needs^[13] by stabilizing them and arranging for their transport when needed; when the hospital closed, local capacity to address these needs disappeared. Respondents cited the immediate and ongoing need to ensure emergency transportation to neighboring hospitals following the closure. [emphasis added]

¹² <https://www.kff.org/report-section/a-look-at-rural-hospital-closures-and-implications-for-access-to-care-three-case-studies-issue-brief/>

¹³ See Toliver, Z. The Opioid Epidemic: Testing the Limits of Rural Healthcare. (The Rural Monitor, Rural Health Information Hub, May 18, 2016). <https://www.ruralhealthinfo.org/rural-monitor/opioid-epidemic/>



Some public investment in ambulance services may be needed in the wake of a rural hospital closure....[R]espondents also noted that there can be challenges transporting patients back home after they are taken by ambulance to another community for care and this problem can be significant for low-income patients who do not have the means or support system in place to ensure their travel home.

The need for increased availability of emergency services in the wake of a hospital closure is not easily met in rural communities. As noted in a recent article in Rural Health Information Hub,¹⁴ EMS in rural areas is usually a “patchwork of varying expertise: first responders, EMTs, occasionally a paramedic, interspersed nonprofit or volunteer, fire-based or hospital-based organizations, all with the goal of providing the best pre-hospital emergency care possible.” The article referenced a 2016 Minnesota EMS assessment which found that nearly 60 percent of respondents did not have all shifts covered for the next 24 hours. These issues are exacerbated when the local hospital closes, requiring more and lengthier transports out of the community. According to Kevin McGinnis, Program Manager at the National Association of State EMS Officials (NASEMSO), as referenced in this article, staffing a rural EMS service with paid staff can range from \$200,000 to \$750,000 a year.

In addition to a reduction in access, the Kaiser Family Foundation study found that hospital closures result in job losses and can have other economic effects, which in turn can make it more challenging for rural communities to attract employers.

¹⁴ <https://www.ruralhealthinfo.org/rural-monitor/ems-self-determination/>



PART TWO: RESPONSE TO MERCATUS

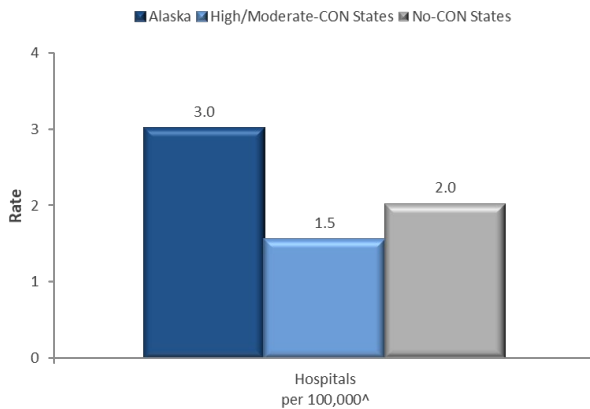


RESPONSE TO MERCATUS

Most notable among anti-CON proponents is the Mercatus Center at George Mason University. Mercatus has authored many papers that are often released as “provisional findings” and “likely to be republished in an academic journal,” but it is important to note that these papers are not published and do not undergo a traditional, rigorous peer review as would most academic and scientific papers. The most common pitfalls of the methods and assumptions from these studies are summarized in Part Three. Mercatus has targeted Alaska specifically, along with other CON states,¹⁵ arguing that outcomes related to access, spending, and quality in CON states such as Alaska is worse than in No-CON states. They suggest that their studies “give some insight into what is likely to happen in an Alaska without CON laws.” In most instances, the following analyses directly contradict the Mercatus findings.

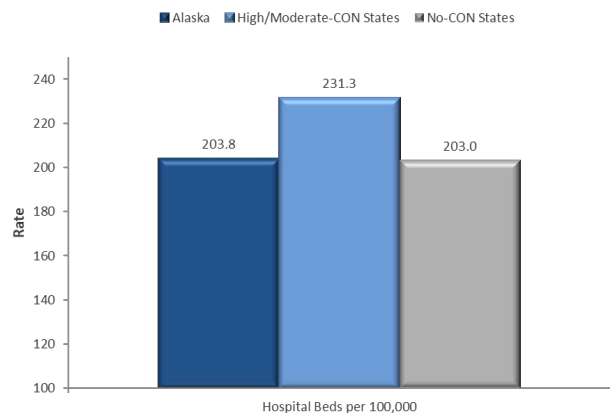
Access to Healthcare Services

Mercatus suggests that the Alaska CON program has resulted in less access to hospitals and ambulatory surgery centers than in No-CON states. In reality, Alaska offers considerably better access to healthcare services than its High/Moderate-CON peers, as well as No-CON states.



Alaska has three hospitals for every 100,000 residents, a rate that is 50 percent higher than the No-CON state median. If Alaska were to drop to the No-CON state median, Alaska would lose seven of its 22 acute care hospitals. At the number of hospitals Mercatus suggests that the state should have (35.5), its rate per 100,000 would be more than twice that of No-CON states’.

Contrary to Mercatus’ findings, the distribution of Alaska’s hospitals is disproportionately higher in rural areas compared with the population. More than 50 percent of Alaska’s hospitals are located in Small Rural communities (defined as counties of less than 25,000) and more than 75 percent are located in areas defined as rural. By comparison, approximately 45 percent of Alaska’s population resides in areas defined as rural; thus, hospital distribution skews favorably towards the rural communities.



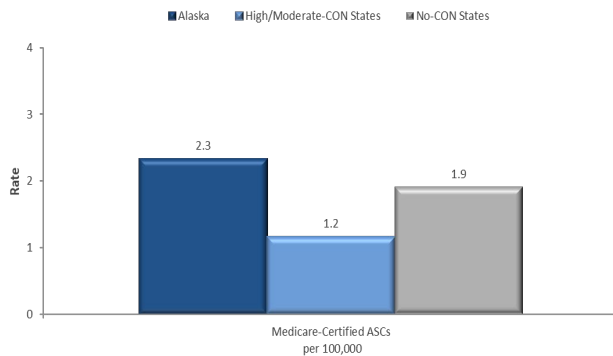
Alaska also has the same access to hospital beds than No-CON states. Alaska provides 203 acute care hospital beds per 100,000, virtually the same as No-CON states. In addition to providing the same

¹⁵ “Certificate of Need Laws: Alaska State Profile.” Mercatus Center, George Mason University.



PART TWO: RESPONSE TO MERCATUS

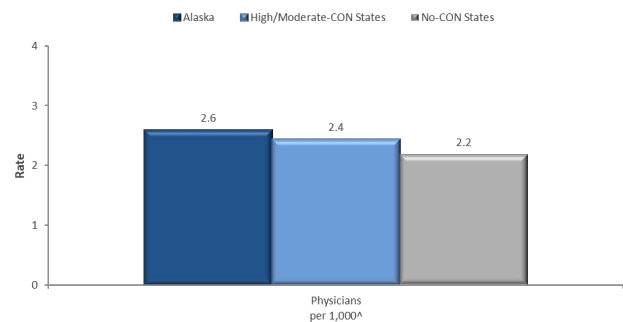
access to hospital beds, Alaska does so efficiently. Alaska hospitals average 66 percent inpatient occupancy, compared with 60 percent among hospitals in No-CON states.



Alaska's access to Medicare-certified ambulatory surgery centers ("ASCs") also is better than No-CON states. Alaska has 17 ASCs, or 2.3 per 100,000. That rate is 20 percent higher than the No-CON states' median of 1.9 per 100,000. Mercatus argues that Alaska would have 15.2 ASCs without a CON program, yet Alaska already has 17 ASCs. Clearly, the CON program has not limited the number of ASCs that Mercatus argues Alaska should have.

According to the Association of American Medical Colleges (AAMC)¹⁶, Alaska has more active physicians per 1,000 residents (physicians are not regulated by CON) than No-CON states, with a similar differential to the rate of ASCs, which are regulated by CON. The similarities between these two statistics suggest that the CON program in Alaska is not unnecessarily restricting access to regulated services.

Despite almost two-thirds of its hospitals operating as part of a larger system, including tribal hospitals, Alaska remains in the bottom quartile of states for hospital consolidation.



