Southwest Rural HEALTH RESEARCH CENTER

The Development of Telehealth Laws in the U.S. from 2008 to 2015: A Legal Landscape

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Purpose

This study examines the scope and evolving nature of telehealth statutes and regulations (laws) in the United States (U.S.). We analyze the legal frameworks established in the fifty states and the District of Columbia to govern the use of telehealth from 2008 to 2015.[1] Our research aims to understand changes in telehealth laws over time, variations in legal frameworks (i.e., the statutes and regulations governing the use of telehealth within a specific jurisdiction) established across the U.S., and the extent that state laws regulate the primary care delivery through the use of telehealth.

Background

The Health Resources and Services Administration defines telehealth as "the use of electronic information and telecommunication technologies to support and promote long-distance clinical health care, patient and professional health-related education, public health, and health administration."[2] As methods allowing communication over the internet and the immediate sharing of health records continue to improve, telehealth technologies have begun to establish themselves as an important part of modern health care. The rapid technological advances make telehealth a moving target for regulators. Continued advances in transmission speed, quality and nature of patient-provider interaction, and security capacities and vulnerabilities challenge efforts to codify standards for telehealth practice and reimbursement in statutes and regulations.

For several decades, telehealth technologies have been recognized as an avenue for access to health care services for rural residents.[3] However, the widespread adoption of these technologies has faced many challenges, including high equipment costs,[4] limited broadband access,[5] and insurance payment for services rendered.[6–8] Many of these challenges can be addressed through state policy changes. State laws can authorize, incentivize, regulate, and restrict or enhance telehealth service for different types of health care providers. In short, a state's regulatory environment can create a pathway to enable utilization of telehealth technologies and services in a given state.

Key Findings

- The number of laws governing the use of telehealth in the United States expanded from 382 in 2008 to 1,083 in 2015.
- Between 2008 and 2015, 15 states enacted laws permitting the practice of telehealth in primary care settings or expanded legal authorizations to permit non-physician providers use telehealth to provide primary care.
- The number of states with laws providing a broad authorization for various providers to offer telehealth services more than tripled (three to ten) between 2008 and 2015.
- The number of states with laws regulating private insurance coverage of telehealth tripled as well, (seven to 21) between 2008 and 2015.
- Both urban and rural states adopted or revised telehealth laws relating to primary care and payment.

To date, research has found that telehealth can be an effective and cost-saving means of health care delivery, particularly in rural areas.[9,10] Telehealth has allowed individuals in remote communities to access services and providers they may not have been able to otherwise.[11–14] However, important concerns remain about its use. In particular, scholars and policymakers have noted the need to ensure a sufficient quality of care for patients using telehealth, in part because the technology presents unique barriers like the inability to perform in-person physical exams, technological problems, and data security issues.[15,16]

For these reasons, state policymakers have developed laws designed to regulate the use of telehealth in America. In both statutes and regulations, there has been considerable variation in state behavior along the way. For example, work from the Center for Connected Health Policy has highlighted state variations in telehealth regulations related to live video and store-and-forward modalities for remote patient monitoring, Medicaid reimbursement, telehealth prescriptions, and originating sites for services.[17]

These regulations matter for telehealth use. Research has demonstrated that regulations that ensure equal payment for telehealth are associated with increased telehealth adoption while state laws that require full in-state licensure (as opposed to special telehealth licenses) decrease adoption.[18] Questions remain as to whether predominantly rural states are more likely than predominantly urban states to have permissive telehealth laws, whether states that encourage telehealth laws also have scope of practice laws for advanced practice nurses and physician assistants that provide greater independence of practice, and whether predominantly rural states are less likely to have laws that mandate physician supervision of non-physician telehealth providers. To answer these questions, this descriptive piece focuses on the changing nature of telehealth regulations over time across jurisdictions. More specifically, it focuses on which states were the earliest in adopting telehealth, how telehealth regulatory environments have changed across the country over time, and which states are telehealth regulatory leaders today.

