

20 Years of Health Workforce Research: Where Have We Been and Where Do We Need to Go?

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Agenda

- Brief review of health workforce research
 - Physician and nurse shortage debate
- Evolution of data and methods
- Needed areas for future research

Healthcare discussions 20 years ago...

Medicine and the Media

Timothy Johnson, M.D., M.P.H.

Interestingly, only 2 percent listed the Internet as a primary source...53 percent said that when they have mentioned a media report to their doctor, he or she has been “happy” to talk about it...the vast majority (80 percent) reported that they have never read, seen, or heard a media medical report or health news story that led them to question their doctor's advice. (lecture citing National Health Council Report)

The New York Times

Reality of the H.M.O. System Doesn't Live Up to the Dream

By PETER T. KILBORN OCT. 5, 1998

*Shifting to **evidence-based medicine**, however, will require immense investments in **computers** and great changes in how HMO's and doctors do business.*

Harvard
Business
Review

IT

Can Patients Drive the Future of Health Care?

by Alexandra Wyke

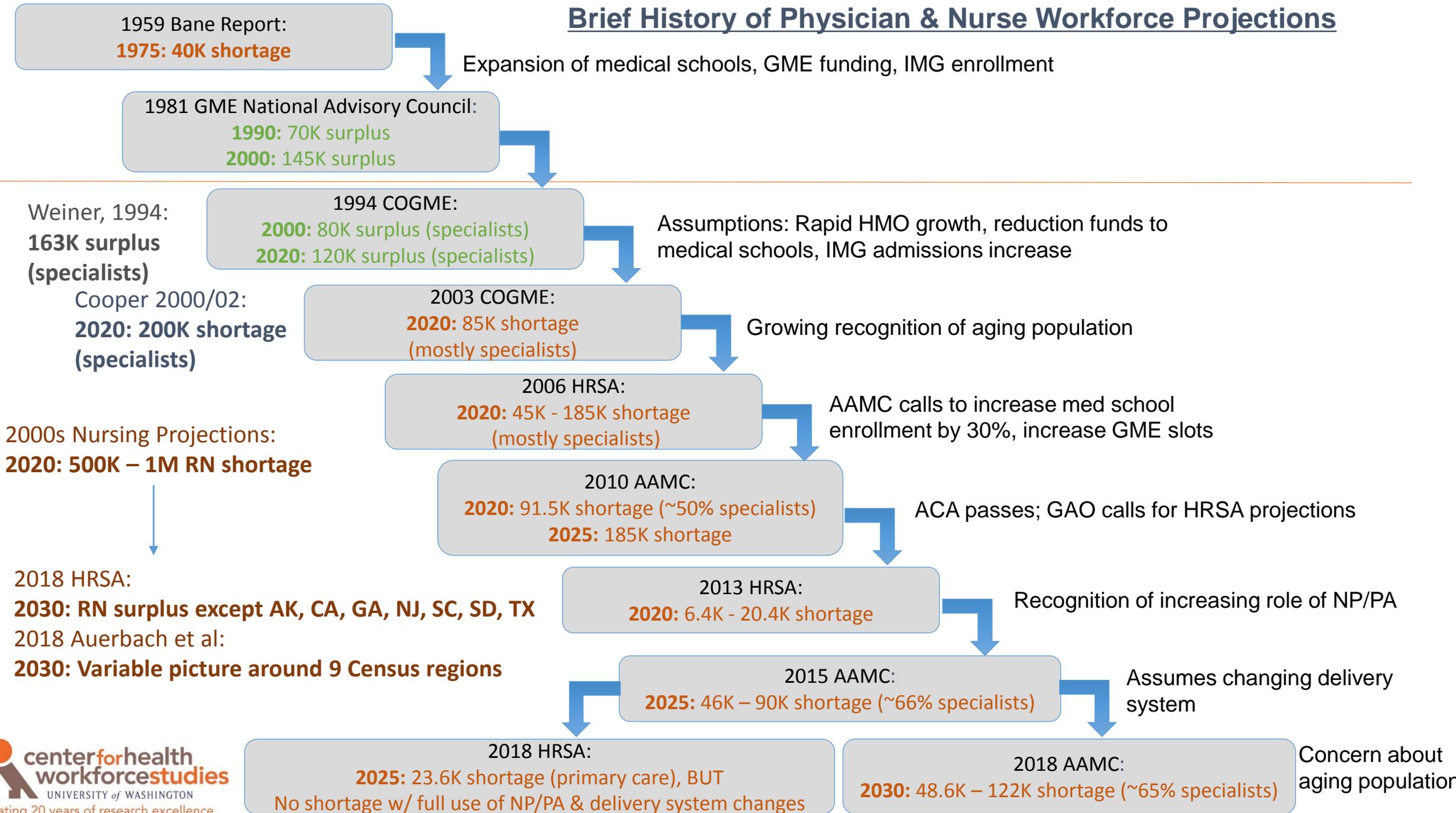
FROM THE JULY-AUGUST 1997 ISSUE

*According to Ken Kaplan, a principal research scientist at the Massachusetts Institute of Technology, the current trends in imaging, **telecommunications, telerobotics, and bio-sensors**, when designed and integrated properly, will enable health care teams to perform their tasks more effectively and at dramatically lower costs. An added feature of this technology is that it could greatly increase access to care. If developed properly, it might evolve into an array of **home health-care tools** that could fundamentally alter the medical treatment of both rich and poor, no matter where they live.*