Spending

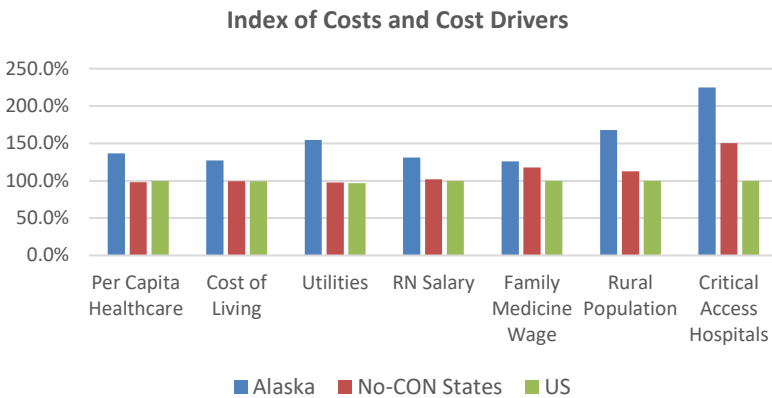
Mercatus argues that CON laws are associated with higher spending per capita and suggests that Alaska would save \$294 per person without CON.

Per capita spending is slightly lower in No-CON states—less than \$100 lower than High/Moderate-CON states. However, both inpatient and ED utilization is lower in No-CON states, which may drive lower per capita health spending rates. In addition, the higher spending and utilization in High/Moderate-CON states may be the result of less healthy populations in those states rather than the presence of CON regulations.

¹⁶ <https://www.aamc.org/media/37841/download>



PART TWO: RESPONSE TO MERCATUS



Although Alaska reports the second highest per capita healthcare spending in the US, other goods and services in Alaska are more costly compared to the US as well. The Missouri Economic Research and Information Center's ("MERIC") shows that Alaska's cost of living is almost 30 percent higher than No-CON states and all US states combined, a very similar differential to per capita

healthcare costs as illustrated in the chart¹⁷. Grocery costs are about 35 percent higher in Alaska as well. Utility costs—the fixed nature of which is perhaps somewhat comparable to healthcare—are more than 50 percent higher than No-CON states and all US states combined. Part of the healthcare cost differential is attributed to labor; data from May 2021 show that Alaska's RN salaries are about 30 percent higher than No-CON and all states combined, and these data do not appear to include rates for travel nurses that have ballooned during the pandemic. Likewise, 2021 data from the US Bureau of Labor Statistics show that Alaska has the second highest annual mean wage for family medicine physicians in the US, which is more than 25 percent higher than the US average.

There are logical reasons for these cost differentials. While Alaska has the 4th lowest population, it has the largest land mass of any state in the US, at more than 10 times the median size of all states. As a result, its population density is by far the lowest of any state, making it more costly to deliver services, including healthcare, across such a large landscape. Its terrain also contributes to costly delivery of care. Certainly, no other state in the lower 48 has a notable percentage of hospitals that are not accessible by road. Nearly half of Alaska's population resides in rural areas (as defined by the study) and almost 60 percent of its hospitals are designated as Critical Access, compared to 31 percent of No-CON states' population and 39 percent of No-CON states' hospitals, as shown in the bar chart above. Having a majority of its hospitals reimbursed on a cost-basis by Medicare/Medicaid is clear recognition that the cost of care in Alaska is higher than in the lower 48 and that higher costs are driven by accessibility issues. In addition, Alaska's State Health Score is 90 percent lower than the median of all states and more than 90 percent lower than the No-CON states. The health status of its population likely contributes to higher healthcare spending.



The factors contributing to the cost of healthcare in Alaska—access, terrain, small population, higher staffing costs and higher costs of living in the state—will not change as a result of CON laws.

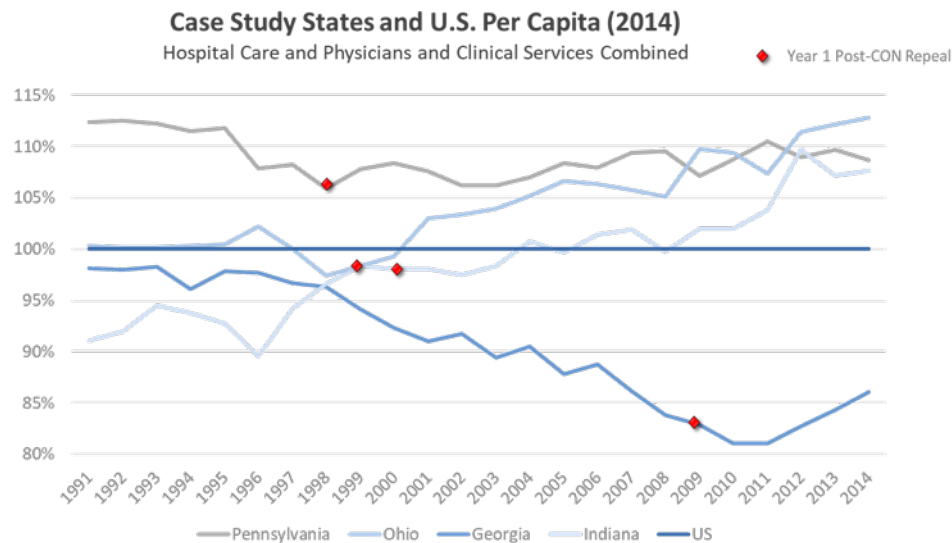
¹⁷ The per capita healthcare expenditure data is from Kaiser Family Foundation which reproduced data from the Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group.



PART TWO: RESPONSE TO MERCATUS

As noted in Part Three, there are always limitations with studies involving CON. Limitations also exist when analyzing pre- and post-repeal impact in specific states. Despite the limitations,¹⁸ this study has been able to obtain data sufficient to examine some aspects of the impact of CON repeal in the three case study states discussed in Part One, as well as a fourth: Georgia repealed CON only for single-specialty ASCs in 2008, Pennsylvania's CON laws sunset in 1996, Ohio repealed CON with a phased approach from 1995 to 1997, and Indiana repealed, reenacted, and repealed CON again in 1998 (then reinstated for nursing facilities again in 2018).

In each of these states, per capita health expenditures for hospital and physician services grew at a higher rate in the years since CON repeal than the US average growth rate over the same period of time. Prior to repeal, three of the states' expenditures had been growing at a lower rate than the US average, shown by the downward trendlines in the chart below.¹⁹ Indiana's growth rate was higher than the US average before CON repeal, shown by the upward trendline, and it remained higher than the US after repeal to such a level that the state's per capita cost rose above the US average a few years later.



The average experience of these states that have fully or partially repealed CON strongly suggests that Alaska's per capita costs would increase at a rate ~20 percent above the national growth rate with the repeal of CON.

Quality

Mercatus alleges that healthcare quality would be higher in Alaska without CON regulations but fails to examine quality data in Alaska. While No-CON states tend to outperform High/Moderate-CON states for many quality measures, Alaska outperforms both its High/Moderate-CON peers and No-CON states. A

¹⁸ Given all the factors that make a conclusive argument for or against CON nearly impossible to make as discussed in this report, coupled with the myriad of differences between all the states, it is likewise difficult to surmise the exact impact of CON repeal. However, there are facts from states that have partially or fully repealed CON more recently than the national repeal decades ago that indicate what potential repeal might mean for Alaskans.

¹⁹ The chart shows each state's actual per capita cost for these services as a percentage of the US cost in the years pre- and post-repeal. Upward trendlines indicate a growth rate in per capita costs that is higher than the US average growth rate and downward trendlines indicate a growth rate that is lower than the US average growth rate.



PART TWO: RESPONSE TO MERCATUS

comparison of a range of quality scores among Alaska, High/Moderate-CON states, and No-CON states demonstrates that Alaska has more scores that are better (8 of 17) than the other comparative groups, including the No-CON states with 6 of 17 better scores.

