



The Economics and Policy of Occupational Licensing

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Background

Occupational licensing is a core labor market institution that controls access to employment.

- Licensing defined as a credential that is legally required for one's job.
- 22 percent of all employed 16+ year old workers in the U.S. are licensed.
 - Up from about 5 percent in the 1950s.
 - Most of the growth is due to an increase in the number of occupations that are licensed (White House 2015).
 - Women are somewhat more likely to be licensed than men.
 - Licensing is more common at higher education and income levels.
- Licensed fraction of workers varies across countries but there are long-run increases in most.

The Public Choice Account

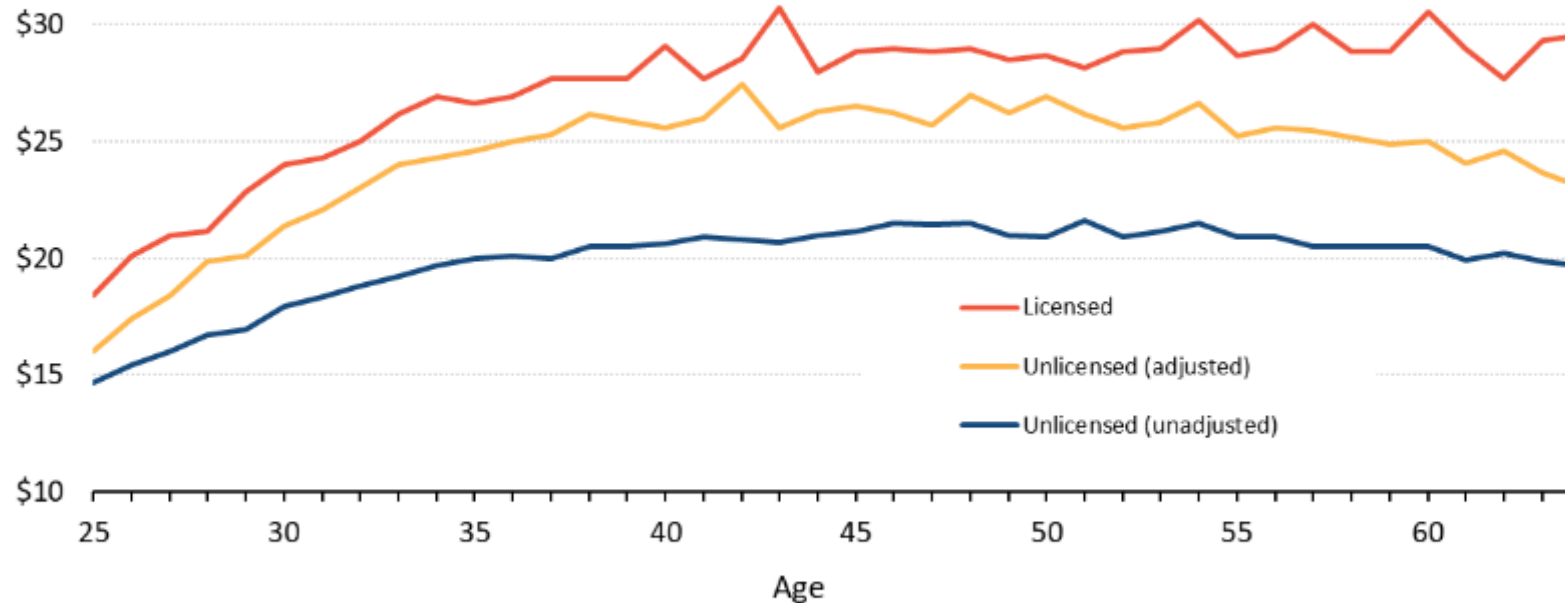
- The public choice account posits that licensure primarily serves to benefit members of the licensed profession.
- Evidence
 - Licensing burdens raise wages for licensed employees and raise prices for consumers.
 - Growth in number of licensed professions.
 - Licensure usually requested by practitioners rather than consumers.
 - Substantial variation across states in the strictness of licensing rules.
 - Many licensing requirements not plausibly linked to health and safety concerns.

Wage Gap Over the Career

FIGURE 2

Licensing Wage Premium by Age

Median Wage
(2018 \$)

