



A History of Medical Regulation in the United States

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PART I

Medicine Before Regulation in America



The Unregulated Medical Landscape: 1700s–1800s

Major Schools of Thought

- Allopathy — conventional 'heroic' medicine
- Homeopathy — 'like cures like' (Hahnemann, 1796)
- Botanical / Herbal medicine — Native & folk traditions
- Thomsonianism — steam baths, botanical purges
- Eclecticism — selected best of all systems
- Hydropathy — water-cure treatments



The Unregulated Medical Landscape: 1700s–1800s

Who Was Practicing Medicine?

- Anyone could call themselves a physician
- No licensing requirements in any state
- Formal training: optional, not required
- European-trained doctors alongside folk healers
- Apprenticeship was the main path to practice
- Competing systems had equal legal standing



Frontier Medicine & the Patent Medicine Era

- Frontier medicine: necessity-driven, community healers, midwives, barbers
- "Heroic medicine": **bloodletting, purging**, blistering, heavy metals (calomel/mercury)
- Laudanum (opium tincture) sold freely — mothers given it for colicky infants
- Patent medicines: secret formulas, extravagant claims, alcohol/opiates common
- Traveling medicine shows: entertainment + sales pitch, no accountability
- Snake oil: Clark Stanley's Rattlesnake Oil (1893 World's Fair) — a defining symbol
- Mail-order cures: Lydia Pinkham's Vegetable Compound, Swaim's Panacea



Frontier Medicine & the Patent Medicine Era

"Heroic" Treatments

Mercury, arsenic, extreme bloodletting — often worse than the disease

No Safety Testing

Products could contain morphine, cocaine, alcohol, turpentine — unlabeled

\$75 Million Industry by 1900

Patent medicines were among the most advertised products in America

1906 Pure Food & Drug Act — first federal response



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Wakes with severe sore throat, hoarse voice — cyanche trachealis (likely acute bacterial epiglottitis)



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— total blood removed: ~80 oz (~5 pints, 40% of blood volume)

This was the BEST available medical care of its time — received by America's most prominent citizen.



A Case Study: The Death of George Washington — December 1799

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PART II

Why States Moved to Regulate the Practice of Medicine



The Push for State Medical Regulation

Who Drove the Movement?

- Newspaper exposés of patent medicine dangers built public pressure
- Early reformers alarmed by epidemic death tolls & ineffective treatments
- State medical societies: organized physicians pressed for licensing boards
- Growing germ theory evidence (Pasteur, Koch) discredited unscientific healers
- Allopathic physicians (AMA, founded 1847) — sought professional legitimacy
- American Medical Association lobbied state legislatures aggressively



The Push for State Medical Regulation

Catalysts for Action

1847

AMA Founded — first national body promoting medical standards

1870s

Germ theory gains acceptance; scientific medicine emerges

1880s

States begin passing (weak) medical licensing laws

1905

Samuel Hopkins Adams: 'The Great American Fraud' in Collier's

1906

Pure Food & Drug Act — labeling requirements enacted

1910

Flexner Report catalyzes nationwide reform of medical education



Goals Behind Medical Practice Regulation

Public Protection

Shield citizens from unqualified, incompetent, or fraudulent practitioners causing direct patient harm

Professional Standards

Establish **minimum** knowledge & competency benchmarks before granting the **privilege** to practice medicine

Educational Quality

Elevate medical school curricula from apprenticeship to science-based training with clinical requirements

Accountability

Create legal mechanisms to discipline, suspend, or revoke licenses from impaired or unethical physicians

Public Confidence

Build societal trust in medicine by ensuring patients could rely on legitimate qualifications of their doctor

Interstate Consistency

Over time, harmonize standards so that competency in one state reflected genuine national-level qualification



The 10th Amendment & States' Police Power

"The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."

— U.S. Constitution, Amendment X (1791)

How the 10th Amendment Empowered State Licensing:

- Regulation of health & safety = core "police power" of states — not delegated to federal government
- States could define who qualifies to practice, what constitutes medical practice, and penalties for violations
- Dent v. West Virginia (1888): U.S. Supreme Court upheld state medical licensing as constitutional
- Each state legislature created its own Medical Practice Act — no federal uniformity required
- State medical boards: **quasi-governmental bodies** given authority to set standards, examine, and discipline
- This state-by-state framework created **both protection AND fragmentation** — a tension felt for 100+ years