Methods

This analysis of state telehealth legal frameworks looks at both consensus standards for scientific legal research and traditional cannons of legal construction for statutes (i.e., laws passed by state legislatures) and regulations (i.e., laws promulgated by state executive agencies).[19–21]

Collection

Building on work on telehealth and primary care laws done by The Policy Surveillance Program at Temple University,[22] we conducted a longitudinal analysis of the telehealth legal environment. We identified and collected statutes and regulations (laws) in the Westlaw 2008 and 2015 historical archives for all U.S. states and the District of Columbia using the search string provided in the LawAtlas protocol, (i.e., telehealth OR telemedicine OR "remote patient monitoring" OR "distant care" OR "distant site provider" OR telepractice). We used the "SD" (substantive document) search modifier to exclude non-substantive references in published laws (e.g., non-binding annotations).

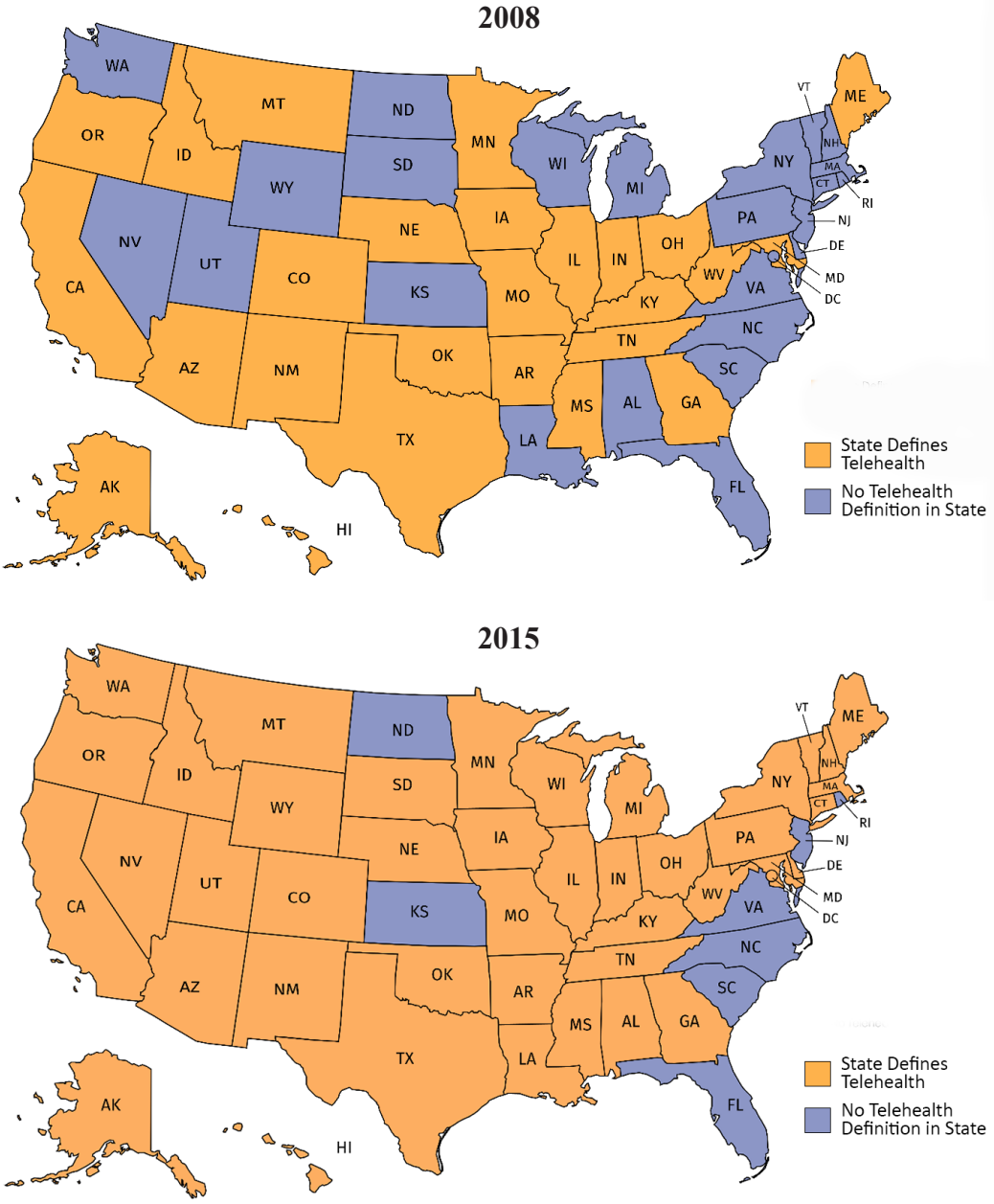
Legal Coding

We adopted the coding questions from the published LawAtlas research protocol in our analysis of state telehealth laws. Between 2 and 5 researchers coded every state's telehealth laws. At minimum, at least one licensed attorney and a political scientist experienced in analyzing state legislation coded each state. The inter-coder agreement rate for the reported data was 92% during