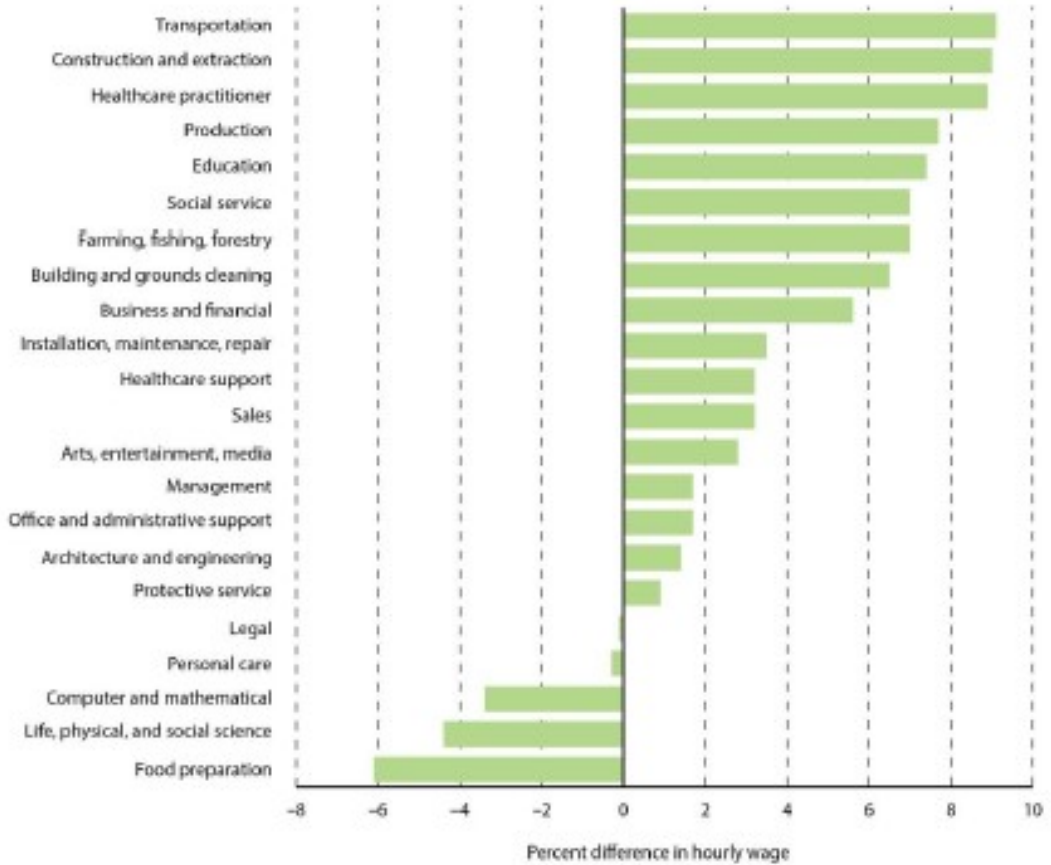


Source: Current Population Survey, Bureau of Labor Statistics 2016-18 and author's calculations.

Note: Estimates for the "unlicensed (adjusted)" series are derived from a DiNardo, Fortin, and Lemieux reweighting with controls consisting of gender, race, quadratic expressions of both age and years of education, union coverage, self-employment status, region, and public sector status. Sample weights are used throughout. The sample consists of 25-64 year old employed workers with wages between \$5 and \$100 per hour, excluding observations with Census-allocated wage and earnings. Earnings are deflated using the CPI-U-RS.

Wage Gaps Exist in Most Fields

FIGURE 2.
Differences in Wages of Licensed and Unlicensed Workers, by Occupation

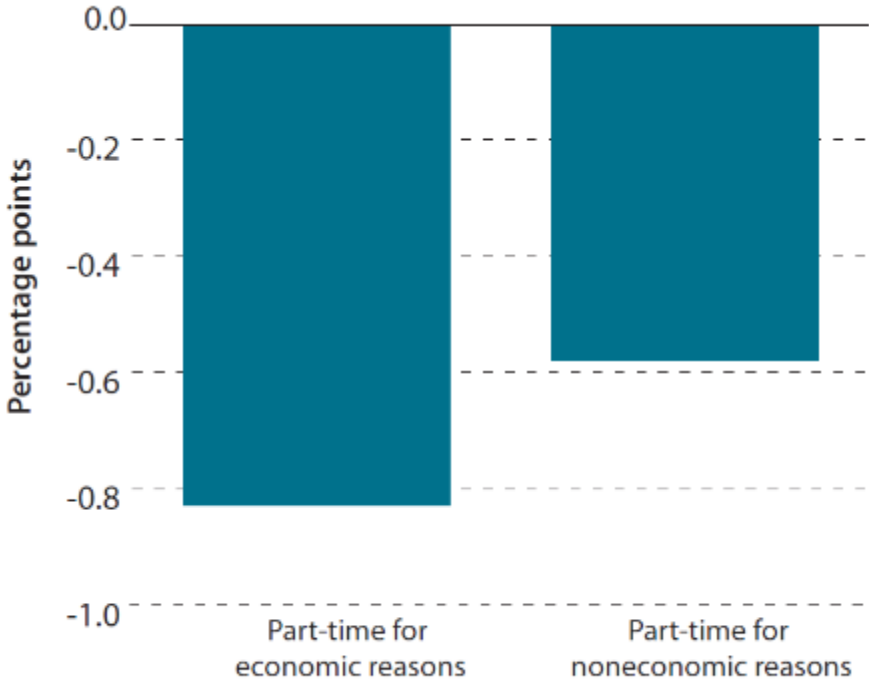


Source: Current Population Survey; authors' calculations. Estimates adjust for work experience, detailed occupation, education, gender, and race. Sample is restricted to workers age 25 to 64.



Similar Gaps in Other Labor Market Outcomes

Licensing and Part-time Work



Source: Current Population Survey, Bureau of Labor Statistics 2016–17 and author’s calculations.
Note: Estimates are derived from linear regressions with controls consisting of gender, race, quadratic expressions of both age and years of education, union coverage, self-employment status, geographic region, and public sector status. Note that hourly wages are not included among the covariates. Part-time status definitions follow BLS conventions. The sample consists of 25–64 year old employed workers.

