

Chiropractic Scope of Practice: A New Index and Database of Regulatory Stringency

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Abstract

This paper introduces a new state-level database and index of chiropractic scope-of-practice regulation across the 50 states and the District of Columbia. The database classifies legal authority in 12 diagnostic, therapeutic, and adjunctive practice domains as unrestricted, conditional on additional requirements, limited to ordering or referral, explicitly prohibited, or not specified in the governing legal text. We construct an equal-weight restrictiveness index in which each domain that is not fully authorized under the basic chiropractic license receives one restriction point, and the resulting count is normalized to a 0–10 scale. The index reveals substantial cross-state variation: values range from 0 in Kansas to 10 in Hawaii, with a mean of 4.59. New Jersey and Pennsylvania each receive an index value of 9, although the composition of their restrictions differs. As an exploratory application, we examine the cross-sectional relationship between state restrictiveness and county chiropractic business density in 2024. The unconditional association is negative, and the estimated relationship is reconfirmed after county demographic and economic characteristics are included, indicating substantial sensitivity to local market conditions. The database provides new measurement infrastructure for research on occupational licensing, provider location, health care utilization, spending, and patient outcomes.

Keywords: chiropractic care; scope of practice; occupational licensing; health care workforce; regulatory index

JEL Codes: I11, I18, J44, K23

Introduction

Motivation

The United States faces persistent geographic disparities in access to musculoskeletal care and nonpharmacologic pain-management services, particularly in rural and medically underserved areas. Chiropractors provide conservative musculoskeletal care, but the services they are legally permitted to provide vary substantially across states. Some jurisdictions allow chiropractors to order imaging, conduct diagnostic testing, and use a broad range of therapeutic modalities, whereas others limit practice authority to a narrower set of manual treatments. Despite this cross-state heterogeneity, there is no widely used, systematic measure of chiropractic scope-of-practice regulation, and economic evidence on the relationship between these laws and provider supply, utilization, spending, or patient outcomes remains limited.

This paper addresses that measurement gap by constructing a detailed state-level database and index of chiropractic scope-of-practice regulation. The database classifies legal authority across diagnostic, therapeutic, and adjunctive practice domains, including imaging, laboratory testing, needling procedures, nutritional interventions, therapeutic modalities, and diagnostic authority. The resulting index provides a standardized measure of regulatory restrictiveness that can support future research on provider entry, geographic distribution, health care utilization, spending, and patient outcomes.

Scope-of-practice regulation may influence chiropractic labor markets through several channels. Restrictions can alter the range of services that a practitioner may offer, the expected return to entering or relocating to a state, and the costs associated with obtaining additional credentials. Regulatory ambiguity may also create compliance costs when the governing legal text does not clearly authorize or prohibit a service. These mechanisms suggest that scope-of-practice laws may be associated not only with professional autonomy, but also with establishment formation, service availability, and patient access.

A multidimensional classification is particularly important because states may impose similar overall levels of restriction through different legal mechanisms, including explicit prohibition, statutory silence, ordering-only authority, and conditional authorization. The paper therefore reports both a composite restrictiveness index and the legal classifications underlying each state's score.

The project also extends the economic literature on health-profession scope-of-practice regulation. Much of the existing research has focused on nurse practitioners, in part because systematic legal classifications are available for that profession (McMichael and Markowitz 2023). Comparable measurement infrastructure has generally not been available for chiropractors. By making cross-state chiropractic regulation systematic, transparent, and comparable, the database can inform ongoing policy debates and provide a template for studying scope-of-practice regulation in other health professions.

Literature Review

Occupational licensing has received substantial attention in the economics literature, with much of the research examining whether licensure requirements affect employment, wages, prices, mobility, and service quality (Kleiner 2000; Kleiner et al. 2016). Health professions introduce an additional regulatory dimension because possession of a license does not necessarily confer the same practice authority in every state. State scope-of-practice laws determine which services a licensed provider may perform and whether that authority is unrestricted, conditional on additional requirements, limited to ordering or referral, or prohibited (Kleiner et al. 2016; Plemmons 2025).

Most economic research on health-profession scope of practice has focused on nurse practitioners and, to a lesser extent, physician assistants, psychologists, pharmacists, and other nonphysician providers. This emphasis partly reflects the availability of systematic legal classifications for those professions (McMichael and Markowitz 2023). Existing studies examine whether broader practice authority is associated with provider entry, geographic mobility, workforce distribution, wages, prices, health care utilization, and patient outcomes. Comparable empirical research on chiropractic scope-of-practice regulation remains limited, in part because a consistent state-level legal classification has not previously been widely available.

Chiropractors provide a useful setting for studying scope-of-practice regulation. Licensed practitioners complete a Doctor of Chiropractic degree, national board examinations, and state-specific licensure requirements. Doctor of Chiropractic programs operate under common national accreditation standards, while state governments determine the legal authority granted under the basic chiropractic license. Consequently, practitioners with broadly similar professional preparation may face substantially different legal practice environments depending on the state in which they are licensed.

Chiropractors are also often regulated through profession-specific state licensing boards rather than through boards primarily governing physicians or other health professions. This institutional structure may reduce one source of regulatory heterogeneity when comparing chiropractic laws across states. It does not, however, eliminate differences in statutory interpretation, administrative guidance, enforcement practices, reimbursement conditions, or local health care markets. These remaining differences reinforce the need for a transparent legal classification that distinguishes both the breadth and the form of scope-of-practice restrictions.