	Alaska	High/ Moderate-CON States	No-CON States
Deaths among Patients with Serious Treatable Complications after Surgery	153.0	169.5	164.4
Serious blood clots after surgery	4.0	3.9	3.6
Patients who gave their hospital a rating of 9 or 10	71.9%	71.3%	74.6%
Pneumonia (PN) 30-Day Readmission Rate	16.0%	16.7%	16.4%
Pneumonia (PN) 30-Day Mortality Rate	15.8%	15.7%	15.4%
Heart Failure (HF) 30-Day Readmission Rate	21.9%	22.1%	21.5%
Heart Failure (HF) 30-Day Mortality Rate	12.6%	11.4%	11.7%
Acute Myocardial Infarction (AMI) 30-Day Readmission Rate	15.0%	16.1%	15.8%
Acute Myocardial Infarction (AMI) 30-Day Mortality Rate	12.4%	12.7%	12.5%
Standardized Infection Ratio – CLABSI	0.50	0.68	0.61
Standardized Infection Ratio – CAUTI	1.26	0.77	0.68
Standardized Infection Ratio – SSI: Colon Surgery	1.48	0.83	0.86
Standardized Infection Ratio – SSI: Hysterectomy	0.57	0.89	0.90
Standardized Infection Ratio – MRSA Bacteremia	0.79	0.80	0.61
Standardized Infection Ratio – C.diff.	0.47	0.60	0.65
Rate of readmission after discharge from hospital (hospital-wide)	15.3%	15.6%	15.4%
MRI Lumbar Spine for Low Back Pain	43.2%	39.9%	40.6%

Lowest performing

Highest performing

Mid-range performing

Within 0.1 point of highest (still shown in green) or mid-range (both shown in yellow)

On the specific metrics examined by Mercatus, Alaska outperforms No-CON states. Alaska's deaths after surgical complications is considerably better than No-CON states. Alaska's rate would be more than seven percent higher as a No-CON state. Similarly, Alaska's pneumonia readmission rate, AMI readmission rate, and AMI mortality rate would all be higher as a No-CON state.

	Alaska	High/ Moderate-CON States	No-CON States
Deaths among Patients with Serious Treatable Complications after Surgery	153.0	169.5	164.4
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Acute Myocardial Infarction (AMI) 30-Day Mortality Rate	12.4%	12.7%	12.5%

Alaska's nursing home quality is even more stellar. A comparison of several metrics shows that Alaska's scores are significantly better than the other comparative groups, including the No-CON states.

	Alaska	High/ Moderate-CON States	No-CON States
SNF Residents with New/Worsened Pressure Ulcers	1.1	1.7	1.6
Long Stay Resident w 1 or More Falls w Major Injury	3.9	3.4	3.9
High Risk Long Stay Residents with Pressure Ulcers	5.9	7.8	6.4
Short Stay Residents Rehospitalized	14.3	20.8	20.2
Hospitalizations per 1,000 Long-Stay Days	0.9	1.5	1.5



PART THREE: THE CON DEBATE



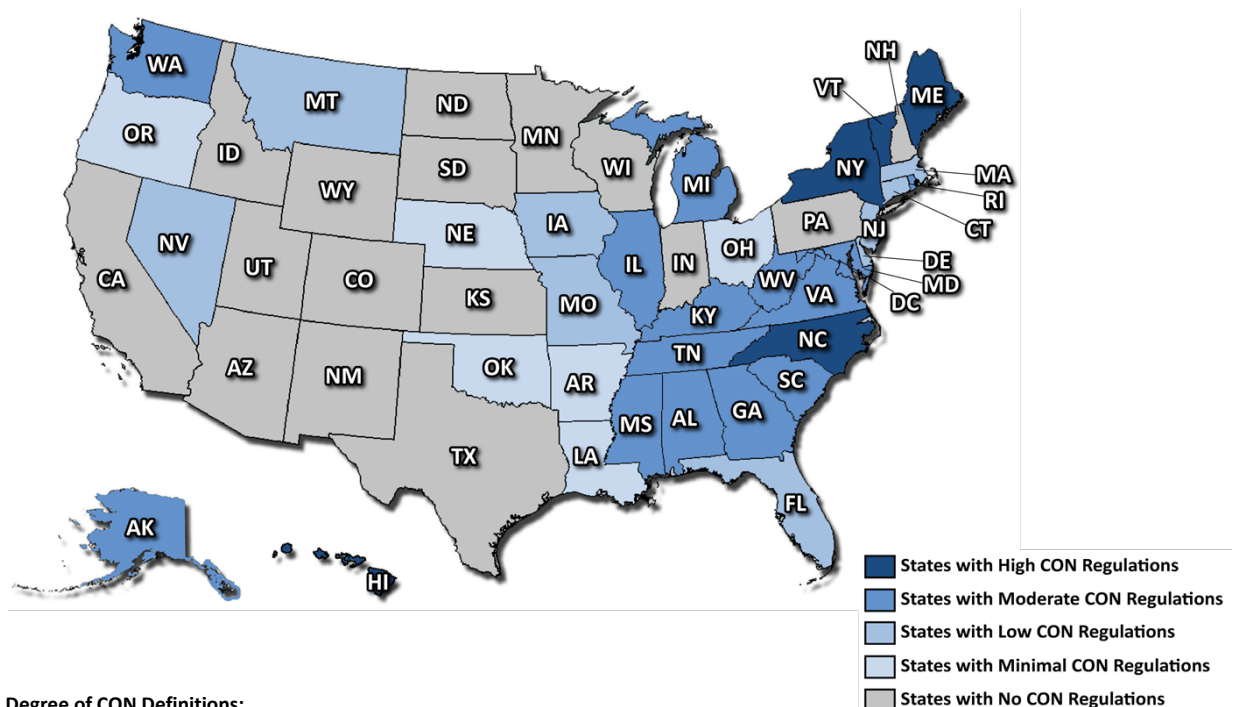
CON STUDIES AND ANALYSES

As mentioned previously, it is difficult to draw conclusions about the benefits, or lack thereof, of CON laws for many reasons, a few of which are discussed below.

Degrees of Regulation

While it is clear which states have CON laws at any given time and which do not, the variation in degrees of regulation between the CON states is significant. Any study that treats CON status as a binary choice—and most do—is grossly oversimplified. Among the 35 states with CON laws, there are huge variations in services covered, enforcement, administrative policies, and threshold levels. For example, some regulate only a few services like post-acute care (e.g., Ohio and Nebraska), while others (e.g., North Carolina and New York) regulate most healthcare services. Thus, any attempt at a determinative analysis of data simply between CON and No-CON states is muddy at best.

Alaska is considered a Moderate CON state, with 19 regulated services. Unlike many of its High/Moderate peers Alaska does not require CON for home health or hospice services.





Timing

The federal Health Planning Resources Act of 1974, which tied federal funding to Certificate of Need (CON) laws, was repealed in 1987. Since that time, 16 states had repealed their CON laws as of 2019. Among the 35 states (including the District of Columbia) that have CON laws, the extent of those laws varies. Appendix A includes a list of, and the previous map illustrates, all 50 states and the District of Columbia, whether or not they have CON laws, and a characterization of the extent of those CON laws—Minimal, Low, Moderate, or High. For those states that have repealed some or all of their CON laws, Appendix A includes dates and related information regarding repeal. For those states that have retained some CON laws, Appendix A lists the categories of health services regulated by CON.

Many of the No-CON states ended their CON programs in the 1980s, but others not until the late 1990s or even later, and still others have had on-again, off-again CON programs. The differences in timing, coupled with the differences in which services were regulated when, makes it virtually impossible to know what facilities and services existed or were developed with or without CON regulation and what impact that has on the variables typically analyzed in CON studies, such as utilization, cost and spending.

In addition to the timing of CON regulations themselves, it is difficult to isolate the impact of CON during a particular period of time from changes in clinical practice and/or technology that may be affecting variables such as utilization, cost and spending.

Variables

Variables driving healthcare utilization and cost are many, making it difficult to control for all those variables and isolate CON as the causal factor. As illustrated in the Summary of the Report, less rigorous studies often will suggest causation between factors that do not actually exist. In contrast, population diversity is a statistically significant difference between High/Moderate-CON states and No-CON states. On average, the white population in No-CON states is 14 percentage points higher than that of High/Moderate-CON states. Unfortunately, health disparities between races are well documented. According to professors at the Harvard T.H. Chan School of Public Health, “health disparities [in the US] between blacks and whites run deep. For example, blacks have higher rates of diabetes, hypertension, and heart disease than other groups, and black children have a 500% higher death rate from asthma compared with white children.”²⁰ Findings drawing conclusions that CON is the cause of higher costs or lower health status, rather than considering race or socioeconomic factors, are disingenuous.