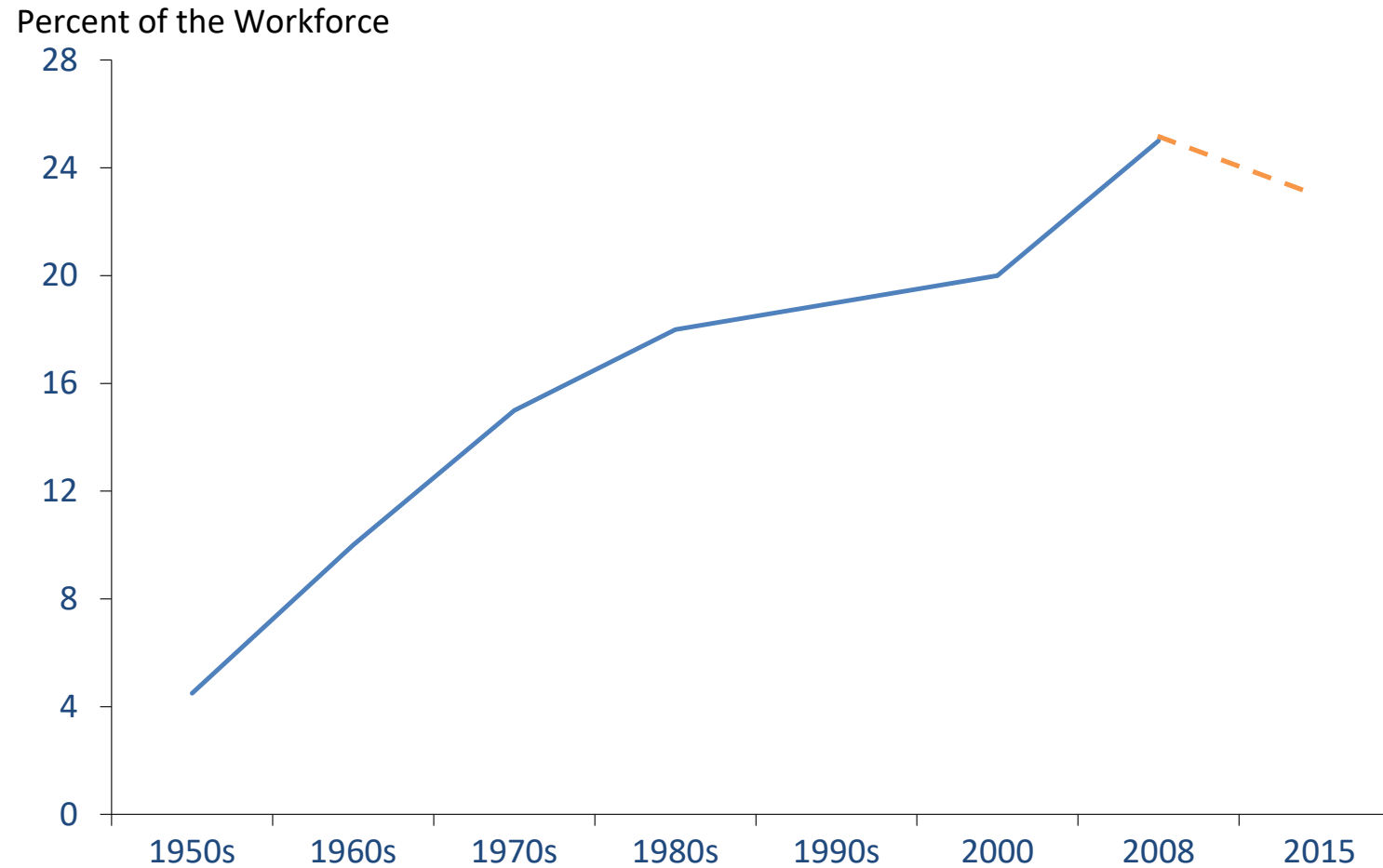
Licensing Raises Prices for Consumers

Consumer price effects are hard to measure directly in any comprehensive way, but can be observed for particular licensing rule variations.

- Limitations on nurse practitioner scope of practice lead to higher costs (Kleiner et al. 2016; Spetz et al. 2013).
- Stricter dentist licensing leads to higher prices (Kleiner and Kudrle 2000).
- Stricter mortgage broker licensing leads to higher prices (Kleiner and Todd 2009).

Licensing Has Grown Dramatically

Share of Workers with an Occupational License

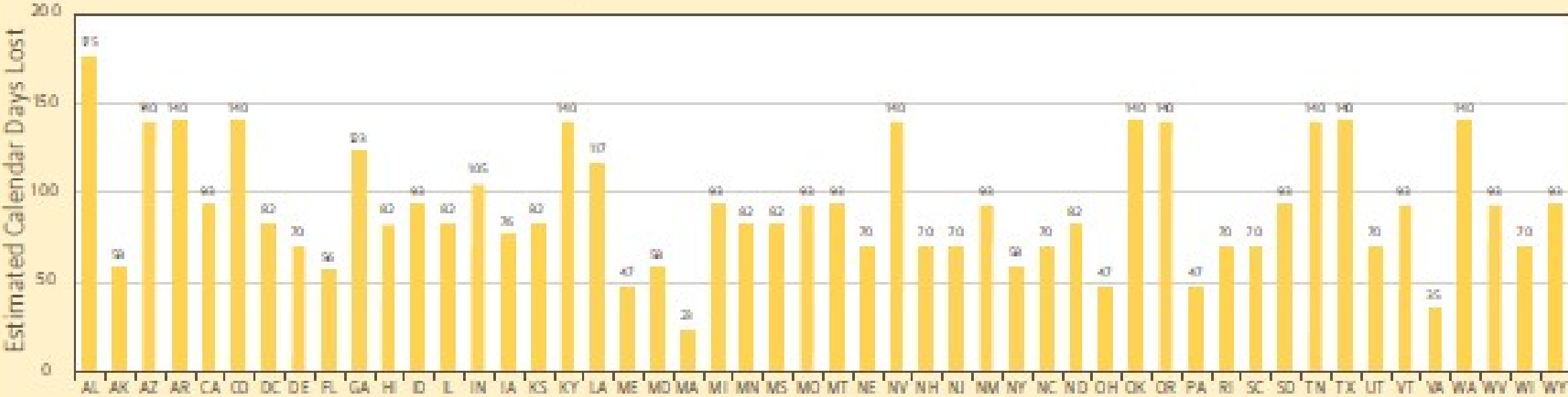


Source: The Council of State Governments (1952); Greene (1969); Kleiner (1990); Kleiner(2006); and Kleiner and Krueger (2013), Westat data; CEA Calculations; Bureau of Labor Statistics.