This paper contributes to the literature by creating such a classification. Rather than treating chiropractic regulation as a single binary distinction, the database identifies whether authority in each practice domain is unrestricted, conditional on additional requirements, limited to ordering or referral, explicitly prohibited, or not specified in the governing legal text. This structure permits researchers to examine both the overall breadth of regulatory restriction and the legal mechanisms through which states limit chiropractic practice.

Methods

The database was constructed and verified through a multistage legal-review process. In the first stage, a team of undergraduate honors students collected and coded relevant state statutes, administrative regulations, and other legal provisions under the direction of a policy analyst in the West Virginia University John Chambers College of Business and Economics. In the second stage, law students in the West Virginia University College of Law reviewed the legal citations and initial classifications under faculty supervision. Potential errors, conflicting authorities, and ambiguous classifications were escalated for additional review. In the final stage, legislative analysts at the Knee Regulatory Research Center conducted a final verification of the legal sources and coding decisions.

Following the legal-classification approach of McMichael and Markowitz (2023), the database measures the authority stated in the governing legal text rather than practitioner behavior. The classifications therefore may not capture informal board guidance, enforcement practices, payer requirements, facility policies, or differences in how licensing boards and individual practitioners interpret ambiguous provisions. The database is intended to describe the authority contained in the reviewed legal materials, rather than every formal or informal constraint that may affect chiropractic practice in a particular jurisdiction.

We evaluate chiropractic scope of practice across 12 domains: nutritional supplements, nutritional injections, acupuncture, dry needling, ultrasound therapy, thermotherapy, electrical therapy, bloodwork, CT scans, diagnostic authority, mechanical spinal traction, and adjustments of the extremities. These domains were selected because they represent diagnostic, therapeutic, and adjunctive activities that vary across state chiropractic laws.

For the 11 non-diagnostic domains, legal authority is classified into one of five mutually exclusive categories: (1) cannot order, refer, or perform; (2) not specified in the governing legal text; (3) may order or refer for the activity but may not perform it directly; (4) may perform the activity only with additional training, certification, licensure, supervision, or another regulatory condition; or (5) may perform the activity under the basic chiropractic license without an additional credential.

Diagnostic authority is classified separately according to whether chiropractors are limited to diagnosing musculoskeletal conditions or may diagnose beyond the musculoskeletal system. A domain is classified as “not specified” when the reviewed legal materials do not expressly authorize, conditionally authorize, or prohibit the activity. This classification does not establish that the activity is legally permitted or legally prohibited; rather, it identifies the absence of clear authority in the reviewed legal text.

The component-level classifications are retained in the database even though several categories are treated equivalently in the composite restrictiveness index. Preserving these distinctions allows researchers to identify whether a state restricts chiropractic

practice through explicit prohibition, statutory silence, ordering-only authority, or additional credential requirements.

Creating the Index

To construct the chiropractic scope-of-practice restrictiveness index, we follow the general regulatory-index approach used in the existing literature (Flowers et al. 2024; Trudeau et al. 2025). The purpose of the index is to summarize cross-state variation in the breadth of legal restrictions imposed on chiropractic practice using a standardized 0–10 scale. Because the measure is expressed as a restrictiveness index, higher values indicate that chiropractors face restrictions in a larger number of practice domains, while lower values indicate broader authority under the basic chiropractic license.

We evaluate chiropractic scope of practice across 12 domains, listed in Table 1: nutritional supplements, nutritional injections, acupuncture, dry needling, ultrasound therapy, thermotherapy, electrical therapy, bloodwork, CT scans, diagnostic authority, mechanical spinal traction, and adjustments of the extremities.

For the 11 non-diagnostic domains, the governing legal text is classified into one of five mutually exclusive categories: (1) cannot order, refer, or perform; (2) authority is not specified; (3) may order or refer for the activity but may not perform it directly; (4) may perform the activity only with additional training, certification, licensure, supervision, or another regulatory condition; or (5) may perform the activity under the basic chiropractic license without an additional credential.

The index treats the first four categories as restricted and the fifth category as unrestricted. Each practice domain therefore receives one restriction point whenever chiropractors lack full authority to perform the activity under the basic license, regardless of the particular legal mechanism producing the restriction. A domain receives zero restriction points only when chiropractors may perform the activity without an additional credential or regulatory condition.

Diagnostic authority is coded in the same direction. A jurisdiction receives one restriction point when chiropractors are limited to diagnosing musculoskeletal conditions and zero restriction points when chiropractors may diagnose beyond the musculoskeletal system.

Let r_{ij} denote the restriction indicator for practice domain j in jurisdiction i :

$$r_{ij} = \begin{cases} 1, & \text{if authority is prohibited, unspecified, limited to ordering or} \\ & \text{referral, or conditional on an additional requirement,} \\ 0, & \text{if the activity is fully authorized under the basic license.} \end{cases}$$

The raw restrictiveness score for jurisdiction i is the number of domains in which chiropractic authority is restricted:

$$S_i = \sum_{j=1}^{12} r_{ij}.$$

The raw score ranges conceptually from 0 to 12, although the observed jurisdictions do not span both theoretical endpoints. We therefore normalize the raw score using the minimum and maximum values observed across the 50 states and the District of Columbia:

$$R_{\text{index},i} = \frac{S_i - \min(S)}{\max(S) - \min(S)} \times 10.$$

In the current cross-section, the least restrictive jurisdiction has two restricted domains and the most restrictive jurisdiction has 12 restricted domains. Therefore, $\min(S) = 2$ and $\max(S) = 12$, and the normalized index simplifies to:

$$R_{\text{index},i} = S_i - 2.$$

Equivalently, let $x_i = 12 - S_i$ denote the number of domains in which chiropractors possess unrestricted authority. Because the observed number of unrestricted domains ranges from zero to ten, the index may also be written as:

$$R_{\text{index},i} = 10 - x_i.$$

The two expressions are algebraically equivalent. The first emphasizes that the index counts restricted domains, while the second emphasizes that the index is the inverse of the number of unrestricted domains.