Small Datasets

The size of datasets in any state-based CON analysis—which are limited to 51 states, including the District—inherently limits the conclusions that can be drawn from these studies. As noted by health economist Mark Holmes, PhD, Director Cecil G. Sheps Center for Health Services Research; Professor and Associate Chair, UNC Gillings School of Public Health in a 2016 Ascendient study,²¹ “there are rules of thumb for how many observations one should have per regressor (variable). For example, textbooks typically suggest 10 to 20 observations per variable. I, personally, usually look for at least 20. If you look

²⁰ Lavizzo-Mourey, Risa and Williams, David, “Being Black is Bad for Your Health,” US News and World Report, April 14, 2016.

²¹ “Image vs Reality: Mercatus, CON, and Statistics in Search of Meaning,” Ascendient Healthcare Advisors, May 2016.



at Table 2 in the Mercatus report,²² models 4 and 8 have 51 observations (50 states, plus the District of Columbia) for 12 variables (e.g., CON requirement, average age, etc.), or about 4 observations per variable. ***It means this model is at a high risk for overfitting, which means the results can be misleading because the model is too complicated for the size of the dataset. The bottom line is that these results should not be interpreted without major caution.*** [emphasis added]

Study Limitations

Small datasets, as discussed above, are a frequent study limitation in CON analyses, though not always cited by report authors. There are others as well. A number of CON studies are conducted on a single service (e.g., coronary artery bypass), but conclusions are drawn and applied to other services as well. Some studies are based on data from a single point in time and data that is not perfectly constructed; others are limited to one payer or another (e.g., commercial insurance or Medicare), which may or may not be applicable to other payers.

One of the frequently reported analyses conducted by the Mercatus Center at George Mason University (and reported out by individual states) states that it does not consider “other factors affecting health care costs, such as competition among hospitals, availability of doctors, market dominance by large health insurance carriers, or overall patient health.”²³ Clearly, overall population health has a considerable influence on healthcare spending across the US and cannot be divorced from any analysis of healthcare costs, creating a significant limitation on any study that fails to consider population health.

²² Stratmann, T. and Baker, Matthew C., “Are Certificate-of-Need Laws Barriers to Entry? How They Affect Access to MRI, CT, and PET Scans.” Mercatus Working Paper, Mercatus Center, George Mason University, January 2016.

²³ “Study finds NC health care regulations drive up costs,” *The News & Observer*, February 13, 2015.



COMMON ANTI-CON ARGUMENTS

For many of the reasons cited in the section above, it is virtually impossible to conclude that CON causes any particular outcome, either positive or negative. Nevertheless, there are entities with an ideological bent who routinely publish studies advocating for CON repeal. Most notable of these is the Mercatus Center at George Mason University. Mercatus has authored many papers that are often released as “provisional findings” and “likely to be republished in an academic journal,” but it is important to note that these papers are not published and do not undergo a traditional, rigorous peer review as would most academic and scientific papers. The most common arguments offered by Mercatus and other anti-CON proponents, including the pitfalls of the more ideological arguments, are summarized below.

Conclusions Are Often Misleading

With the appearance of an authoritative academic study, these papers purposefully but inappropriately lead readers, especially the casual reader looking for support of their position, to faulty conclusions. For example, in Mercatus’ 2016 study on imaging,²⁴ the authors refer to differences in “utilization” between CON and non-CON states, with the clear implication that residents in the CON states are not getting the vital imaging services that they need. For instance, on page 20: “less imaging care for MRIs, CTs and PETs is provided in states with CON requirements.” This is the conclusion that many will rely upon in arguing against CON. However, data in Mercatus’ own report do not show that CON status results in “less imaging care,” nor does Mercatus show fewer total scans for CON states. They show only that fewer services are delivered in a non-hospital setting in CON states. To their credit, the authors *do* explicitly make the point once, that “[t]he negative effect occurs only for scans provided outside the hospital,” but the nuance is easily lost, and the whole discussion can be misleading for a casual reader. By using terms such as “utilization” and “less care,” the authors are misrepresenting their own data and suggesting facts that are not accurate. (Ascendient published a paper²⁵ critiquing this Mercatus study, which expands on many of the arguments outlined here.)

Assumptions Are Often Faulty

Using the Mercatus imaging study as an example, the authors appear to assume that fewer providers of imaging services (in CON states) means that there is less access. The problem with this argument is that the sheer number of providers may be irrelevant when it comes to measuring access. To use a transportation example, one would never measure a city’s accessibility by the raw number of planes landing at the airport. Ten private aircraft are not “better” than five commercial jets, because the commercial jets are much more productive in economic terms—they offer more access to more passengers, despite their lower numbers. Likewise, Mercatus’ own report data show that hospital providers offer greater access to imaging services, because their output is roughly 10 times greater than non-hospital providers. In fact, Mark Holmes indicates that the economic argument is actually the opposite of what Mercatus cites, because it is more economically productive to have more high-producing providers.²⁶

²⁴ Stratmann, T. and Baker, Matthew C., “Are Certificate-of-Need Laws Barriers to Entry? How They Affect Access to MRI, CT, and PET Scans.” Mercatus Working Paper, Mercatus Center, George Mason University, January 2016.

²⁵ “Image vs Reality” <https://www.ascendient.com/insights/whitepapers/image-vs-reality-mercatus-con-and-statistics-in-search-of-meaning/>

²⁶ Ibid, page 9.



Study Design Is Often Faulty

At best, the design of these studies is often faulty; at worst, the studies are deliberately designed to achieve the desired results. For example, the previously cited Mercatus imaging report aggregated data, rather than using individual data, which eliminated the ability to control for factors other than CON. According to Mark Holmes, “the dataset they start with is individual Medicare claims data. That means that they had access to a lot of information on each individual patient—information like age, race, co-morbidities—data points that could affect demand for imaging. Rather than using that individual data, they made a lot of adjustments to get to state-level averages. In my opinion, the cleanest approach would have been to use the individual data, which would have allowed them to control for those individual variables that may affect utilization and cost.”²⁷

Arguments Are Often Faulty

Like study design, these papers often present intense data analysis centered around speculative or faulty arguments. Using the Mercatus imaging paper again as an example, the study compares Medicare records with Census results and finds that residents of CON states are more likely than residents of non-CON states to travel across state lines for an MRI, CT or PET scan. The authors explain the finding as follows: “The propensity for residents of CON states to travel out of state to obtain medical services can be attributed to any of several factors: higher costs, a smaller selection of services, or lower access to care.”²⁸

If, as the Mercatus authors argue, CON was truly limiting access to imaging services, then patients would have to travel outside the “CON zone” to escape the limitations, not just to any other state. (In the 2016 paper, Mercatus analyzed only in-state or out-of-state, not to which state the patient traveled.) For example, a Vermont patient struggling to schedule an MRI could not simply visit New Hampshire (a CON-state at the time of the study), Massachusetts or New York, because all of those neighboring states also require a CON for MRI services (and thus would present exactly the same access barriers as Vermont). To circumvent these purported barriers, the Vermont patient would have to travel all the way to New Jersey or Pennsylvania, the closest states without CON requirements.

To demonstrate the faulty logic of these conclusions, Mark Holmes conducted a similar analysis by analyzing the commuting patterns of each state’s workforce with the imaging data from the Mercatus study and determined that 5.2 percent of residents in states with PET CON work out of state, while only 3.2 percent of residents do in states without PET CON. According to Dr. Holmes, “A false conclusion would be that CON for PET increases the probability of working in another state...Clearly, PET CON is not causal relative to the percentage of residents who work out of state. Rather, these states have high connectedness to other states for reasons other than CON, and those reasons are likely a major driver of the differences.”

Dr. Holmes cautions that “[s]tudies such as this must be careful about drawing conclusions about causation from mere correlations.”