Note: Estimates for 1950-2008 are for workers with State licenses; estimates for 2015 include State, Federal and local licenses.

Licensing Requirements Vary Widely Across States

Manicurist, Licensed in 50 states



Source: Dick M. Carpenter II et al., *License to Work: 2nd Edition* (2017).

Some Licensing Requirements Not Linked to Health/Safety

- By inspection:
 - Eyebrow threaders being required to obtain esthetician licenses w/ hundreds of hours of unrelated training (Institute for Justice 2017)
 - Florist licensure in Louisiana
- Research suggests no quality/outcome effects in many (but not all) instances:
 - Dentistry (Kleiner and Kudrle 2000)
 - Real estate (Powell and Vorotnikov 2012)
 - Teacher licensing strictness (Angrist and Guryan 2007; Kane, Rockoff, and Staiger 2008)
 - Nurse practitioner licensing strictness (Perloff et al. 2017; Kleiner et al. 2016)
 - Certified nurse midwife licensing strictness (Markowitz et al. 2017; Yang et al. 2016)
 - Quality actually higher with less-restrictive licensure for CNMs

Problems With The Public Choice Account

A simple public choice account:

1. May be too dismissive of health and safety concerns in some areas.
2. Over-emphasizes the professions (e.g., barbers) for which the public interest account is least plausible.
 - a. De-emphasizes the most valuable reforms (e.g., to licensure in health care).
3. Puts an inordinate focus on *whether* an occupation is licensed, rather than *how* it is licensed.
 - a. Requirements and fees might be excessive relative to what is required for public safety.
 - b. The tasks that licensed workers are permitted to undertake (e.g., scope of practice) matter for competition.
 - c. Details matter for outcomes like interstate migration.

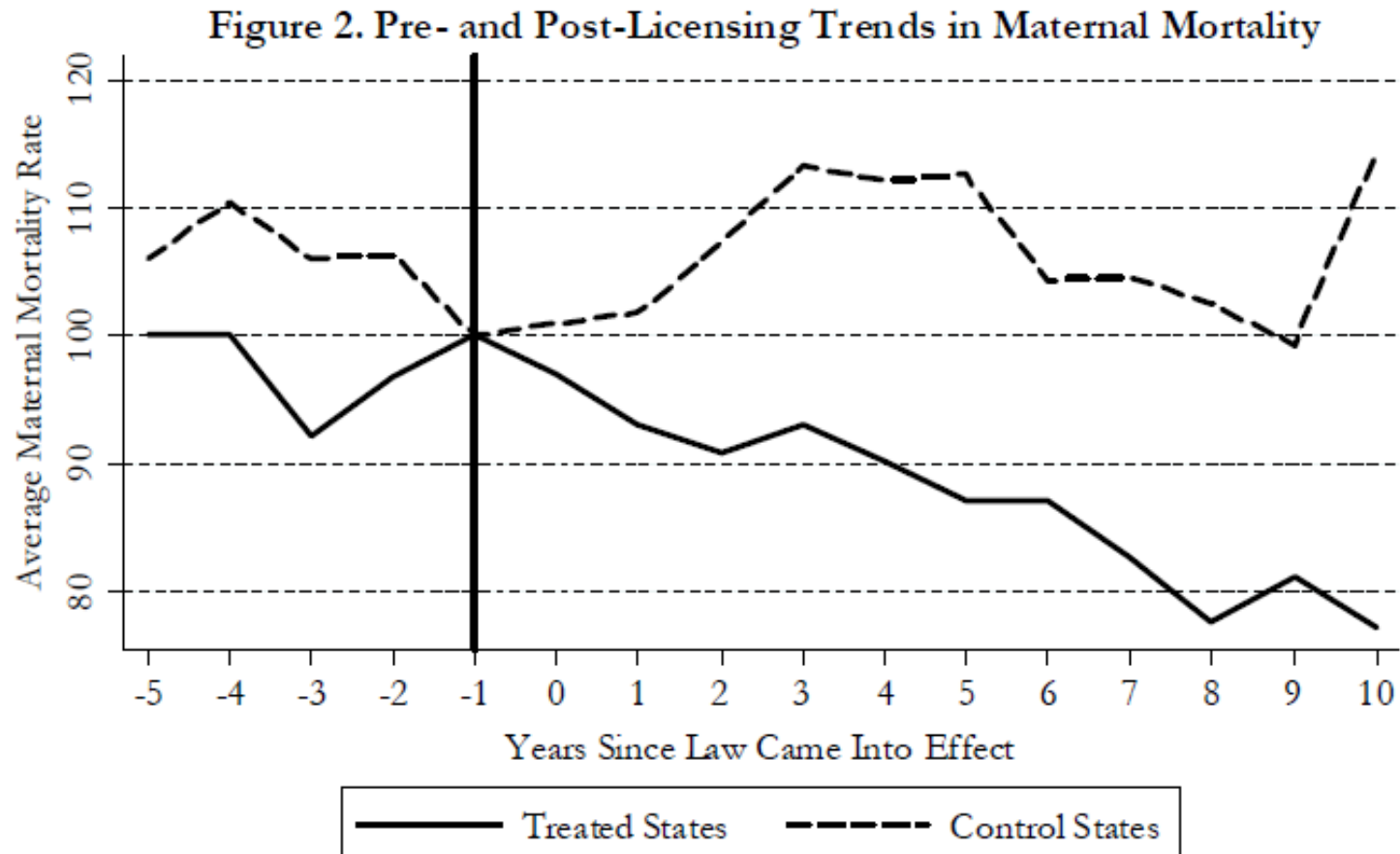
Other Theories of Occupational Licensing