Using Pennsylvania as an example, chiropractors face restrictions in 11 of the 12 evaluated domains. Four domains are not specified in the governing legal text, one is classified as ordering-only or musculoskeletal-only authority, and six require additional training, certification, licensure, or another regulatory condition. One domain is fully authorized under the basic chiropractic license. Pennsylvania's raw restrictiveness score is therefore:

$$S_{\text{PA}} = 4 + 1 + 6 = 11.$$

After normalization, Pennsylvania receives:

$$R_{\text{index,PA}} = \frac{11 - 2}{12 - 2} \times 10 = 9.$$

The normalized index ranges from 0 to 10. A value of 0 identifies the jurisdiction with the fewest observed restricted domains, while a value of 10 identifies the jurisdiction with the greatest number of observed restricted domains. These values are relative to the jurisdictions in the sample. A score of 0 does not imply the complete absence of regulation because the least restrictive observed state still restricts two of the evaluated domains.

The index is designed to measure the breadth of regulatory restriction rather than the relative severity of different legal mechanisms. An explicit prohibition, an additional-credential requirement, ordering-only authority, and statutory silence each receive one restriction point because none grants full authority under the basic chiropractic license. The index therefore does not impose unsupported cardinal differences among these forms of regulation. For example, it does not assume that an explicit prohibition is twice as

restrictive as an additional-training requirement. The underlying categories remain separately reported in the database and in Table 2, allowing researchers to distinguish the legal form of each restriction and construct alternative measures when appropriate.

Because multiple jurisdictions may receive the same index value, the numerical index score and the reported ordinal ranking are distinct. Within an index-value tie, jurisdictions are ordered first by the number of domains in which chiropractors cannot order, refer, or perform an activity, with a larger count treated as more restrictive. Remaining ties are ordered by the number of domains not specified in the governing legal text, again with a larger count treated as more restrictive. Jurisdictions that remain tied are then ordered using the ordering-only or musculoskeletal-only category and the additional-requirements category, with greater use of these intermediate forms of authority treated as less restrictive than prohibition or statutory silence. Alphabetical order is used only when jurisdictions remain identical across all reported components. This secondary ordering affects the displayed rank but does not alter the index value.

Table 2 reports the normalized restrictiveness scores, the number of domains in each legal category, and the resulting jurisdiction rankings. Jurisdictions with lower index values grant chiropractors unrestricted authority in a larger number of domains, whereas jurisdictions with higher values restrict chiropractic authority across a larger share of the evaluated domains. The index provides a transparent measure of state-level regulatory variation that can be used in subsequent analyses of provider supply, practitioner location, health care utilization, spending, and patient outcomes.

Results

National Variation in Chiropractic Scope of Practice

The chiropractic scope-of-practice restrictiveness index reveals substantial variation across the 50 states and the District of Columbia. As reported in Table 2, index values span the full observed range from 0 to 10, with a mean of 4.59, a median of 4, and a standard deviation of 2.26. Nineteen jurisdictions receive index values of 3 or below, indicating relatively broad practice authority compared with the rest of the sample, while 18 jurisdictions receive values of 6 or above. The remaining 14 jurisdictions receive values of either 4 or 5.

Hawaii is the most restrictive jurisdiction observed, with an index value of 10. New Jersey and Pennsylvania each receive an index value of 9. Under the secondary ordering procedure described in *Creating the Index* section, New Jersey is ranked second and Pennsylvania third. Alabama and West Virginia each receive an index value of 8. At the other end of the distribution, Kansas is the least restrictive jurisdiction observed, with an index value of 0. Texas and New Mexico each receive a value of 1, while Oregon, Indiana, Montana, Ohio, Rhode Island, and South Dakota each receive a value of 2.

The normalized index is algebraically equivalent in the current cross-section to ten minus the number of domains in which chiropractors possess unrestricted authority. The index therefore measures the breadth of regulatory restriction rather than the complete absence or presence of regulation. In particular, Kansas's index value of 0 indicates that it has the broadest observed chiropractic practice authority in the sample, not that it imposes no scope-of-practice restrictions. Kansas still restricts two of the 12 evaluated domains.

Figure 1 displays the geographic distribution of the index. The map shows that both relatively restrictive and relatively permissive regulatory environments are present across multiple regions of the United States rather than being confined to a single geographic area.

Sources of Regulatory Variation

The aggregate index summarizes the breadth of regulatory restriction but does not distinguish among the legal mechanisms through which states limit chiropractic practice. As shown in Table 2, the average jurisdiction grants unrestricted authority, including diagnostic authority beyond musculoskeletal conditions, in 5.41 of the 12 evaluated domains. On average, 2.24 domains are not specified in the governing legal text, 1.90 require additional training, certification, licensure, or another regulatory condition, 1.33 explicitly prohibit chiropractors from ordering, referring for, or performing the activity, and 1.12 fall into the intermediate ordering-only or musculoskeletal-diagnosis-only category.