As determined in Ascendient’s rebuttal paper, armed with a map and Occam’s Razor (“*Among competing hypotheses, the one with the fewest assumptions should be selected*”) there is another explanation than that offered by Mercatus: geography. On the East Coast, where CON predominates, states are more

²⁷ “Image vs Reality,” page 10.

²⁸ Stratmann and Baker, page 20

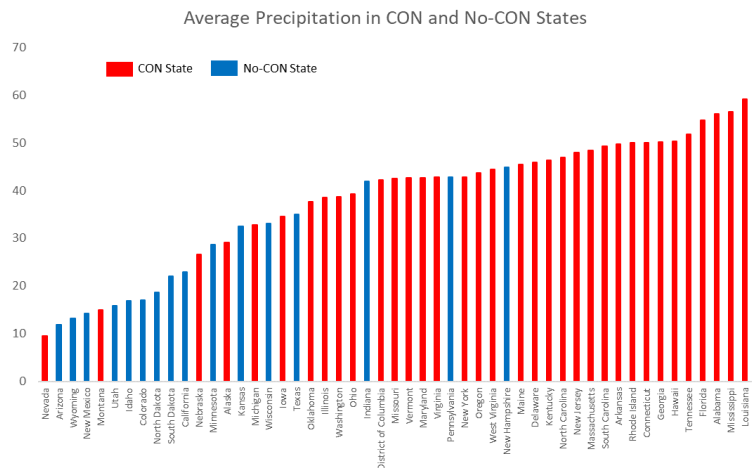


densely populated and more “connected” in terms of commuting patterns. Those who reside in a state where CON is required for PET services are more likely to work outside their home state. The CON law isn’t *causative* here—regulations are not forcing residents out of state for work, nor are they forcing residents out of state for medical care. Instead, CON laws correlate strongly with denser populations and more fluid commuting patterns, but CON laws do not cause those patterns.

We’ve all been told that correlation does not imply causation. Yet many business leaders, elected officials, and media outlets still make causal claims based on misleading correlations. These claims are too often unscrutinized, amplified, and mistakenly used to guide decisions.

Harvard Business Review, 11/5/21

An extreme example shows the danger in assuming causation from correlation. As introduced in the Summary of the Report, Ascendient analyzed the average precipitation of each state and the state’s CON classification as a CON state or No-CON state, as illustrated in the bar chart. The analysis showed that CON states average 43 inches of precipitation each year, while No-CON states average only 26. The difference between the two groups is highly statistically significant. A false conclusion of this very strong correlation would be that CON increases the amount of precipitation in a state. Clearly, CON laws do not cause precipitation.





COMPELLING CON RETENTION ARGUMENTS

Since the advent of the country's modern healthcare system in the middle of the last century, healthcare has never operated, and likely will never operate, as a free market. Elimination of CON laws does not change this fact. Moreover, healthcare transformation is poised to fundamentally alter the landscape of healthcare in the US, including how care is paid for and how care is delivered. Rewriting the laws of competition via CON repeal simultaneous to transformation is a risky proposition, especially for vulnerable communities and safety net providers. The US healthcare system can continue to provide excellent care to all as long as the transition is orderly and evolutionary. Premature repeal of CON is likely to have unintended – and very expensive – consequences.

Such an approach is consistent with the oft-cited Bush-era FTC/DOJ report, “Improving Health Care: A Dose of Competition.”²⁹ While the July 2004 report encourages states to reconsider the efficacy of CON programs (a recommendation often cited by anti-CON proponents), it does so within a broader context that should not be ignored. First, the report notes the inherent features of US health care markets that limit competition.

- **EXTENSIVE REGULATION** at both the federal and state level that affects how competition takes place in healthcare markets. Much of this regulation remains intact and will continue to limit competition (e.g., anti-kickback, self-referral, EMTALA, and medical malpractice).
- **THIRD PARTY PAYORS.** “Insured consumers are insulated from most of the costs of their decisions on health care treatments. The result is that insured consumers have limited incentive to balance costs and benefits and search for lower cost health care with the level of quality that they prefer. A lack of good information also hampers consumers’ ability to evaluate the quality of the health care they receive.” *Thus, healthcare remains remarkably different* from a “well-functioning market [that] maximizes consumer welfare when consumers make their own consumption decisions based on good information, clear preferences, and appropriate incentives.”
- **INFORMATION PROBLEMS.** “The public has access to better information about the price and quality of automobiles than it does about most health care services. It is difficult to get good information about the price and quality of health care goods and services, although numerous states and private entities are experimenting with a range of ‘report cards’ and other strategies for disseminating information to consumers. Without good information, consumers have more difficulty identifying and obtaining the goods and services they desire.”
- **COST, QUALITY, AND ACCESS—THE IRON TRIANGLE.** “[I]n equilibrium, increasing the performance of the health care system along any one of these dimensions can compromise one or both of the other dimensions, regardless of the amount that is spent on health care.....Nonetheless, trade-offs among cost, quality and access can be necessary....Good information about the costs and consequences of each of these choices is important for competition to be effective.”
- **SOCIETAL ATTITUDES.** “For most products, consumers’ resources constrain their demand. Consumers and the general public do not generally expect vendors to provide services to those who cannot pay for them....By contrast, many members of the public and many health care providers view [and regulations such as EMTALA establish] health care as a “special” good, not subject to normal

²⁹ “Improving Health Care: A Dose of Competition” A Report by the Federal Trade Commission and the Department of Justice, July 2004.



market forces, with significant obligational norms to provide necessary care without regard to ability to pay.”

- **AGENCY RELATIONSHIPS.** “A large majority of consumers purchase health care through multiple agents—their employers, the plans or insurers chosen by their employers, and providers who guide patient choice through referrals and selection of treatments. This multiplicity of agents is a major source of problems in the market for health care services.”

While some of these barriers to free market competition—notably insulation by third party payors and lack of information—are being addressed through various measures, some such as EMTALA regulations and societal attitudes show no signs of abatement. Thus, barriers to free market competition in health care will persist.

Second, the report concludes its executive summary with recommendations on how to improve competition in healthcare markets. “[C]ompetition remains less effective than possible in most health care markets, because *the prerequisites for fully competitive markets are not fully satisfied*...The Agencies recognize that *the work remaining to be done is complex and difficult and will take time*. A renewed focus on the prerequisites for effective competition, however, may assist policymakers in identifying and prioritizing tasks for the near future.” [emphasis added] Those recommendations include:

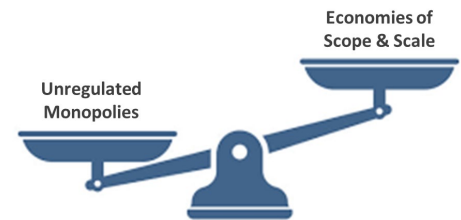
- *“Payment methods that give incentives for providers to lower costs, improve quality, and innovate could be powerful forces for improving competition in health care markets.”*
- *“Governments should reexamine the role of subsidies in health care markets in light of their inefficiencies and potential to distort competition....Competition cannot provide resources to those who lack them; it does not work well when certain facilities are expected to use higher profits in certain areas to cross-subsidize uncompensated care. In general, it is more efficient to provide subsidies directly to those who should receive them, rather than to obscure cross subsidies and indirect subsidies in transactions that are not transparent. Governments should consider whether current subsidies best serve their citizens’ health care needs.” [emphasis added]*
- *“States with Certificate of Need programs should reconsider whether these programs best serve their citizens’ health care needs.”*

Although the report recommends reconsideration of states’ CON programs, it does so in the context of other recommendations, notably to change payment methods and offer direct subsidies rather than cross-subsidies. New payment methods being piloted across the country ultimately may be responsive to the recommendation of this report. Likewise, various methods to cover the uninsured have been implemented, though there remain significant numbers of uninsured that hospitals are committed (and required through EMTALA) to care for. New payment methods that incorporate rational incentives into the healthcare market may resolve many of the concerns hospitals have regarding the dismantling of the CON program. The report states that, “Other means of cost control appear to be more effective and pose less significant competitive concerns.” Essentially, this oft-cited FTC/DOJ reports argues for payment reform and direct subsidies ahead of CON reform or repeal. Thus, until other means of cost control, such as new payment methods, are widespread and universally adopted and the care for the uninsured addressed, the reduction or elimination of the CON program would be premature.