- Consumer protection
- Professionalization
- Occupational arms races

Problem 1: The Public Choice Account is Too Dismissive of Health and Safety Concerns

- Public choice proponents point to lack of empirical evidence that licensing improves quality.
 - But a careful review paints a more nuanced picture.
 - Most empirical studies focus on incremental changes in licensing restrictions.
 - Studies tend to focus on requirements that vary across states.
 - The few studies that focus on the initial adoption of licensing laws find that it has led to quality improvements.
- The evidence does not support the notion that abolishing licensing would have no impact on quality.

Some Evidence of Quality Benefits from Early Licensure that is Now Universal



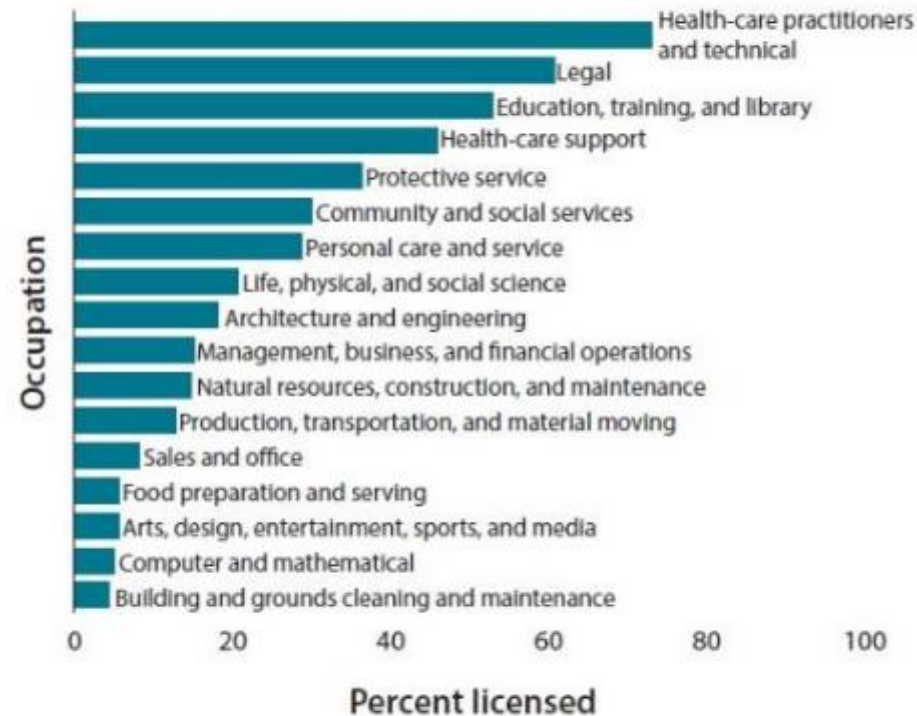
Based on annual data from *Mortality Statistics*, published by the U.S. Census Bureau. On the horizontal axis, 0 represents the year in which midwifery became a licensed profession. It was randomly assigned to states with unregulated midwifery during the period under study. Maternal mortality rates are expressed relative to year -1.

Problem 2: Public Choice Account is Too Focused on Uncommon, Low-Wage Jobs

- Examples include horse masseurs, shampooers, egg handlers, and upholstery repairers.
- Critics tend to focus on these professions because public safety concerns are the least plausible for these professions.
- But many licensed workers are in fields like health care, law, education, and business.
- Arguably they have a stronger justification for being licensed—but poor *design* of licensing regimes in these fields is particularly harmful because of the occupations' economic importance.