These distinctions are important because jurisdictions with identical index values can have substantially different regulatory profiles. New Jersey and Pennsylvania, for example, each receive an index value of 9, meaning that chiropractic authority is restricted in 11 of the 12 evaluated domains. However, the composition of those restrictions differs. New Jersey leaves six domains unspecified, whereas Pennsylvania leaves four domains unspecified and conditions six domains on additional credentials. The common index value therefore reflects an equivalent breadth of restriction, while the secondary ordering procedure ranks New Jersey above Pennsylvania because statutory silence receives priority in breaking ties. Similarly, Alabama and West Virginia each receive an index value of 8 but differ in the distribution of their restrictions across the underlying legal categories.

These comparisons demonstrate why the composite index should be reported alongside its component classifications. The index captures the number of domains in which chiropractic authority is restricted, equivalently expressed as the inverse count of unrestricted domains. The component measures distinguish explicit prohibition, statutory ambiguity, ordering or referral authority, and conditional authorization. These legal mechanisms may impose different compliance costs and may have different implications for provider entry, service provision, and location decisions even when they produce the same composite index value.

Geographic Patterns

Figure 1 shows that chiropractic scope-of-practice restrictiveness is not confined to a single region. Although relatively restrictive jurisdictions are concentrated in portions of

the Mid-Atlantic, Appalachia, and the Southeast, substantial variation remains both across and within regions. In the Northeast, for example, index values range from 9 in New Jersey and Pennsylvania to 2 in Rhode Island. Relatively restrictive and relatively broad practice environments are likewise found throughout the Midwest, South, and West.

The domain-specific maps in Figures 2 and 3 further demonstrate that no single practice authority accounts for the national distribution of restrictiveness. Some jurisdictions authorize common therapeutic modalities while limiting diagnostic or invasive procedures. Others grant comparatively broad diagnostic authority but condition several therapeutic services on additional training, certification, licensure, or other requirements. Chiropractic scope-of-practice regulation is therefore multidimensional and cannot be adequately represented by a single binary classification such as “restricted” or “unrestricted.”

Taken together, the results document meaningful cross-state variation in both the breadth and legal form of chiropractic practice authority. This variation provides the measurement foundation needed to examine whether scope-of-practice regulation is associated with provider location, labor-market outcomes, health care utilization, spending, and patient outcomes. The geographic patterns and descriptive rankings reported here do not, however, establish that scope-of-practice regulation causes differences in any of these outcomes.

Scope of Practice Restrictiveness and Provider Supply

As an exploratory application of the index, we merge the state-level scope-of-practice restrictiveness index with county-level chiropractic business counts and county characteristics from *Your Economy* (YTS) for 2024. Chiropractic supply is measured as the number of chiropractic businesses per 10,000 residents. Because the regulatory index and business density are measured contemporaneously, the analysis is descriptive and should not be interpreted causally.

Figure 4 plots county chiropractic business density against the state restrictiveness index. The unconditional Pearson correlation is -0.1459 ($p < 0.001$), while the corresponding Spearman rank correlation is -0.1554 . In the baseline ordinary least squares specification reported in Column 1 of Table 3, a one-point increase in the restrictiveness index is associated with 0.194 fewer businesses per 10,000 residents ($p < 0.001$).

The estimated relationship is further supported by the specification when county demographic and economic characteristics are included. In the adjusted specification, a one-point increase in the restrictiveness index is associated with 0.175 fewer chiropractic businesses per 10,000 residents ($p < 0.001$). This specification controls for population density, median household income, the share of the population living in rural areas, insurance coverage, and the age composition of the population, as reported in Table 3.

The coefficient should be interpreted as a conditional association rather than as a causal effect. States with larger or more politically influential chiropractic workforces may themselves be more likely to adopt broader practice authority, creating the possibility of

reverse causality. Unobserved differences in patient demand, reimbursement, professional organization, educational infrastructure, and regional practice patterns may also influence both regulation and chiropractic business supply.

Discussion and Conclusion

This paper introduces a new state-level database and index measuring chiropractic scope-of-practice regulation across the United States. The database classifies legal authority across 12 diagnostic, therapeutic, and adjunctive practice domains and distinguishes unrestricted authority, conditional authorization, ordering or referral authority, explicit prohibition, and the absence of clear authority in the governing legal text. The results reveal substantial cross-state heterogeneity. The average jurisdiction grants unrestricted authority in fewer than half of the evaluated domains, while statutory ambiguity and additional credential requirements are common features of state regulatory frameworks.

The principal contribution of the paper is measurement. Existing economic research on health-profession scope of practice has concentrated primarily on nurse practitioners, physician assistants, pharmacists, and a limited number of other nonphysician providers, in part because systematic legal classifications are available for those professions. By constructing a transparent and comparable classification for chiropractors, this database makes it possible to incorporate chiropractic regulation into research on occupational licensing, provider entry and mobility, health care labor markets, service availability, and access to conservative musculoskeletal care.

The findings also demonstrate why scope-of-practice regulation should not be represented solely by a binary indicator. States restrict professional activity through several distinct legal mechanisms. An explicit prohibition may have different behavioral consequences from an additional-training requirement, and both may differ from statutory silence or authority limited to ordering and referral. Jurisdictions can therefore receive the same composite index value while imposing different compliance costs, credentialing burdens, and forms of legal uncertainty. Researchers using the database should consider both the summary index and the component-level classifications underlying each jurisdiction's score.