A Georgia State University study³⁰ frames the competing economic arguments for and against CON. In other words, which economic effect is the more dominant effect in healthcare: do unregulated monopolies raise prices and lower quality or do economies of scope and scale provide lower costs and improved quality? Because most healthcare providers are not paid their “price” for a significant and growing portion of their patient population (e.g., Medicare which sets its own price), the theoretical concern regarding monopoly pricing power has limited, and diminishing, applicability to healthcare providers.

“CON laws create barriers to entry to a variety of health care services markets. As such, they convey monopoly power to incumbent health care providers. In general, economic theory suggests that unregulated monopolies have higher prices and lower quality than firms in more competitive markets. However, competition may limit the ability of facilities to exploit economics [sic] of scale and scope. Economies of scale occur when costs are reduced as volume increases. Economies of scope occur when it is less costly to produce two services together than each service separately. If one or both of these conditions are present, then the increased costs and decreased quality associated with monopoly power may be offset by the decreased costs and increased quality of the economies of scale and scope. CON laws give health care providers the ability to take advantage of economies of scale and scope that can lower costs and increase quality. The basic question is which effect dominates and for which services.”



The argument that CON stifles competition often stems from both an economic ideology and an interest on behalf of physicians who desire to own CON-regulated services. Even with no nefarious intent, positioning physicians as both creators of demand, as well as suppliers of those services, creates an inherent conflict that unintentionally or not, often leads to unnecessary utilization. For example, ample evidence exists to show that physician-owned imaging centers tend to increase utilization, perhaps even unnecessary utilization, and thus drive up system costs—precisely the outcome that CON regulators work to prevent. MedPAC explicitly stated in a 2009 report: “Although the rate of growth slowed between 2006 and 2007, *there are reasons to be concerned that some of the increased use in recent years may not be appropriate*, [emphasis added] which contributes to Medicare’s growing financial burden on taxpayers and beneficiaries.”³¹ The MedPAC report goes on to cite numerous studies that have found that physician ownership in imaging centers or equipment is associated with higher volume.

- A study by the Government Accountability Office (GAO) found that physicians in Florida who were investors in diagnostic imaging centers referred their Medicare patients more frequently for MRI, computed tomography (CT), nuclear medicine, and ultrasound studies than nonowners (GAO 1994). Some of the differences were dramatic: Imaging center owners ordered twice as many MRI scans and 29 percent more CT scans for their patients than nonowners. GAO also found that physicians who were members of practices that performed in-office imaging ordered studies more frequently than physicians who referred

³⁰ “Report of Data Analysis to the Georgia Commission on the Efficacy of the CON Program, Amended November 2006. As found: <https://www.issueab.org/resources/4667/4667.pdf>

³¹ “Impact of physician self-referral on use of imaging services within an episode,” Report to the Congress: Improving Incentives in the Medicare Program, June 2009, http://67.59.137.244/chapters/Jun09_Ch04.pdf



patients to outside facilities. For example, physicians with MRI machines in their offices ordered about three times as many MRI scans per 1,000 office visits as other physicians.

- Stanford researcher Laurence Baker found that patients of neurologists and orthopedic surgeons who owned MRI machines were more likely to receive an MRI scan within seven days of an office visit than patients of neurologists and orthopedic surgeons who did not own MRI machines (Baker 2008) ... Acquiring an MRI scanner led to a 22 percent increase in the probability of ordering MRI scans by orthopedic surgeons and a 28 percent increase in the probability of ordering MRI scans by neurologists.
- A study of California workers' compensation cases concluded that self-referring physicians were more likely than other physicians to order medically inappropriate MRI scans (Swedlow et al. 1992). The researchers, who examined about 500 MRI scans, found that 38 percent of the scans ordered by physicians with an ownership interest in an MRI facility were determined to be inappropriate during a precertification review. By contrast, 28 percent of the scans ordered by physicians without such an ownership interest were found to be inappropriate.

The Mercatus prescription for US healthcare—as exemplified by its 2016 imaging study—is outdated. In October 2015, the *American Journal of Roentgenology*³² examined claims for Medicare beneficiary Part B patients and found that national average spending on imaging peaked in 2006, then decreased 4.4 percent annually between 2006 and 2012. According to a 2011 study³³ headed by David Levin, there are at least five factors at work:

- The Deficit Reduction Act of 2005 (DRA05) substantially cut reimbursement for private office advanced imaging, especially MRI and CT, and “likely discouraged entrepreneurs from opening new imaging offices.”
- Concerns about exposure to radiation likely have affected physicians’ thinking about how often they should refer patients for imaging procedures.
- American College of Cardiology and the American College of Radiology have issued more cautious criteria for imaging, even as physicians in general are increasingly aware of the need to control healthcare costs, contributing to fewer referrals.
- Payors are imposing growing restrictions on which physicians are paid for advanced imaging tests putting particular strain on non-radiologist physicians in a position to self-refer.
- Though not applicable to traditional Medicare patients, the rise of preauthorization programs among radiology benefit management companies likely has physicians thinking more carefully about when and whom to refer for imaging.

Even more significant, the federal government is rapidly moving away from fee-for-service payments in favor of value-based models that discourage expensive and unnecessary services. CMS has announced its intention to have all Medicare beneficiaries in an accountable plan by 2030. Ultimately, Mercatus’ push for more supply, particularly of historically higher-priced services, is contrary to the transformation underway in the industry.

³² Rosenkrantz, A.B., Hughes, D.R., Duszak, Jr., R., “State Variation in Medical Imaging: Despite Great Variation, the Medicare Spending Decline Continues,” *American Journal of Roentgenology*, 2015; 205:817-821

³³ Levin, D.C., Rao, V.M., Parker, L., Frangos, A.J., Sunshine, J.H., “Bending the Curve: The Recent Marked Slowdown in Growth of Noninvasive Diagnostic Imaging,” *American Journal of Roentgenology*, 2011; 196:W25-W29



PART FOUR: APPENDICES

APPENDIX A: CON STATUS BY STATE

CON Status by State			
State	CON?	Degree of CON	Dates of CON Law
District of Columbia	Yes	High	1977-present
Hawaii	Yes	High	1974-present
Maine	Yes	High	1978-present
New York	Yes	High	1966-present
North Carolina	Yes	High	1978-present
Vermont	Yes	High	1979-present
Alabama	Yes	Moderate	1979-present
Alaska	Yes	Moderate	1979-present
Georgia	Yes	Moderate	1979-present
Illinois	Yes	Moderate	1974-present
Kentucky	Yes	Moderate	1972-present
Maryland	Yes	Moderate	1968-present
Michigan	Yes	Moderate	1972-present
Mississippi	Yes	Moderate	1979-present
Rhode Island	Yes	Moderate	1968-present
South Carolina	Yes	Moderate	1971-present
Tennessee	Yes	Moderate	1973-present
Virginia	Yes	Moderate	1973-present
Washington	Yes	Moderate	1971-present
West Virginia	Yes	Moderate	1977-present
Connecticut	Yes	Low	1973-present
Delaware	Yes	Low	1978-present
Florida	Yes	Low	1973-present
Iowa	Yes	Low	1977-present
Massachusetts	Yes	Low	1972-present
Missouri	Yes	Low	1979-present
Montana	Yes	Low	1975-present
Nevada	Yes	Low	1971-present
New Jersey	Yes	Low	1971-present
Arkansas	Yes	Minimal	1975-present
Louisiana	Yes	Minimal	1991-present
Nebraska	Yes	Minimal	1975-present
Ohio	Yes	Minimal	1975-present
Oklahoma	Yes	Minimal	1971-present
Oregon	Yes	Minimal	1971-present
Arizona	No*		1971-1985
California	No		1969-1987
Colorado	No		1973-1987
Idaho	No		1980-1983
Indiana	No**		1980-1996; 1997-1999; 2018-present
Kansas	No		1972-1985
Minnesota	No***		1971-1984
New Hampshire	No^		1979-2016
New Mexico	No		1978-1983
North Dakota	No		1971-1995
Pennsylvania	No		1979-1996
South Dakota	No		1972-1988
Texas	No		1975-1985
Utah	No		1979-1984
Wisconsin	No^^		Repealed 2009
Wyoming	No		1977-1989

*Although Arizona does not operate an official certificate of need program, an application for ambulance services and ambulances must be filed with the Department of Health Services, Bureau of Emergency Medical Services & Trauma System.