the initial round of legal coding (i.e., all reviewers agreed on a given coding question 92% of the time). Disagreements between coders were resolved in coding meetings. When appropriate, we reviewed the published 2015 LawAtlas data and the cited full-text laws to ensure that we interpreted and coded similar legal provisions consistently.

Results

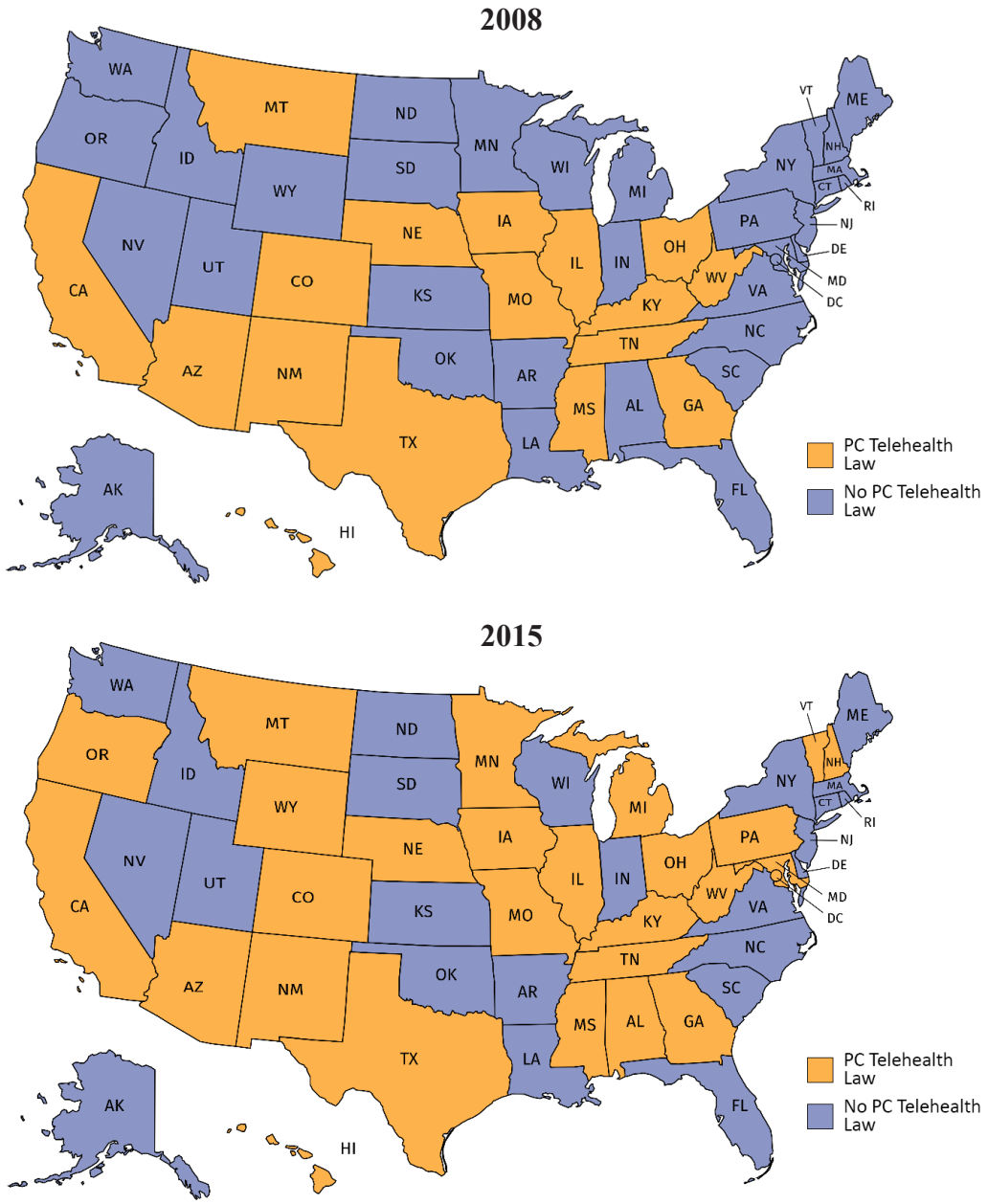
Our search found 382 statutes and regulations specific to telehealth in 2008 and 1,083 such statutes and regulations in 2015, highlighting a growing legal framework. The magnitude of this growth was also reflected in sub-categories of telehealth statutes and regulations such as those directly speaking to Medicaid reimbursement, payment under private insurance, the kinds of providers that can render services, and whether telecommunicated primary care services are permitted under the framework. As can be seen in **Figure 1**, the number of states providing an express definition of telehealth in their codifications increased from 26 to 43 between 2008 and 2015. In 2008, states with explicit definitions of telehealth were located primarily in the Midwest, Southwest, and West, but by 2015 most of New England had established express definitions as well. By 2015, there were just eight states (Florida, Kansas, New Jersey, North Carolina, North Dakota, Rhode Island, South Carolina, and Virginia) that lacked telehealth definitions.