The exploratory provider-supply analysis further illustrates the importance of accounting for local market conditions. The unconditional relationship between scope-of-practice restrictiveness and chiropractic business density is positive, but the estimated association changes sign after county demographic and economic characteristics are included. This sensitivity suggests that population density, income, rurality, insurance coverage, age composition, and other market characteristics are important correlates of chiropractic establishment location. The adjusted estimates should therefore be interpreted as conditional associations rather than as evidence that scope-of-practice regulation causally determines provider supply.

The index is not intended to constitute a ranking of clinical quality, patient safety, or the overall welfare effects of state regulatory systems. A broader legal scope does not imply that every included service should be performed by every chiropractor, nor does a narrower scope by itself establish that regulation is inefficient. The index measures the breadth of authority available under the basic chiropractic license. Determining whether a particular restriction generates benefits that exceed its costs requires additional evidence on patient safety, quality of care, prices, provider entry, utilization, spending, and health outcomes.

Several limitations should guide interpretation. First, the database classifies authority stated in the governing legal text and may not capture informal board guidance, enforcement practices, payer requirements, facility policies, or differences in how licensing boards and practitioners interpret ambiguous provisions. Second, the primary index assigns equal weight to all 12 domains even though those domains differ in clinical frequency, invasiveness, and economic significance. It also treats prohibition, statutory silence, ordering-only authority, and conditional authority as restricted because none grants full authority under the basic license. This construction measures the breadth of restriction without imposing unsupported cardinal differences among legal mechanisms, but it does not measure their relative severity.

Third, the index is normalized relative to the jurisdictions observed in the current cross-section. Its endpoints therefore represent the least and most restrictive observed environments rather than the theoretical absence or maximum presence of regulation. Fourth, the database is cross-sectional and cannot identify the effects of regulatory reform over time. Finally, the provider-supply analysis is also cross-sectional and may be affected by reverse causality and omitted variables. States with larger chiropractic workforces or more influential professional organizations may be more likely to adopt broader practice authority, while unobserved differences in patient demand, reimbursement, educational infrastructure, and regional practice patterns may influence both regulation and establishment supply.

These limitations identify several directions for future research. Annual updates to the legal database would permit the construction of a state-by-year regulatory panel and the identification of discrete changes in chiropractic practice authority. Such a panel could be linked to provider supply and mobility, establishment formation, wages, service utilization, insurance claims, opioid prescribing, health care expenditures, and patient outcomes. Where sufficient policy variation exists, state reforms could then be evaluated using event-study, difference-in-differences, or related longitudinal research designs rather than relying exclusively on cross-sectional comparisons. Future work could also compare the primary equal-weight index with alternative measures that assign different weights to the legal categories or individual practice domains.

The database provides a foundation for that research agenda. The results show that licensed chiropractors operate under markedly different legal practice environments depending on the jurisdiction in which they practice. Whether those differences improve

patient protection, constrain provider activity, or alter access to care remains an empirical question. By making the underlying legal variation systematic, transparent, and comparable, the database and index provide the measurement infrastructure needed to investigate that question.

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Table 1: Indicators Used in the Chiropractic Scope of Practice Index

No.	Sub-Area	Variable included in the Index
1	Nutritional Therapies	Nutritional supplements
2		Nutritional injections
3	Needling	Acupuncture
4		Dry Needling
5	Physiotherapeutic Modalities	Ultrasound therapy
6		Thermotherapy
7		Electrical therapy
8	Blood Analysis	Bloodwork
9	Advanced Imaging	CT scans
10	Diagnostic Authority	Musculoskeletal Care
11	Physical Modalities /	Mechanical Spinal Traction
12	Mechanical Therapy	Adjustments on extremities

Source: Drain, S., Denkyirah, E., Aziz, M., Paranauid, D., Carneal, T., Plemmons, A., & Ambrester, W. (2026). *Chiropractic Scope-of-Practice and Provider Distribution in Pennsylvania*. Knee Regulatory Research Center. <https://knee.wvu.edu/publications/knee-center-research/2026/04/16/chiropractic-scope-of-practice-and-provider-distribution-in-pennsylvania>