Licensing Varies Widely Across Occupations

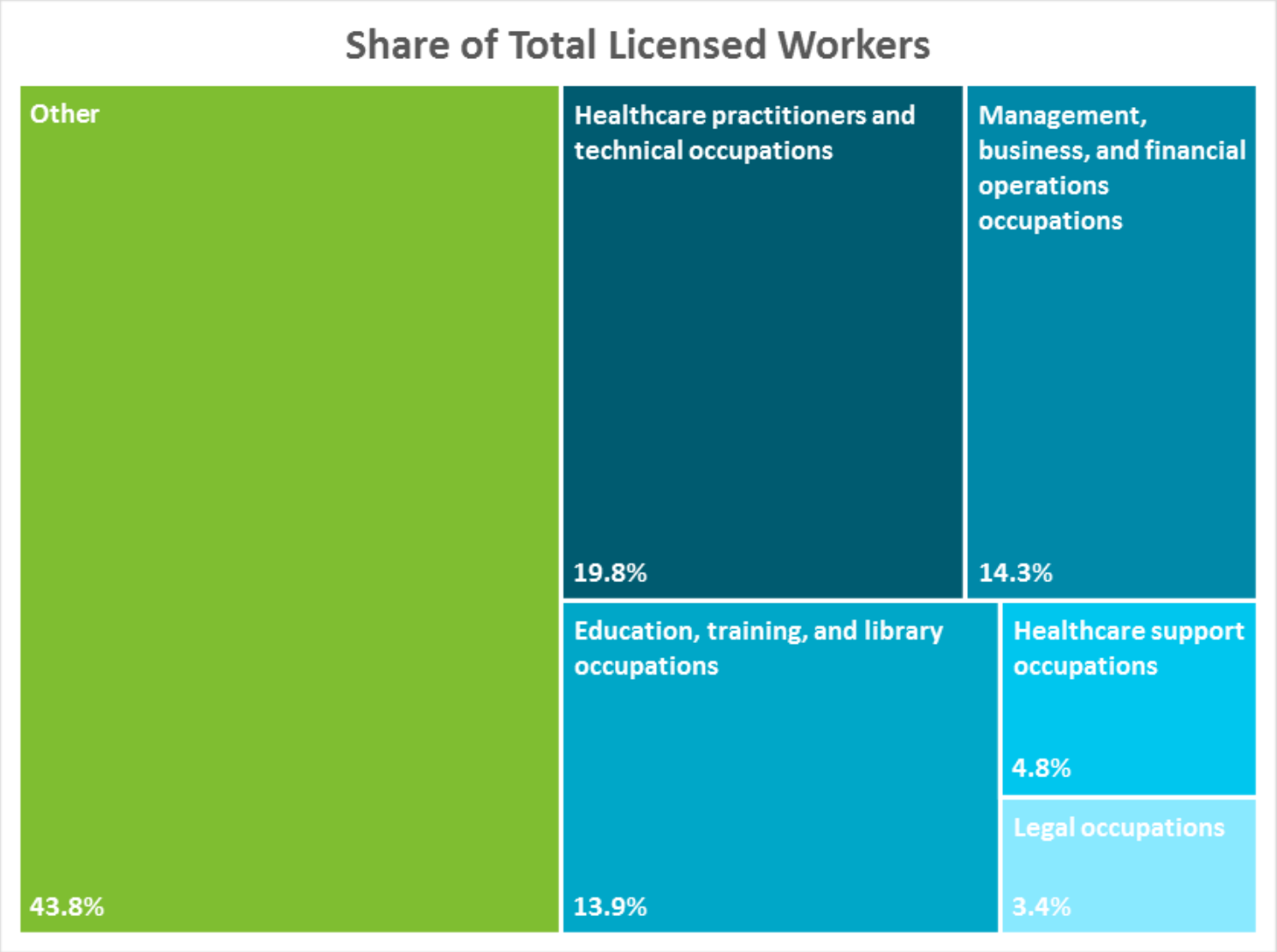
Licensed Share of Workers, by Occupation



Source: BLS 2016–17; authors' calculations.

Note: Sample is restricted to employed workers age 25 to 64. We define workers as licensed only if their government-issued credential is required for their job.

But 25 Percent Of Licensed Workers Are In Health-care Occupations Alone



Source: Ryan Nunn and Gabriel Scheffler, *Occupational Licensing and the Limits of Public Choice Theory*, 4 Administrative Law Review Accord (2019)

Licensing in the Health-care Sector Has Particularly Important Impacts

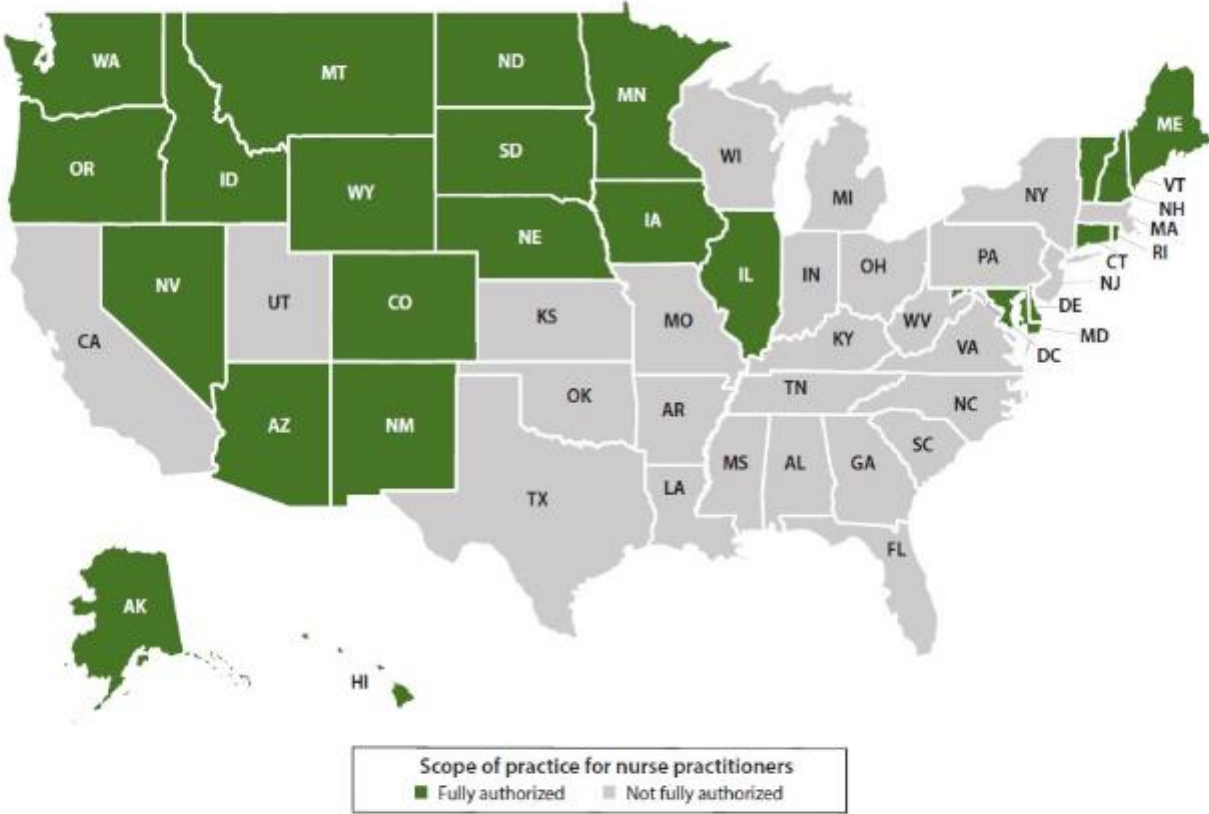
- U.S. spends about 18 percent of GDP on health-care services.
- Both wage premiums and licensing prevalence are high in the health-care sector.
- It's not just a matter of whether a worker is licensed: health-care workers interact in ways that are constrained by licensure rules.

