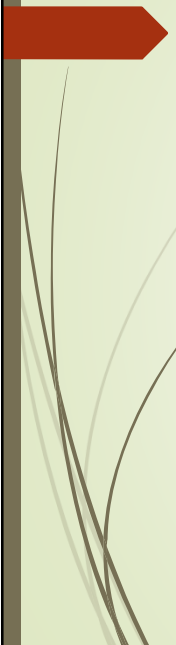




Innovate, Inspire, Invest: the next chapter in Wisconsin's healthcare workforce development

Lisa Grill Dodson, MD
Founding Dean Emeritus
Professor of Community and Family Medicine
MCW-Central Wisconsin

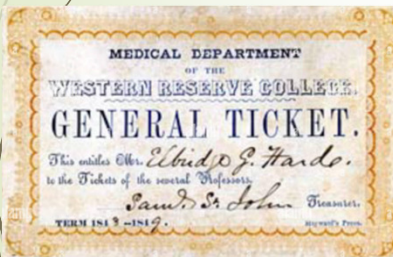
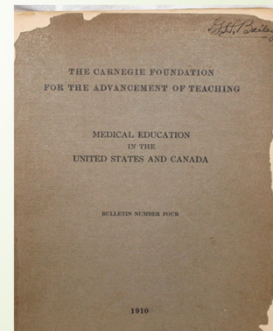


Disclosures

- No financial disclosures
- The views presented are my own

Historical background: How did we get here?

- Medical education nonstandard, unregulated in US until late 19th century
- Commissioned by the AMA and Carnegie Foundation, the Flexner Report in 1910 led to standardization of curricula in university based medical schools.
- Johns Hopkins Allopathic model (2 + 2)



Unintended (?) consequences

- Closure of most schools of homeopathy, naturopathy, chiropractic, osteopathy
- Closure of almost all schools for women, African Americans and non-urban schools
- Focus on acute and hospital care, and technology/research
- Marked reduction in care to rural and other underserved communities
- Increase cost of attendance
- Increase cost of healthcare
- Reduced number of physician graduates



1920's to 1960's

- General medical practice persists but specialization begins
- Internship and residency increasingly common.
- Medical school still relatively inexpensive, but persistently urban in location and focus
- <5% women <1% minority
- Medical research accelerates
- Improvements in surgical procedures, anesthesia, pharmacology, transfusion/blood banking, radiology, much of it war-driven.
- Accelerated graduation programs during wartime (1939-45, 1955-75)



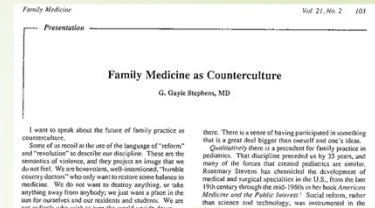
Medical education in Wisconsin

- 1893: Medical College of Wisconsin predecessors established
 - 1913: Wisconsin College of Physicians and Surgeons merges with Milwaukee Medical College to become Marquette School of Medicine
 - 1967: separates from Marquette to become MCW
 - 2015-2016: MCW regional campuses in GB and CW
- 1848: UW med school proposed
 - 1907: First medical department
 - 1925: University of Wisconsin SOM matriculates its first 4-year class



Specialization

- (1916) American Board of Ophthalmology formed
- ABMS formed 1933.(Derm, OB/GYN, Ophthalmology, ENT)
 - Currently 24 ABMS specialty boards (16 boards between 1933 -1949)
 - 38 specialties
 - 89 subspecialty areas.
- 1935:Peds, 1936: IM (now with <20 subspecialties each)
- 1949-1969: No new specialty boards formed
- 1969: Family Medicine (originally Family Practice)



Social and political factors affecting med ed

- Urbanization (60% post- Great Depression, continued into 1980's)
- Industrialization
- Immigration
- Employment-based health insurance
- Hill Burton Act (1946)
- JCAHO (1950's)
- Medicare and Medicaid (1965)
- Civil rights and women's movements
- Cost containment efforts, Health Care Financing Admin (1977)
- DRG's (1980's)
- RVU's, RBRVS (late 1980's into early 1990's implementation)

What about rural?