Table 2: State Restrictiveness Index and Scope of Practice Components

Rank	States	Index Value (1)	Can't Order, Refer, or Perform (2)	Does Not State (3)	Can Order/ Only MSK (4)	Additional Training/Licenses (5)	Can Perform/ Beyond MSK (6)
1	Hawaii	10	3	4	1	4	0
2	New Jersey	9	0	6	2	3	1
3	Pennsylvania	9	0	4	1	6	1
4	Alabama	8	0	5	0	5	2
5	West Virginia	8	0	5	1	4	2
6	Mississippi	7	5	1	1	2	3
7	Georgia	7	2	2	1	4	3
8	Michigan	7	1	7	1	0	3
9	Arkansas	7	1	6	1	1	3
10	Wyoming	7	0	6	1	2	3
11	District of Columbia	7	0	2	4	3	3
12	South Carolina	6	5	0	1	2	4
13	Illinois	6	2	1	3	2	4
14	Delaware	6	1	6	1	0	4
15	Utah	6	1	3	2	2	4
16	Nebraska	6	1	1	4	2	4
17	Tennessee	6	0	6	1	1	4
18	Arizona	6	0	4	0	4	4
19	Washington	5	4	3	0	0	5
20	Kentucky	5	4	1	2	0	5
21	Virginia	5	4	0	2	1	5
22	California	5	2	4	0	1	5
23	Nevada	5	2	1	2	2	5
24	Oklahoma	5	0	3	0	4	5
25	North Carolina	4	4	0	1	1	6
26	New Hampshire	4	2	2	0	2	6
27	Connecticut	4	1	2	2	1	6
28	New York	4	1	1	2	2	6
29	Idaho	4	0	4	0	2	6
30	Wisconsin	4	0	3	1	2	6
31	Louisiana	4	0	2	2	2	6
32	Colorado	4	0	1	1	4	6
33	Vermont	3	3	0	1	1	7
34	Alaska	3	2	3	0	0	7
35	North Dakota	3	2	1	0	2	7
36	Maine	3	2	1	1	1	7
37	Minnesota	3	2	0	1	2	7
38	Florida	3	1	2	0	2	7
39	Iowa	3	1	0	2	2	7
40	Maryland	3	1	0	2	2	7
41	Massachusetts	3	0	4	1	0	7
42	Missouri	3	0	3	0	2	7
43	Oregon	2	2	0	1	1	8
44	Indiana	2	1	0	1	2	8
45	Montana	2	1	0	1	2	8
46	Ohio	2	1	0	2	1	8
47	Rhode Island	2	1	0	2	1	8
48	South Dakota	2	0	3	0	1	8
49	Texas	1	1	1	1	0	9
50	New Mexico	1	0	0	0	3	9
51	Kansas	0	1	0	0	1	10

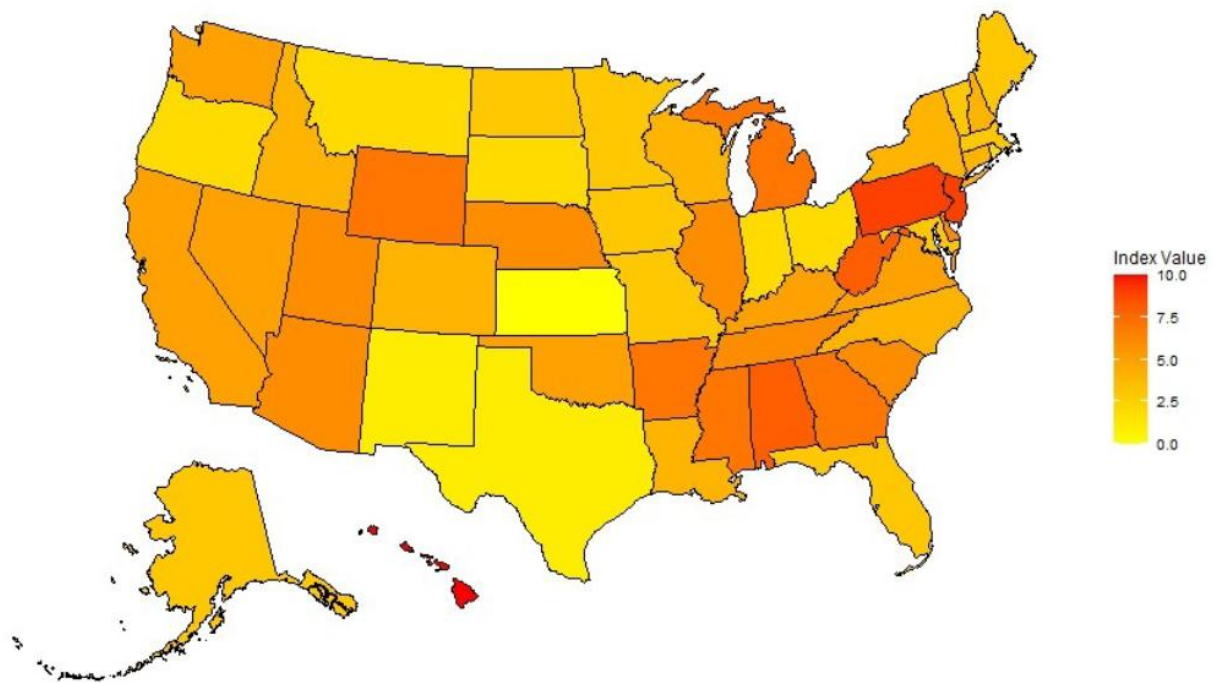
Note: Higher values indicate greater restrictiveness. Each domain receives one restriction point when authority is prohibited, unspecified, limited to ordering or referral, limited to musculoskeletal diagnosis, or conditional on additional requirements. Fully authorized domains receive zero points. Raw restriction counts are min-max normalized to a 0-10 scale; observed raw scores range from 2 to 12.

Source: Drain, S., Denkyirah, E., Azin, M., Paranaid, D., Carneal, T., Plemmons, A., & Armbruster, W. (2026). *Chiropractic Scope-of-Practice and Provider Distribution in Pennsylvania*. Knee Regulatory Research Center. <https://knee.wvu.edu/publications/knee-center-research/2026/04/16/chiropractic-scope-of-practice-and-provider-distribution-in-pennsylvania>

Table 3: Index Value and Businesses per 10,000 Residents

	(1)	(2)
	Baseline	With Controls
Index value	-0.194*** (0.0247)	-0.175*** (0.0238)
Population density per sq. mile	-9.22e-06 (0.0000294)	-0.0000106 (0.0000282)
Median household income, 2024		0.0000333*** (0.000000334)
Insured population share (%)		-0.1008*** (0.0129)
Rural population share, 2020 (%)		-0.0049*** (0.0019)
Population ages 18–64 (%)		-0.1424*** (0.0208)
Population age 65 and older (%)		0.0926*** (0.0171)
Constant	4.946*** (0.1199)	0.0475 (1.598)
Observations	2,848	2,848
R^2	0.0213	0.163

Note: The dependent variable is the number of businesses per 10,000 residents. Standard errors are reported in parentheses. *** $p < 0.01$, ** $p < 0.05$, and * $p < 0.10$.