PART III

The Flexner Report: Transforming Medical Education



The Flexner Report (1910): Medical Education in the United States and Canada

- Commissioned by the Carnegie Foundation; conducted by Abraham Flexner (an educator, not a physician)
- Endorsed the **Johns Hopkins model** as the **gold standard** for medical education
- Visited all 155 medical schools in the US and Canada over two years
- Found shocking conditions: diploma mills, no laboratory science, no hospital training
- Fewer than 20 schools met even minimal standards for science-based education
- Recommended: 2 yrs basic science + 2 yrs clinical training as the national standard
- Called for state boards to only accept graduates from approved schools



The Flexner Report (1910): Medical Education in the United States and Canada

Impact by the Numbers

155

Medical schools in 1910

31

Schools remaining by 1930

50%

Reduction in graduates (1910–1920)

~1900

Year the Johns Hopkins model began



Flexner's Legacy: A Disparate Impact on Black & Women's Schools

The Flexner Report: A Lasting Wound on Medical Diversity

Black Medical Schools

- 7 Black medical schools existed in 1910 (Howard, Meharry, and 5 others)
- Flexner's report was deeply racialized — advocated training Black doctors only to serve Black communities
- 5 of 7 Black schools closed within years of the report
- Only Howard (DC) and Meharry (TN) survived — still training ~15% of Black physicians today
- The physician shortage in Black communities created by Flexner persists to this day
- Health disparities in underserved communities trace direct lineage to this 1910 decision
- 2025-2026: 8.4% a decline of 10% in previous years. ~72% female, ~28% male



Flexner's Legacy: A Disparate Impact on Black & Women's Schools

The Flexner Report: A Lasting Wound on Medical Diversity

Women's Medical Schools

- Women's Medical College of Pennsylvania (est. 1850): the first U.S. medical school for women
- Several women's-only schools closed after Flexner, as men-only schools slowly integrated
- Integration was glacially slow — Johns Hopkins didn't fully integrate women until 1970
- Women who survived as physicians faced severe discrimination in residency and hospital positions
- Women represented just 5% of medical graduates in 1910; not until 1970s did representation grow meaningfully
- The consolidation of power in the AMA effectively excluded women and minorities for decades
- For 2023-24: 54.6 of medical school students are women.



PART IV

Standardizing Medical Licensing: From State Chaos to the USMLE



The Patchwork of State Medical Licensing

- After the Flexner Report, each of the 48 states created its own medical practice act and licensing board
- Each state wrote its own examination — content, format, passing scores, and re-examination policies all differed
- A license in New York did NOT automatically qualify a physician to practice in Pennsylvania or any other state
- Reciprocity agreements between states were informal, inconsistent, and often politically motivated
- Physicians moving between states faced the burden of re-examination — sometimes repeatedly
- Quality of state exams varied enormously: some were rigorous, others were cursory or politically influenced
- The result: a physician might be "qualified" in one state and denied licensure in another for the same qualifications

The fundamental tension: States' constitutional authority vs. the practical need for interstate mobility of physicians and a consistent national standard of medical competency.



From State Exams to National Standards: FSMB, NBME & the USMLE

1912	FSMB Founded	Federation of State Medical Boards created to coordinate state licensing boards and share information
1915	NBME Established	National Board of Medical Examiners created a voluntary national exam accepted by many (not all) states
1916	NBME Part I/II/III	Three-part exam covering basic sciences, clinical sciences, and clinical competency — widely adopted
1968	FLEX Exam	FSMB launched the Federation Licensing Exam — a two-day standardized test designed specifically for state licensure; most states adopted it
1992	USMLE Step 1	FSMB + NBME jointly launched the United States Medical Licensing Examination, replacing both FLEX and NBME boards
1994	USMLE Complete	All three Steps (1, 2 CK, 2 CS, 3) fully operational. All states recognized USMLE scores for licensure decisions



When the System Failed: The Michael Swango Case



Michael Swango: How Silence Between States Enabled a Predator

Medical degree: Southern Illinois University, 1983 — suspicious patient deaths during residency never formally investigated

1985: Convicted of poisoning fellow emergency workers in Illinois — sentenced to 5 years (served 2.5 yrs)

1993: Applied to Virginia residency using a false application — VA board didn't check Illinois records

1994: Ohio medical board licensed him — no interstate data-sharing system existed to flag his history

1995: AMA database listing did not reflect criminal conviction; state boards had no mandatory reporting

1997: Fled to Africa; continued killing patients in Zimbabwe and Zambia — 60+ suspected victims globally

2000: Arrested at Chicago O'Hare attempting to enter; pled guilty to 4 murders, sentenced to life without parole

Swango's case became the defining argument for mandatory interstate reporting and data sharing among state medical boards.