- Rural electrification and public service districts (1930s – 1950s)
- Medicare and Medicaid (1965)
- Hill Burton act (1946-1974)
 - Built 40% of hospital beds in general hospitals
 - "separate but equal" allowed until 1964 Civil Rights Act
 - State and local matches and economic viability requirements
 - "Reasonable volume" of free care clause
 - No funding for operations
 - Unequal distribution with overbuilding → cost increases into the 1980'sW

UME virtually untouched, GME expanding

Rural med ed today

- 20% US population, 9-11% of physicians
- <5% of US medical school matriculants are from rural zip codes
- Only 1% of residents train in rural areas
- GME funding overwhelmingly goes to urban hospitals
- Post Flexner likelihood of med school grad locating to rural area declined by <50%

Between January 1, 2019, and January 1, 2024:

- **Rural areas lost nearly 2,500 physicians (5%)**
- **Nearly 3,300 rural medical practices closed.** 11% fewer rural medical practices overall.
- **Independent physicians fell sharply**, declined 43%. Just 12,467 remained, compared to 21,956
- **More than 40% of independent medical practices closed or were acquired** by hospitals, health systems and other corporate entities like health insurer-affiliated owners and private equity groups.
- **76% of physicians and medical practices were employed or owned by non-physicians.**

Where to teach?

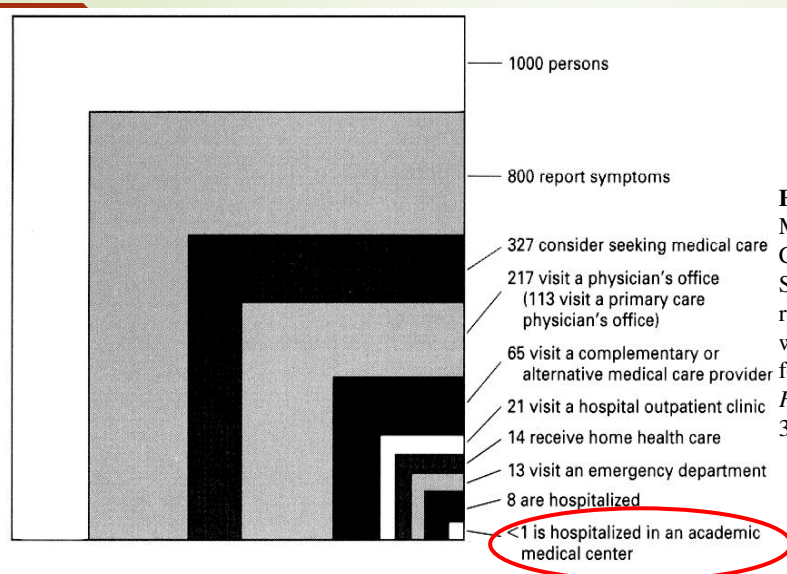


Figure 2. Results of a Reanalysis of the Monthly Prevalence of Illness in the Community and the Roles of Various Sources of Health Care. Each box represents a subgroup of the largest box, which comprises 1000 persons. Data are for persons of all ages.

From: Green: N Engl J Med, Volume 344(26).June 28, 2001.2021-2025

Place-based Medical Education

Key concepts:

- Medical school is the Generalist Education of the physician
- "Apprenticeship" rather than "Near-peer" learning model
- Facilitative faculty models
- Leveraging technology
- Competency-based rather than time and standardized test-based assessment and advancement
- Individualized and relevant
- Community engagement and non-superiority of urban resources

Challenges to Place-based Med Ed

- ▀ Bias (LMD's =Local Medical Docs)
- ▀ FOMO
- ▀ Preceptors: multiple demands
- ▀ Acuity and severity: Horses vs Zebras
- ▀ Inpatient vs outpatient focus
- ▀ Systems capacity
- ▀ Cost

1990: Four Truths of Rural Practice Site Choice

1. Students from rural areas are more likely than those from urban areas to train in primary care and to return to rural areas to practice.
2. Residents who have a significant part of their residency training in rural areas are likelier to choose to practice medicine in rural areas.
3. Family medicine is the key to rural health.
4. Residents practice close to where they train.