Note: Restrictive index ranges from 0 to 10. 0 is less restrictive, and 10 is more restrictive.
Source: Drain, S., Denkyirah, E., Aziz, M., Paranaivid, D., Carneal, T., Plemmons, A., & Armbruster, W. (2026). *Chiropractic Scope-of-Practice and Provider Distribution in Pennsylvania*. Knee Regulatory Research Center.
<https://knee.wvu.edu/publications/knee-center-research/2026/04/16/chiropractic-scope-of-practice-and-provider-distribution-in-pennsylvania>

Figure 1: Chiropractor Scope of Practice Restriction for the US

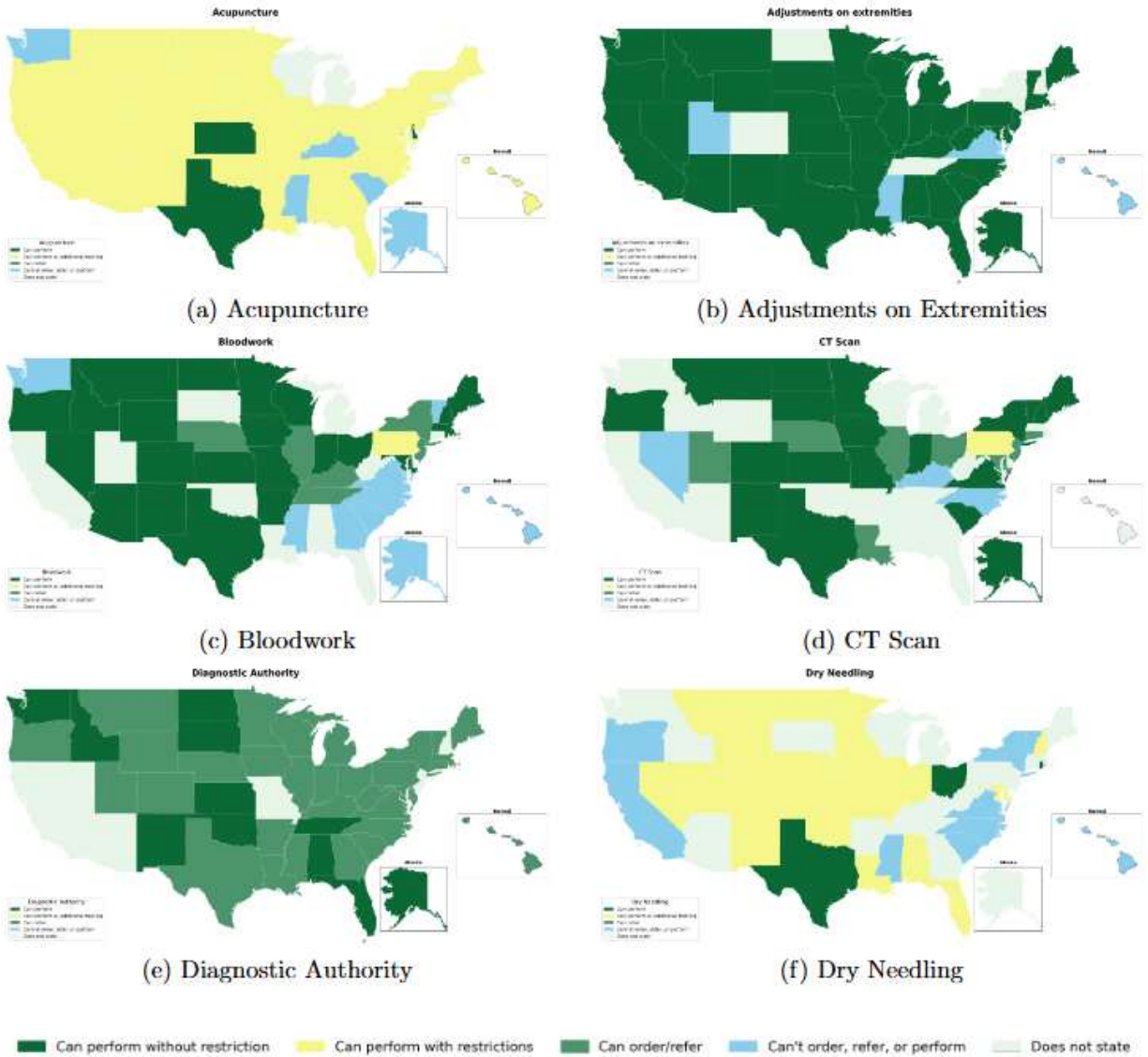


Figure 2: Chiropractic scope-of-practice components across U.S. states, Part A.