**Indiana enacted SB 190 in 2018, a new certificate of need program for comprehensive care facilities (nursing homes). The new program became effective on July 1, 2019 and requires the Office of Family and Social Services and the Department of Health to establish a comprehensive certificate of need program and sets for the application requirements and exceptions. As such, for purposes of this study, Indiana is classified as a no-CON state, since it was a no-CON state during the period reflected in the data analyses and doesn't require CON for most major services.

***While Minnesota does not have a certificate of need program, it maintains various approval processes that function similarly to CON. The 2004 state legislature established a public interest review process for hospitals seeking exceptions to that state's hospital bed moratorium law. Additionally, the state created a local system needs plans for intermediate care facilities pursuant to Minn. Stat § 252.282. This program allows counties to evaluate and regulate its service system to best support the needs of persons with developmental disabilities.

^New Hampshire repealed its certificate of need program in 2016 pursuant to SB 481 and switched to a specialized licensure process for certain health facility projects, including establishing cardiac catheterization, open heart surgery and megavoltage radiation therapy services.

^^Wisconsin does not have an official certificate of need program. The state, however, maintains certain approval processes for long-term care; moratoriums for hospital, psychiatric/chemical dependency, and nursing home beds; and a certificate of public advantage program pursuant to Wis. Stat. § 150.

Source(s):

See Appendix B

CON Status by State - Regulation by Service

	Degree of CON	Hospital	Acute Beds	ASC	Burn	Cath	CT	Gamma	Home Health	Hospice	ICF/MR	LTAC	Litho	Nursing Facility	MOB	MRI	NCU	Obstetrics	Open Heart	Transplants	PET	Psych	Rad Th	Rehab	Dialysis	Assisted Living	Subacute	Sub Abuse	Swing	Ultrasound	Other	Total
Vermont	High	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	27
District of Columbia	High	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	27
Hawaii	High	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	27
North Carolina	High	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	24
Maine	High	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	23
New York	High	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	23
Tennessee*	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	21
West Virginia	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	21
Alabama	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	20
South Carolina	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	20
Alaska	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	19
Virginia	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	19
Mississippi	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	19
Rhode Island	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Georgia	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Washington	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	18
Kentucky**	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Michigan	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	17
Maryland	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	16
Illinois	Moderate	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	16
Connecticut	Low	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
Massachusetts	Low	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
Missouri	Low	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
Florida^	Low	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	14
New Jersey	Low	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	13
Iowa	Low	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	10
Delaware	Low	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	10
Montana	Low	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	8
Nevada	Low	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	6
Arkansas	Minimal	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	7
Oklahoma	Minimal	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	5
Oregon	Minimal	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4
Louisiana	Minimal	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	4
Nebraska	Minimal	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	3
Ohio	Minimal	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	2

Source(s): See Appendix B

Please note:

*Public Chapter 1043 became effective July 1, 2016. This law made sweeping changes to the Tennessee's Certificate of Need Program including additions and deletions to services overseen by the program, a new emphasis on the quality of health care provided by the applicant, increasing the oversight of granted CONs by the HSDA, and changes in the funding structure of the agency. Beds may be increased by 10% of licensed beds in a specific bed category without a CON once every three years.

**MRI services were removed from Kentucky's CON Requirements in 2019. Licensure for MRI services remains in 2019.

^Florida: open heart for Pediatrics only. Effective July 2019, general hospitals – including acute care facilities, long-term care facilities, and rural hospitals – are no longer subject to CON approval pursuant to HB 21. These services are shown as CON regulated services in the chart above due to these requirements existing during the time period of available data analyzed during this process.

Degree of CON Definitions:

-High – State regulates more than 22 services

-Moderate – State regulates more than 15 services but fewer than or equal to 22 services

-Low – State regulates more than or equal to 8 services but fewer than 15 services (except for Nevada which is coded as Low despite only having 6 regulated services due to its regulation of acute care beds and ASCs)

-Minimal – State regulates fewer than 8 services and does not regulate hospitals, acute care beds, or ASCs

APPENDIX B: GEOGRAPHIC CLASSIFICATION RATIONALE

Ascendient worked through several geographic classification schemes before determining that the methodology discussed below was most appropriate for *the purposes of this analysis and CON impact study*. Purposes of this study include analyzing access to healthcare services—including primary care physicians—by geography. As such, final geographic classifications needed to make sense not only for Alaska but for ALL states. Ascendient tested these classifications across multiple states for which we have direct knowledge and experience--North Carolina, Maryland, South Carolina, Georgia, and New York--to verify its use across the US. As a result, Ascendient has used this classification system for similar studies on multiple occasions.

Ascendient developed the following geographic classifications based on county population ranges and determining whether or not a county within the 75,000 to 200,000 range is adjacent to a county with at least 200,000 population (small urban or greater). Resulting classifications are as follows:

- <25,000 = Small Rural
- 25,000 - 75,000 = Rural
- 75,000 - 200,000 non-adjacent to a county of at least 200,000= Rural Suburban
- 75,000 - 200,000 adjacent to a county of at least 200,000= Suburban
- 200,000 - 500,000 = Large Suburban
- 500,000 - 1,000,000 = Urban
- >1,000,000 = Large Urban

APPENDIX C: SUMMARY OF DATA MEASURES AND SOURCES

Data Item	Data	Source	Data Time Period	Assumptions
A	CON?	American Health Planning Association 2011 and 2016 National Directory CON Programs Health Planning Agencies	2011 and 2016 National Directory with adjustments for known CON requirements	N/A
B	Degree of CON Regulation	American Health Planning Association 2011 and 2016 National Directory CON programs Health Planning Agencies	2011 and 2016 National Directory with adjustments for known CON requirements	<p>Degree of CON Definitions:</p> <p><u>-High</u> – State regulates more than 22 services</p> <p><u>-Moderate</u> – State regulates between 15-22 services</p> <p><u>-Low</u> – State regulates more than or equal to 8 services but fewer than 15 services (except for Nevada which is coded as moderate despite only having 6 regulated services due to its regulation of acute care beds and ASCs)</p> <p><u>-Minimal</u>: State regulates fewer than 8 services and does not regulate hospitals, acute care beds, or ASCs.</p>
C	If no CON, How long? (Dates of CON Law)	National Conference of State Legislatures	December 2019	N/A
D	Health Services regulated by CON	American Health Planning Association 2011 and 2016 National Directory CON Programs Health Planning Agencies	2011 and 2016 National Directory with adjustments for known CON requirements	N/A

Data Item	Data	Source	Data Time Period	Assumptions
E	Geographic Distribution of Counties	Census, PEPPPOP2019.PEPANNRES w Ascendient geographic assumptions	2019	
F	Geographic Distribution of Population	Census, PEPPPOP2019.PEPANNRES w Ascendient geographic assumptions	2019	
G	Population Age	Census, American Community Survey Table S0101	2019	
H	Life Expectancy	Life Expectancy by State Population. (2019-11-05). Retrieved 2019-12-12, from http://worldpopulationreview.com/states/life-expectancy-by-state/ Based on 2017 CDC data (https://www.cdc.gov/nchs/products/databriefs/db328.htm)	2017 data	
I	Median Household Income	Kaiser Family Foundation	2019	
J	Total Population Size	Census, accessed via data.census.gov, PEPANNRES2019 w Ascendient geographic assumptions	2019	
K	Population Density	Census, accessed via data.census.gov, PEPANNRES2019; GCT-PH1-Geography-United States	2019; 2010	