Figure 1. The Growth of Laws Defining Telehealth in America; 2008 and 2015



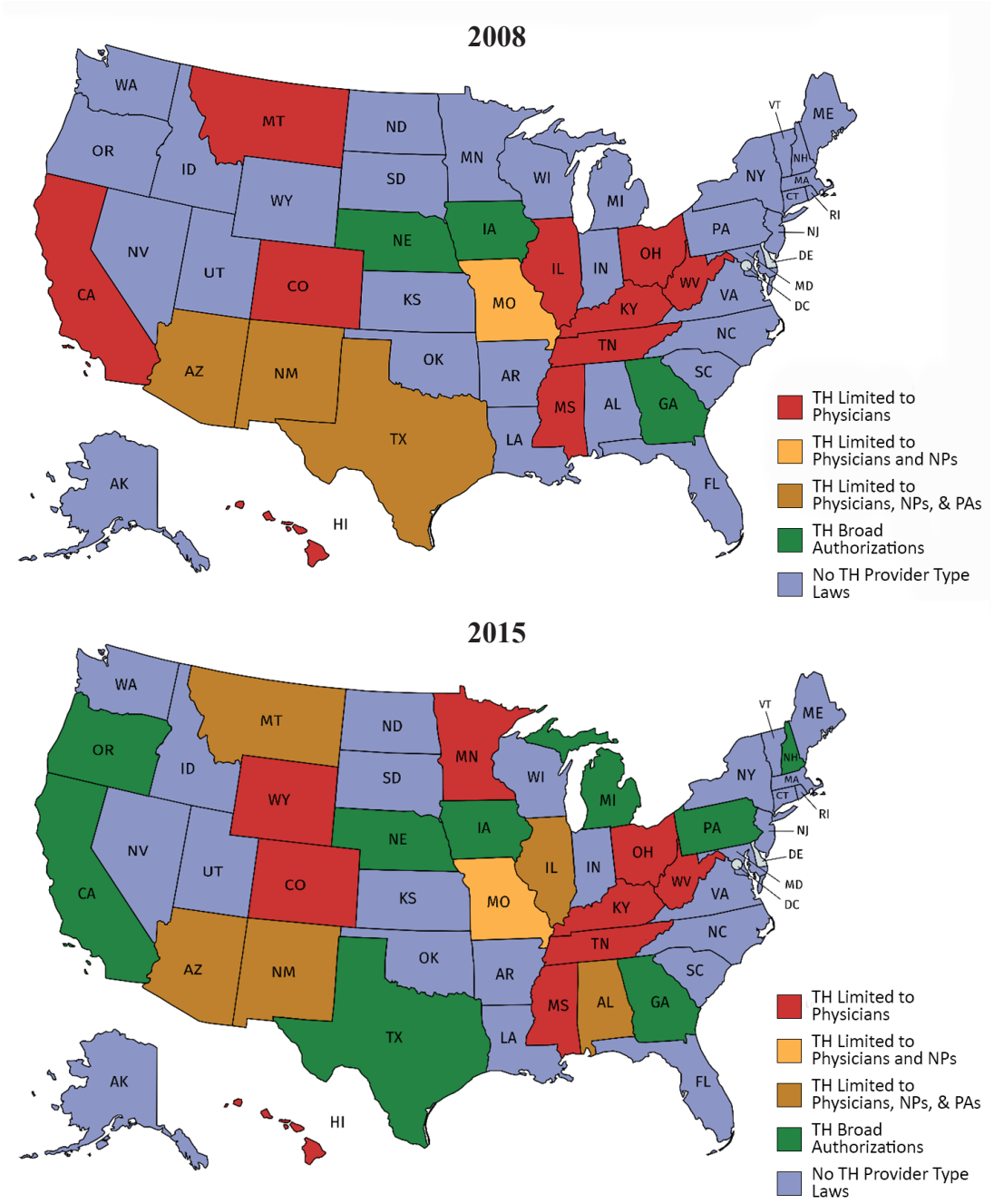
In **Figure 2** we present findings from our analysis of state laws that expressly allow for the provision of non-specialty (e.g., primary) care via telehealth mechanisms. We found that the number of states permitting the delivery of primary care via telehealth, through either broad or express legal language, increased from 17 to 27 between 2008 and 2015. These gains occurred across the country without clear regional patterns. For example, Alabama, Vermont, Minnesota, and Wyoming all enacted provisions.