Features of the Licensing System Restrict Access to Health Care Without Improving Quality

- Excessive SoP restrictions prevent health care providers from offering services they are qualified to provide, through:
 - Maximum ratios of APRNs or PAs to supervising physicians.
 - Limitations on prescription authority.
 - Supervisory requirements and collaborative practice agreements.
- Differences in state licensing requirements make it more difficult for health care providers to relocate or deliver services remotely through telehealth.
- State medical practice acts deter foreign-trained providers from practicing in the US by requiring them to complete duplicative training.

Nurse Practitioner Scope of Practice

Fully Authorized Scope of Practice for Nurse Practitioners



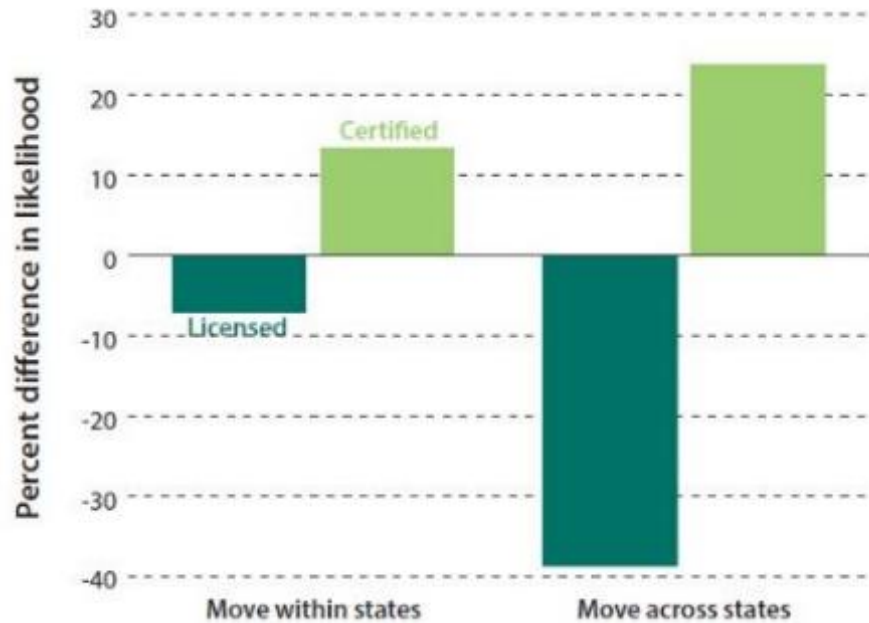
Source: Policy Surveillance Program 2017.
Note: The map shows states with fully authorized SOP for both practice and prescription authority in 2017.

Problem 3: Public Choice Account Deemphasizes Opportunities to Improve Licensing

- Many of the costs of licensing depend not on licensing per se, but on how specific licensing requirements are structured.
- Examples:
 - Workers in occupations that have state-specific licensing exams are less likely to move across states.
 - Licensing restrictions disqualify individuals with criminal records, regardless of whether those records suggest a real safety threat.
 - Licensing requirements remain stagnant over time, i.e., they are often not modified to keep up with changing economic and technological conditions.

Differences In State Requirements Contribute To Lower Interstate Migration

Differences in Likelihood of Moving for Licensed and Certified Workers



Source: BLS 2016–17; authors' calculations.

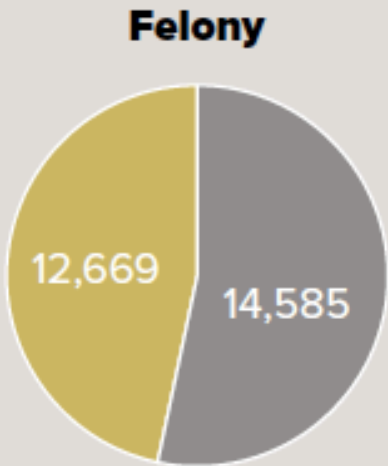
Note: Sample is restricted to workers age 25 to 64. We define workers as licensed only if their government-issued credential is required for their job. Estimates adjust for age, education, gender, and race.