Source: Talley RC. [Graduate medical education and rural health care](#). Acad Med. 1990.

▀ Other "truths":

- ▀ "Women don't go rural"
- ▀ Degrees of rurality



Additional factors in 2025

- Quality of mentorship
- Quality of clinical experiences (hands on, didactic)
- Duration of education (accelerated vs. extended medical school)
- FOMO
- Medical debt
- Prestige, salary
- Practice options (employment, DPC, Solo/small group)



Physician shortage... or maldistribution?

- Maldistribution by:
 - Geography
 - Specialty
 - Prestige
 - Financing
 - Pay
 - Resources



COGME Reports

[COGME Rural Health Issue Brief #3: Training Needs to Prepare the Healthcare Workforce for Rural Practice](#) (PDF - 160 KB), June 2021

[COGME Rural Health Issue Brief #2: Investing in a Health Workforce that Meets Rural Needs](#) (PDF - 323 KB), February 2021

[COGME Rural Health Issue Brief #1: Special Needs in Rural America: Implications for Health Workforce Education, Training, and Practice](#) (PDF - 270 KB), July 2020



Addressing maldistribution through medical education

- Holistic admissions
- Modified training milieu
- Incentives for generalist practice (in all specialties)
- Improved infrastructure and connectivity
- Reduce systemic barriers

Medical Education Effects

Declines in:

- Physical and emotional health
- Moral reasoning
- Empathy
- Financial stability

Increases in:

- Perceived stress
- Burnout/moral injury

Fourth year effect

Not repaired in most practice environments



MCW-Central Wisconsin campus

- Regional location
- Small class size
- Primary care and psychiatry focus
- Regional Admissions Advisory Committee (RAAC)
 - Regional applicant emphasis
 - Less emphasis on metrics
- Community clinical placements, "apprenticeship" model
- Continuous campus support
- Accelerated model

MCW-CW results

- 150+ grads (2019-2025)
- 19 specialties entered (65% "mission" specialties, 30% FM)
- 60+% accelerated
- 100% match
- 2 withdrawals
- 400+ community faculty
- 80+% of eligible grads practicing in Wisconsin

Wisconsin rural education resources

- WCRGME
- WiNC-GME
- RWHC
- RPRAP
- WCMEW
- WI AHEC
- State loan repayment programs
- MCW regional campuses
- WARM, WARMER
- Rural surgery, ob/gyn



Remaining challenges

- Changing overall health system priorities
 - Primary care
 - Universal access
 - Cost/value
 - Reduce unnecessary care
 - Address attrition/burnout/moral injury



Challenges in Medical Education

- Cost
- Newly imposed limits on federal loans
- Lack of broad educational support
- Admissions
- Curriculum
- Community Faculty / Mentors

Solutions



- Restoring our campfires
- Rebuilding the spirit of medicine
- Physicians as teachers
- Physician support and empowerment
- A Physician-led, team-based primary care health system
- Value based care
- All-payer support for education
- Mentoring of students for broad spectrum practice
- Healthcare system improvement and equity

Thoughts on my leadership journey

- **Be curious**
- Don't put on blinders, take some side trips
- Develop new skills that don't necessarily have an **immediate** value
- Take some chances
- Figure out what you are good at
- Understand what makes it worth going out in a snowstorm
- If at all possible, marry your best friend
- **Integrate** your work and life, don't **balance** it
- Have fun





Sources

- Rosenblatt RA, Hart LG. Physicians and rural America. West J Med. 2000 Nov;173(5):348-51. doi: 10.1136/ewjm.173.5.348. PMID: 11069878; PMCID: PMC1071163.
- Mennin S. Ten Global Challenges in Medical Education: Wicked Issues and Options for Action. Med Sci Educ. 2021 Sep 20;31(Suppl 1):17-20. doi: 10.1007/s40670-021-01404-w. PMID: 34567834; PMCID: PMC8452128.
- Schwartz CC et al. Comprehensive history of 3-year and accelerated US medical school programs: a century in review. MEDICAL EDUCATION ONLINE 2018, VOL. 23, 1530557
<https://doi.org/10.1080/10872981.2018.1530557>