Figure 2. Telehealth Primary Care Laws; 2008 and 2015



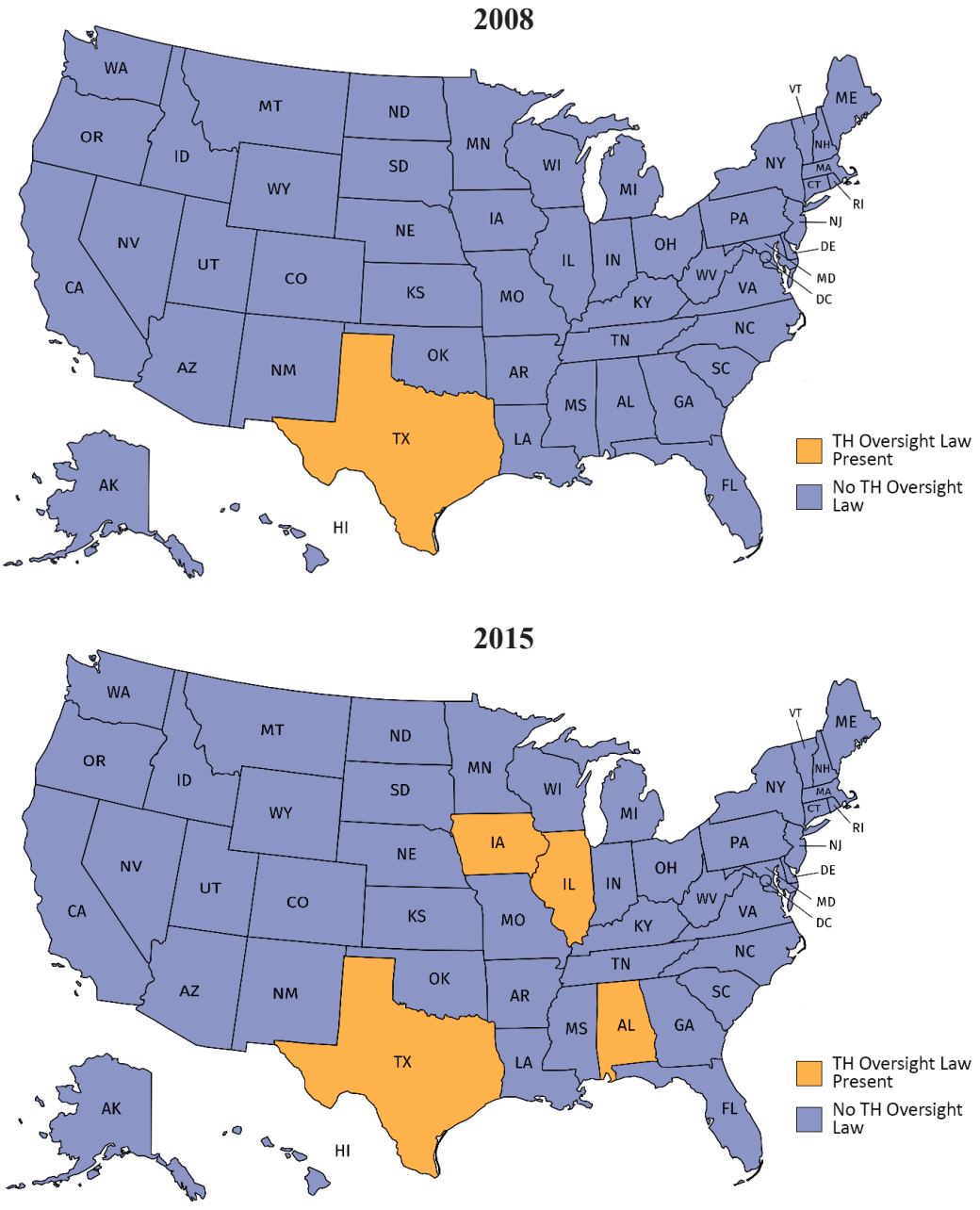
The findings of our analysis on telehealth provisions relating to the kinds of providers allowed to engage in the delivery of services via telehealth are found in **Figure 3**. We found that in both 2008 and 2015, a relatively small number of states had laws authorizing the delivery of primary care services by specified non-physician providers (e.g., nurse practitioners and physician assistants) via telehealth mechanisms. The number of states expressly permitting some types of nurse practitioners to practice telehealth increased from four (Arizona, Missouri, New Mexico, and Texas) to six (Alabama, Arizona, Illinois, Missouri, Montana, and New Mexico). The number of laws expressly permitting physician assistants to practice telehealth increased from three (Arizona, New Mexico, and Texas) to five (Alabama, Arizona, Illinois, Montana, and New Mexico). On the other hand, the number of states specifically limiting the delivery of health services through telehealth mechanisms to physicians increased from 14 to 16. The number of states with broadly-worded laws that authorize a variety of healthcare professionals to provide care via telehealth more than tripled between 2008 and 2015 (from three to ten).