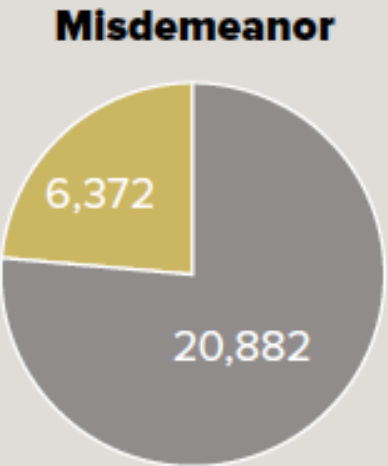
- Johnson and Kleiner (2017) find that interstate mobility is reduced when licensing exam requirements vary across states.
- Both geographic and job-to-job mobility are often key for wage growth (Nakamura et al. 2017; Haltiwanger et al. 2018).

Specific Licensing Restrictions Target Those With Criminal Records

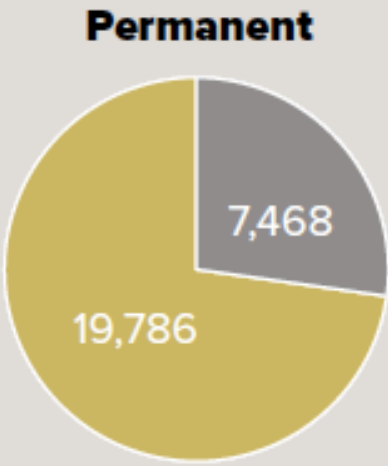
Types of Disqualifications Among State Licensing Restrictions



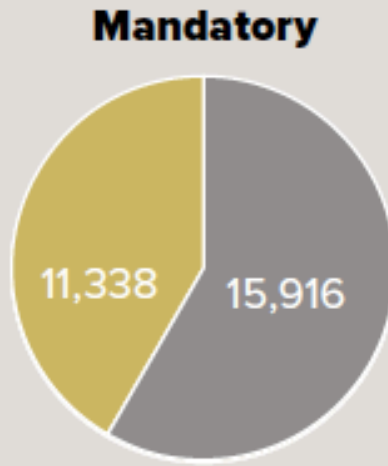
■ Any Felony
■ Other



■ Any Misdemeanor
■ Other



■ Permanent
■ Non-Permanent



■ Mandatory
■ Discretionary

The ABA Inventory documents 27,254 state occupational licensing restrictions. Of these restrictions, over 12,000 are for individuals with any type of felony, over 6,000 are based on misdemeanors, over 19,000 are permanent disqualifications, and over 11,000 are mandatory disqualifications.

Occupational Licensing Reform Options

Overview Of The Current Policy Discussion

- Increasing understanding that licensing affects groups differently:
 - For example, people with criminal records, workers with foreign credentials, military veterans and spouses, etc.
 - Wage premiums are different by race and gender but less clear how to interpret.
- Robust discussion of licensing in context of antitrust and competition policy.
 - Currently centering on scope of practice reform in the health-care sector.
- Ongoing efforts to enhance interstate reciprocity or otherwise lower barriers to interstate migration and work.

Overview Of The Current Policy Discussion

- Patently indefensible licensure (e.g., floristry) vs. all other licensure
 - The rhetoric can appear radical, but it may have less scope than generally believed.
 - Hard to claim that there is zero possibility for public harm from unlicensed practice.
- Better to discuss: what is the optimal type and content of occupational regulation in each particular case?
 - This may result in more radical change.
 - The possibility (or even demonstrated reality) of public safety risks only justifies narrowly tailored rules that maximize net benefits.
- Also need more emphasis on licensing as it relates to entrepreneurship.

Selected Recent Policy Work On Licensing

- Obama administration 2015 report
- NCSL, CSG, and NGA multi-state licensing consortium
- Numerous Federal Trade Commission briefs and analyses
- Institute for Justice *License to Work*
- National Employment Law Project on criminal justice barriers
- CAC, CLEAR, and other groups provide resources for public and policymakers

Hamilton Project Work on Licensing

- Kleiner (Jan 2015) discussed licensing research and made proposals similar to those of 2015 Obama administration report
- Analysis of labor market differences between licensed and unlicensed workers (Nunn 2016; 2018)
- Interaction with criminal justice policy
 - Schanzenbach et al. (2016)
 - Piehl (2016)
- Scope of practice reform for APRNs (Adams and Markowitz 2018)

Recent Proposals and Initiatives

- State consortium led by NCSL
 - Aims to enhance interstate reciprocity, among other goals
- Some selected state examples:
 - Arizona and Pennsylvania recognition of out-of-state licenses
 - Nebraska's Occupational Board Reform Act
 - General review of licensing rules and movement towards less-restrictive alternatives
 - Illinois criminal justice reforms
 - Prevents license forfeiture due to student loan default (2018)
 - Requires relevance of criminal convictions (2016)

White House Proposed Best Practices

- Limit licensing requirements to those that are necessary for protection of public health and safety.
 - Consider alternative regulatory mechanisms in situations where they would be adequate to protect the public.
 - Minimize procedural burdens of acquiring a license.
 - Maximize scope of practice, consistent with competency and training.
 - Remove unnecessary burdens for specific groups like those with criminal records.
- Apply rigorous cost-benefit analysis to all licensing provisions.
 - Strengthen states' sunrise and sunset review processes.
- Harmonize licensing requirements across states to the extent possible and reduce burdens for licensed workers who move across state lines.



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