Data Item	Data	Source	Data Time Period	Assumptions
L	Distribution by Race	Census, accessed via data.census.gov, ACS Demographic and Housing Estimates 2019: ACS 1-Year Estimates Data Profiles Table ID: DP05	2019	
M	Distribution by Ethnicity	Census, accessed via data.census.gov, ACS Demographic and Housing Estimates 2019: ACS 1-Year Estimates Data Profiles Table ID: DP05	2019	
N	Percent of Population Below Poverty Level	GCT1701-Geography-United States; American Community Survey 1-Year Estimates	2019	
O	Percent of Population Uninsured	https://wallethub.com/edu/rates-%20of-uninsured-by-state-before-%20after-obamacare/4800	2019	
P	Employment Distribution	Establishment data state and area employment annual averages. Table 1. Employees on nonfarm payrolls in states and selected areas by major industry	2020	
Q	State Health Score (higher is better)	United Health Foundation, America's Annual Report Health rankings	2020 Report; Data time periods vary by measure	
R	America's Top States for Business (Economy, Cost of Doing Business, and Business Friendliness categories)	CNBC, America's Top States for Business in 2019	2019 Rankings; Data time periods vary by measure	
S	% Adults Reporting Fair or Poor Health	Behavioral Risk Factor Surveillance System (BRFSS)	2019; NJ % based on 2018 data based on data limitations	
T	Hospitals (Including subsidiaries)	AHA DataQuery	Data from FY2019 AHA	Excludes the following health systems and associated hospitals:

Data Item	Data	Source	Data Time Period	Assumptions
			<p>Annual Survey. Data accessed March 18, 2021.</p> <p>Subsidiary hospitals as of February 2021 data release.</p>	<p>-Bureau of Medicine & Surgery, Dept. of the Navy -Dept. of the Air Force -Dept. of the Army, Office of the Surgeon General -Dept. of Veterans Affairs -US Indian Health Service</p> <p>Excludes hospitals with the following primary services: acute long-term care, alcohol and other chemical dependency, children's acute long-term, children's psychiatric, children's rehabilitation, chronic disease, ER/outpatient, hospital unit of an institution (prison hospital, college infirmary, etc.), intellectual disabilities, long-term acute care, psychiatric, rehabilitation, & some "Other" hospitals based on Ascendient determinations</p> <p>Includes any remaining hospitals with the following primary service: children's chronic disease, children's general, children's orthopedic, children's other specialty, general medical & surgical, cancer, eye, ear, nose and throat, heart, obstetrics and gynecology, orthopedic, other specialty, surgical, tuberculosis and other respiratory diseases</p>

Data Item	Data	Source	Data Time Period	Assumptions
				Includes parent hospitals only
U	Hospitals (Excluding subsidiaries)	AHA DataQuery	Data from FY2019 AHA Annual Survey. Data accessed March 18, 2021.	<p>Excludes the following health systems and associated hospitals:</p> <ul style="list-style-type: none"> -Bureau of Medicine & Surgery, Dept. of the Navy -Dept. of the Air Force -Dept. of the Army, Office of the Surgeon General -Dept. of Veterans Affairs -US Indian Health Service <p>Excludes hospitals with the following primary services: acute long-term care, alcohol and other chemical dependency, children's acute long-term, children's psychiatric, children's rehabilitation, chronic disease, ER/outpatient, hospital unit of an institution (prison hospital, college infirmary, etc.), intellectual disabilities, long-term acute care, psychiatric, rehabilitation, & some "Other" hospitals based on Ascendient determinations</p> <p>Includes any remaining hospitals with the following primary service: children's chronic disease, children's general, children's orthopedic, children's other specialty, general medical & surgical, cancer, eye, ear, nose and throat, heart, obstetrics and gynecology, orthopedic, other</p>

Data Item	Data	Source	Data Time Period	Assumptions
				specialty, surgical, tuberculosis and other respiratory diseases Includes parent hospitals only
V	Medicare-Certified ASCs	CMS, ASCA	May 2020	N/A
W	Active Patient Care Physicians	2019 AAMC State Physician Workforce Data Book	2018	Limited to Active Patient Care Physicians
X	Active Patient Care Primary Care Physicians	2019 AAMC State Physician Workforce Data Book	2018	Limited to Active Patient Care Primary Care Physicians; Physicians are counted as primary care physicians if their self-designated primary specialty is one of the following: adolescent medicine (pediatrics), family medicine, general practice, geriatric medicine (family practice), geriatric medicine (internal medicine), internal medicine, internal medicine/pediatrics, or pediatrics.
Y	Total Hospital Beds	AHA DataQuery	Data from FY2019 AHA Annual Survey. Data accessed March 18, 2021. Subsidiary hospitals as of February 2021 data release.	Counts depend on data item T requirements Bed counts include number of beds regularly maintained (set up and staffed for use) for inpatients. Excludes newborn bassinets. Count includes both parent and subsidiary hospitals, but geographic distribution is based off of parent hospitals only
Z	Physicians by Geography	Area Health Resources File	2018	Total Active MDs Non-Fed and Fed by county geography per data item E

Data Item	Data	Source	Data Time Period	Assumptions
AA	Net Price per Inpatient Discharge (CMI/WI Adjusted)	Optum Almanac (Medicare Cost Reports), March 5, 2021 Data release.	Data through 2019. The Almanac data are scrubbed for outliers before calculation.	Case Mix Index and Wage Index adjusted, 50 th percentile by state
AB	Health Care Spending Per Capita by State	Kaiser Family Foundation	2020	N/A
AC	% IP Discharges Medicaid and Medicaid/Medicare	AHA DataQuery	Data from FY2019 AHA Annual Survey. Data accessed March 18, 2021. Subsidiary hospitals as of February 2021 data release.	N/A
AD	IP Bed Occupancy	AHA DataQuery	Data from FY2019 AHA Annual Survey. Data accessed March 18, 2021. Subsidiary hospitals as of February 2021 data release.	Counts depend on data item T requirements Bed counts include number of beds regularly maintained (set up and staffed for use) for inpatients. Excludes newborn bassinets. Includes parent and subsidiary hospitals
AE	IP Admissions	AHA DataQuery	Data from FY2019 AHA Annual Survey. Data accessed March 18, 2021. Subsidiary hospitals as of	Counts depend on data item T requirements Includes parent and subsidiary hospitals

Data Item	Data	Source	Data Time Period	Assumptions
			February 2021 data release.	
AF	Emergency OP Visits	AHA DataQuery	Data from FY2019 AHA Annual Survey. Data accessed March 18, 2021. Subsidiary hospitals as of February 2021 data release.	Counts depend on data item T requirements Includes parent and subsidiary hospitals
AG	Hospitals by Control/Ownership	AHA DataQuery	Data from FY2019 AHA Annual Survey. Data accessed March 18, 2021. Subsidiary hospitals as of February 2021 data release.	Counts depend on data items T & U requirements <u>Investor-owned</u> includes all investor-owned for-profit, investor-owned for-profit-corporation, investor-owned for-profit-individual, and investor-owned for-profit-partnership hospitals from AHA <u>Not-for-profit</u> Includes all nongovt (NFP)-church operated and nongovt (NFP)-other from AHA <u>Government</u> Includes all remaining city, city-county, county, state, and hospital district hospitals from AHA
AH	Hospitals by Primary Service	AHA DataQuery	Data from FY2019 AHA Annual Survey. Data accessed March 18, 2021. Subsidiary	Counts depend on data items T & U requirements <u>Gen Med/ Surg</u> Includes all remaining gen med/surg hospitals

Data Item	Data	Source	Data Time Period	Assumptions
			hospitals as of February 2021 data release.	<p><u>Critical Access</u> Includes all remaining critical access hospitals from AHA</p> <p><u>Specialty</u> Includes all remaining cancer, eye ear nose & throat, heart, OB/GYN, ortho, other specialty, surgical, and tuberculosis and other repository disease hospitals from AHA</p> <p><u>Children's</u> Includes all remaining children's chronic disease, children's general, children's orthopedic, and children's other specialty hospitals from AHA</p>
AI	Quality Data Measure	Centers for Medicare & Medicaid Services, Hospital Compare, Hospital-level Database Files (last updated on January 27, 2021)	Varies by data measure	State scores were calculated by averaging individual hospital scores reported within each state
AJ	COVID-19 Census and Surge Bed Capacity	COVID-19 Reported Patient Impact and Hospital Capacity by State Timeseries as provided by the U.S. Department of Health & Human Services	As of April 10, 2021	N/A