Figure 3. Telehealth Provider Type Laws; 2008 and 2015



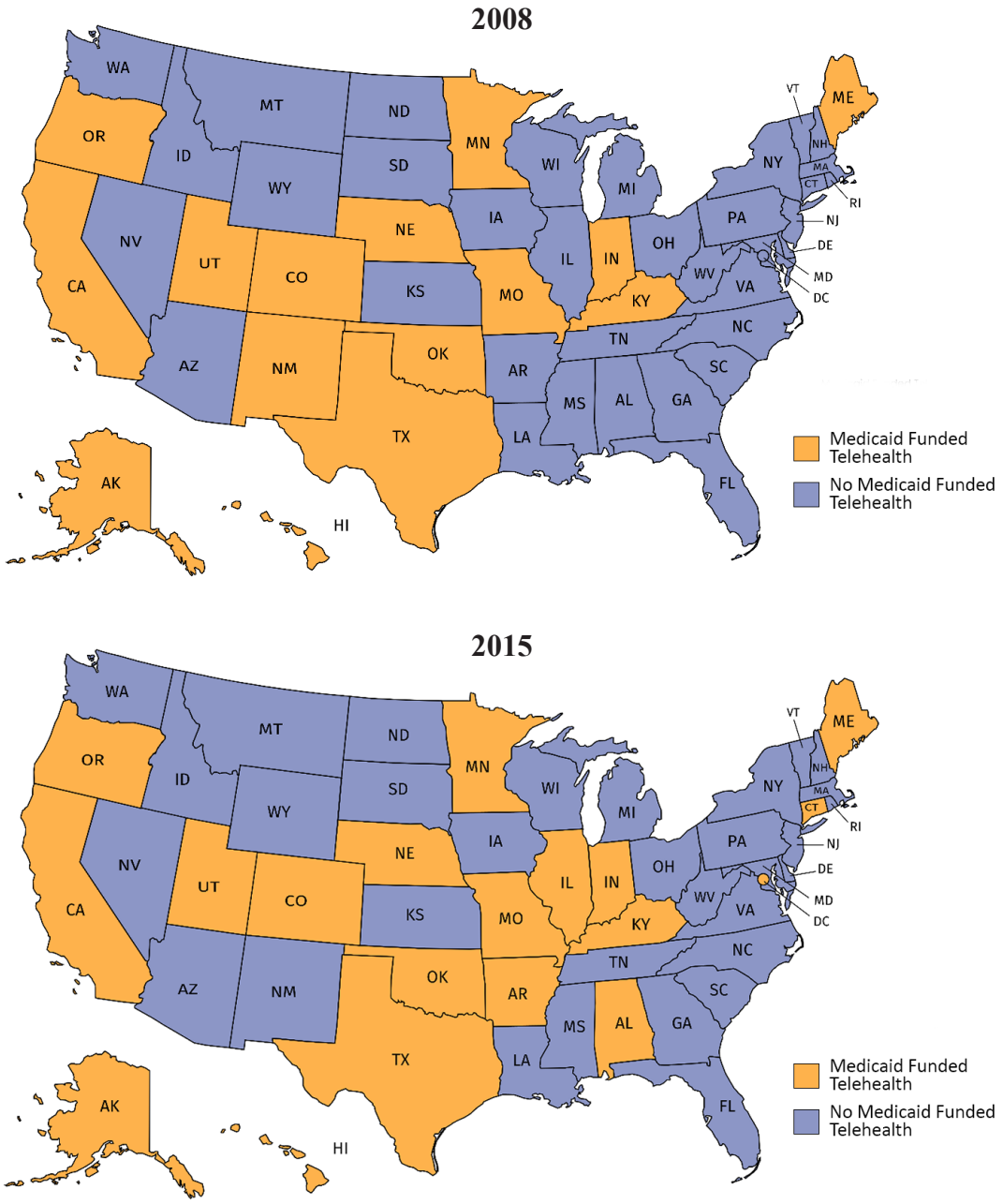
While some areas of telehealth law are common across the states, others are less established. A law requiring physician oversight of care delivered by non-physician providers was only present in Texas in 2008, but by 2015, three states (Alabama, Illinois, and Iowa) joined Texas in requiring physician oversight (**Figure 4**).