Reforms in Information Sharing: Closing the Gaps

- **National Practitioner Data Bank (NPDB):**
 - Medical boards MUST report license revocations, suspensions, restrictions, and clinical privilege actions
 - Requires hospitals and insurers report adverse actions
 - Healthcare Integrity & Protection Data Bank (HIPDB, 1996): added fraud/abuse actions; merged with NPDB in 2013
- **FSMB's Physician Data Center:** a complementary system allowing boards to query licensure history across states – [docinfo.org](https://www.docinfo.org)
- **AMA Physician Masterfile** updated to include board actions — changed from optional to required reporting
- Post-Swango reforms:
 - States required to query NPDB before granting initial licensure and at renewal
 - The Swango case became a textbook example taught in medical licensing courses and ethics curricula nationwide
- Despite improvements: gaps persisted well into the 2000s — voluntary compliance, state resource constraints

"No credentialing system can stop a determined predator — but it can slow them down and create accountability."



PART VI

The IMLCC: A Century-Long Leap Forward in Medical Licensing



The Interstate Medical Licensure Compact (IMLCC)

What Is the IMLCC?

- ~~“One Ring to rule them all”~~
- Interstate compact enacted by state legislatures — now active in 40+ states (2024)
- First fundamental change in medical licensing structure in ~100 years
- Allows eligible physicians to obtain licenses in multiple member states simultaneously through a streamlined process
- **Administered by the IMLCC Commission** — an independent body **created by the participating states**
- **Does NOT replace state licensing** — each state still issues its own license
- Physicians must be principally licensed in their home state to participate
- Background checks, NPDB query, verification of credentials done ONCE — shared with all participating states



The Interstate Medical Licensure Compact (IMLCC)

Why It Matters

- **Preserves state authority** (10th Amendment) while creating practical mobility
- Telemedicine explosion (especially post-COVID) demanded cross-state physician access
- Rural & underserved areas gain access to specialists from other states
- Previously: multi-state licensing could take 6–12 months and cost thousands in fees
- Under IMLCC: additional state licenses obtainable in weeks
- Model for other health professions —physical therapy, and others have adopted similar compacts



IMLCC: History, Eligibility & Process

Streamlined Process:

- Single application → Commission → verified with all member states
- One fee structure covers multiple state licenses
- Average processing: 2–4 weeks (vs. months previously)
- Each state still issues its own **full, unrestricted license**
- Ongoing: discipline in one state triggers review in all states



IMLCC: History, Eligibility & Process

Eligibility Requirements:

- Graduate of accredited US/Canadian medical school
- Passed USMLE or COMLEX within 3 attempts per step
- No disciplinary actions against any license
- No criminal convictions; no controlled substance violations
- Active, unrestricted license in a member "principal" state
- Board-certified OR graduated within last 5 years



IMLCC: History, Eligibility & Process

2014

FSMB proposes compact framework

2015

First states enact the compact

2017

Commission operational; first licenses issued

2020

COVID emergency waivers accelerate adoption

2024

40+ states + DC and Guam participating



The Arc of Medical Regulation: 200+ Years

Pre-1800s	1847–1900	1900–1910	1910–1960	1960–1992	1992–2000	2015–Now
No Standards	AMA & Reform	State Licensing	Education Reform	FLEX & NBME	USMLE Born	IMLCC Era
Anyone could practice; heroic medicine, patent cures	Organized physicians begin lobbying for state licensing	Varied, fragmented state boards; Flexner reshapes schools	Schools standardize; Black & women's schools devastated	Standardized exams adopted state by state; some uniformity	National unified licensing exam; Swango exposes data gaps	Interstate compact: first structural reform in 100 years



The Arc of Medical Regulation: 200+ Years

Key Takeaways:

- 1.** Medical regulation evolved in direct response to public harm, scandal, and the growth of scientific knowledge.
- 2.** The Flexner Report's legacy is dual: it raised standards AND created profound, lasting disparities in physician diversity.
- 3.** The tension between state authority (10th Amendment) and the need for national consistency has never fully resolved — the IMLCC is the most significant attempt yet.



147.091 GROUNDS FOR DISCIPLINARY ACTION.

Subd. 1b. **Utilization review.** The board may investigate allegations and impose disciplinary action as described in section 147.141 against a physician performing utilization review for a **pattern of failure to exercise that degree of care that a physician reviewer of ordinary prudence making utilization review determinations for a utilization review organization would use under the same or similar circumstances.** As part of its investigative process, the board shall receive consultation or recommendation from physicians who are currently engaged in utilization review activities.