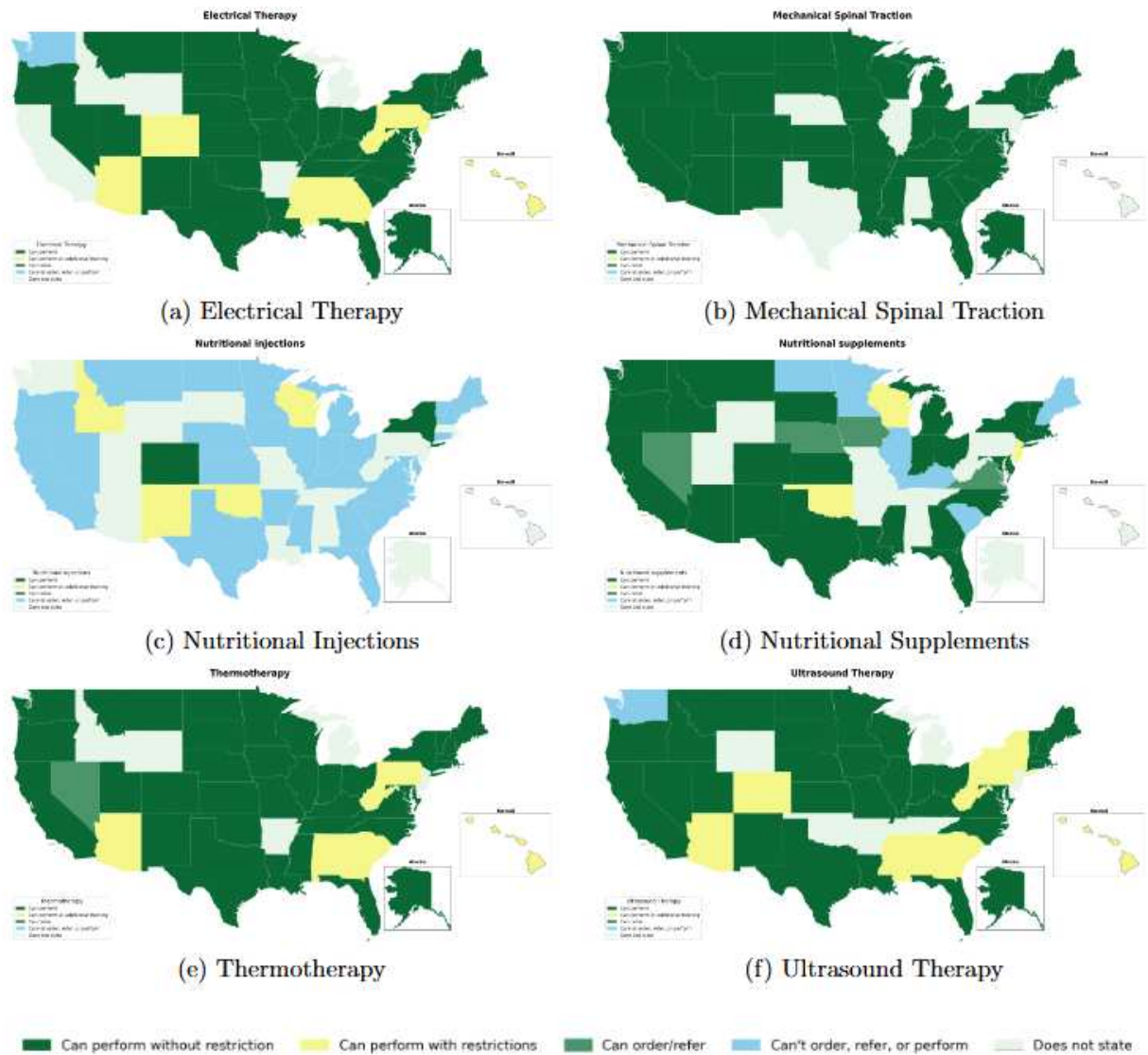


Figure 3: Chiropractic scope-of-practice components across U.S. states, Part B.

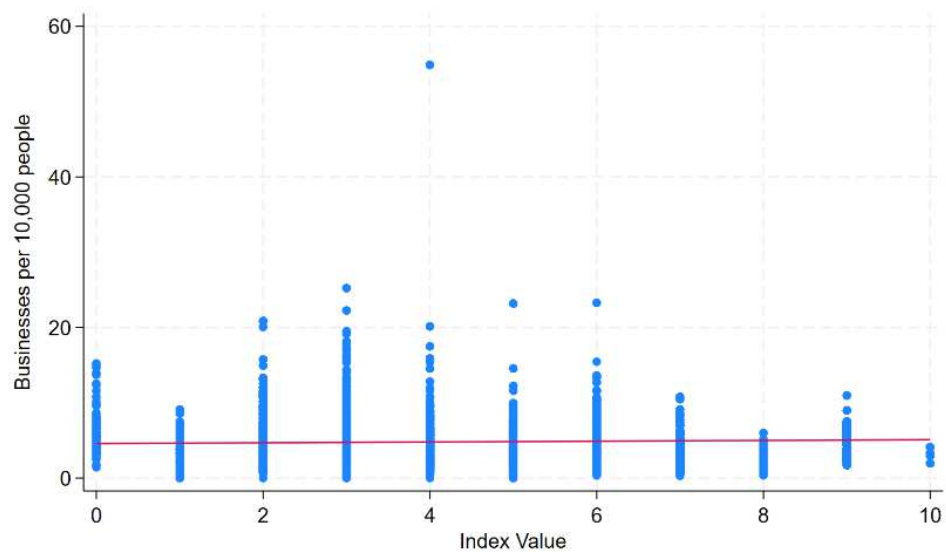


Figure 4: County Chiropractic Businesses per 10,000 Population and Restrictive Index