Figure 4. Changes in State Telehealth Laws Governing Oversight; 2008 and 2015



Our legal analysis also identified an increase in the number of states with laws related to payment for telehealth services. **Figures 5 and 6** present the findings of states allowing for reimbursement of telehealth-delivered services under their Medicaid programs and payment under private insurance, respectively. The number of states with laws related to state Medicaid reimbursement and private insurance payment increased from 15 to 19 and 7 to 21, respectively between 2008 and 2015. Our results suggest that enabling regulations on telehealth payment for Medicaid are relatively rare in the eastern U.S. and that laws governing private insurance telehealth payments are more geographically defused.

Figure 5. Telehealth Medicaid Reimbursement Laws; 2008 and 2015



To examine any differences in the adoption of telehealth laws by state proportions of rurality and urbanicity, we used the U.S. Census Bureau's 2010 Urban and Rural Classifications and Urban Area criteria to identify states with the largest proportion of rural residents.[23] As demonstrated in **Table 1**, legal changes relating to the provision of care via telehealth occurred at relatively similar rates for the top 25 states with the largest rural populations, and the 25 states with the smallest rural populations. For example, five of the states with the largest percentages of rural residents made changes to their laws and regulations on which providers are allowed to deliver primary care services via telehealth, while six of the states with the largest percentages of urban residents also made such changes. Moreover, seven of the states with the largest numbers of rural residents made additional changes to their regulations on reimbursement for services through private insurance mechanisms while 11 of the states with the largest numbers of urban residents did the same. These findings indicate that states with large urban populations also see the utility of a regulatory environment supports telehealth as an avenue for increased access to care for rural residents.

Figure 6. State Laws Addressing Private Insurance Telehealth Coverage; 2008 and 2015

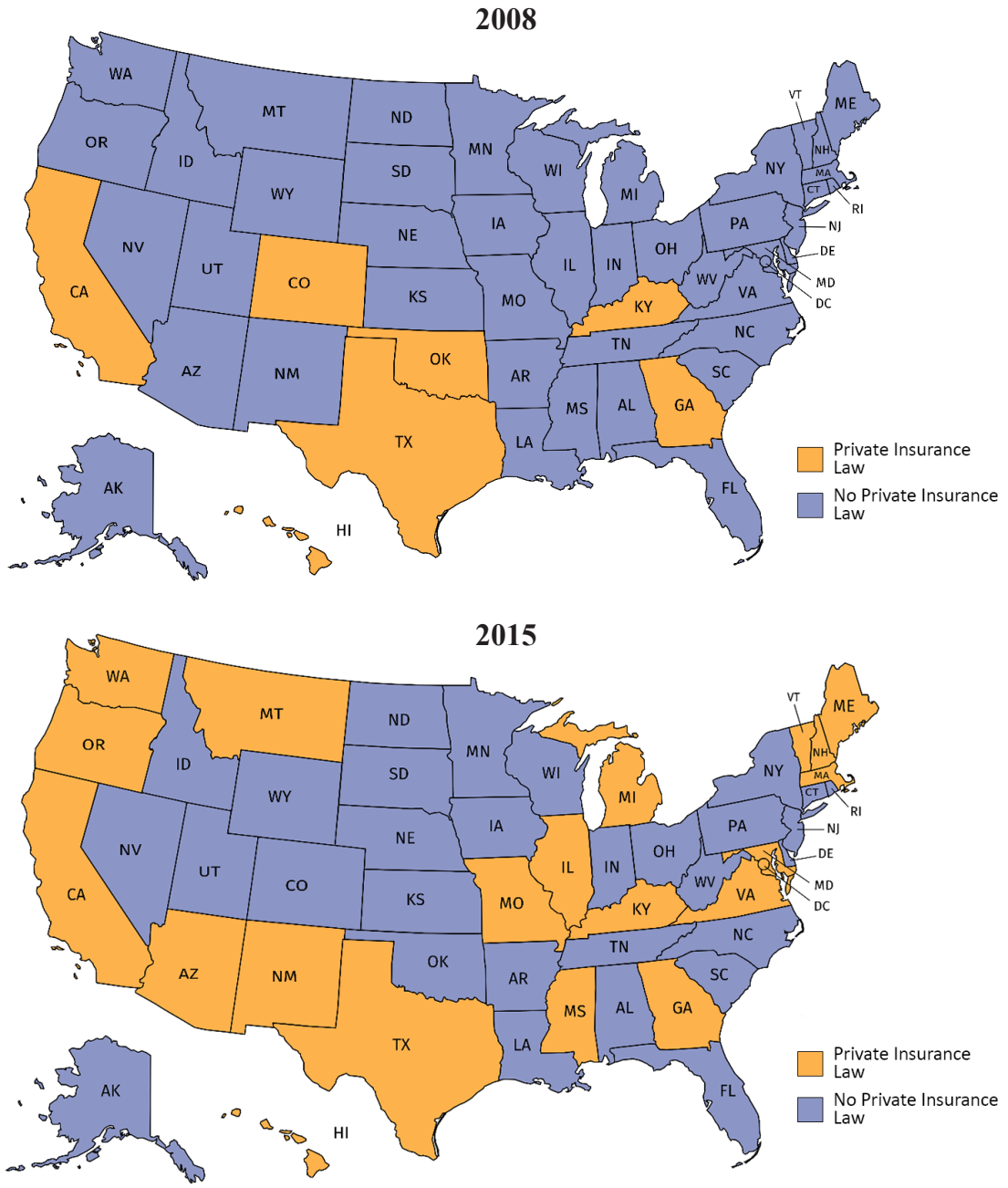


Table 1. Changes in State Telehealth Laws between 2008 and 2015

	Increase in States with Legal Definitions	Increase in States with Primary Care Laws	States with Changes in Provider Type Laws	Increase in States with Physician Oversight Laws	Increase in States with Medicaid laws	Increase in States with Private Insurance Laws	Total Changes in Reported Legal Measures
Top 25 Rural* States	7	5	5	2	2	7	28
Bottom 25 Rural States	10	3	6	1	3	11	34

* The top 25 rural states, based on 2010 US Census data for the percentage of the population living in rural areas, are Maine (61.3%), Vermont (61.1%), West Virginia (51.3%), Mississippi (50.7%), Montana (44.1%), Arkansas (43.8%), South Dakota (43.4%), Kentucky (41.6%), Alabama (41.0%), North Dakota (40.1%), New Hampshire (39.7%), Iowa (36.0%), Wyoming (35.2%), Alaska (34.03.%), North Carolina (33.9%), Oklahoma (33.8%), South Carolina (33.7%), Tennessee (33.6%), Wisconsin (29.9%), Missouri (29. 6%), Idaho (29.4%), Indiana (27.6%), Nebraska (26.9%), Louisiana (26.8%), Minnesota (26.7%)[23]

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