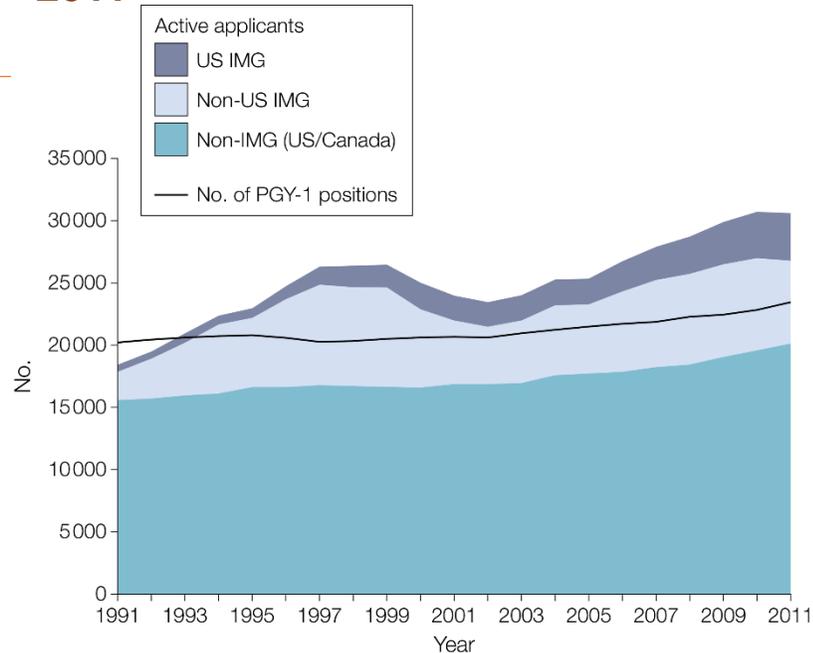
Health workforce over last 20 years ...

- Debates about physician surplus → shortage
 - Debate about investment in GME \$
 - Debate about IMG impact on supply
 - Concern about maldistribution in rural areas & move away from primary care
- Greater investments in nursing education
 - 2010 IOM Future of Nursing report calling for 80% of RNs to have Bachelor's degree
- More states moving towards NP/PA independent scope of practice
 - Growing evidence of equal care quality and safety to physicians
 - NPs/PAs more likely to work in rural areas and in primary care

Brief History of Physician & Nurse Workforce Projections



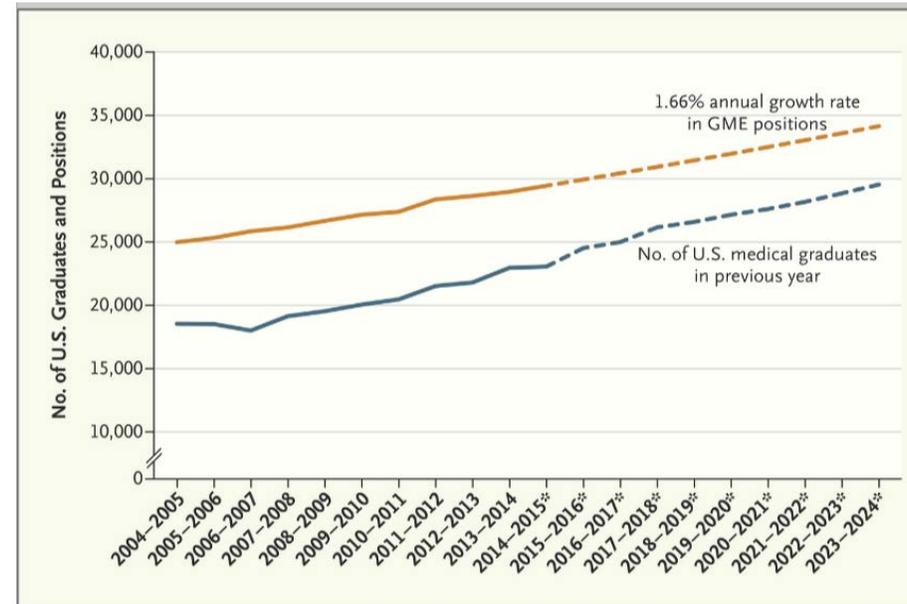
Trends in Applicants Participating in the National Resident Matching Program and Number of PGY-1 Positions, 1991-2011



Source: Traverso and McMahon, 2012, JAMA

Conflicting Projections on Available GME Slots

Actual and Projected Growth in Number of US Medical School Graduates and GME Entrants



Source: Mullan, Salsberg, Weider, 2015, NEJM

Health workforce over last 20 years ...

- Role of insurance in decision making between patients and providers
 - Managed care in 1990s
 - Cost growth concerns in 2000s
- Major policy changes expected to transform healthcare delivery & reduce costs
 - Massive investments in health IT in 2009
 - Passage of Affordable Care Act in 2010

Health workforce discussions now...

- Moving away from “nose counting” to predict supply
 - Recognition of geographic variability
 - More complex modeling and growing availability of data
- What health workforce is needed for complex and transforming health system?
 - Integrating workforce and coordinating across settings
 - New roles/occupations emerging
- Increasing number of HSR studies on “other” healthcare workers
 - Investments by health professions to conduct more studies, collect more data
 - Concern about “degree creep” and clear career pathways

Recent headlines...what can we glean about our future research agenda?

THE WALL STREET JOURNAL.

U.S. Edition • June 19, 2018 | Today's Paper | Video

Conservatives Make New Push to Repeal Affordable Care Act

Group proposes a new system that lifts national consumer protections and gives control of health care to the states

By *Stephanie Armour*

June 19, 2018 5:32 a.m. ET

Walgreens and Humana are partnering to create senior health hubs

EXCLUSIVE

Citing weak demand, IBM Watson Health to scale back hospital business

By CASEY ROSS @caseymross and IKE SWETLITZ @ikeswetlitz / JUNE 15, 2018

STAT+

Opinions

Is the gig economy a myth?

The Washington Post
Democracy Dies in Darkness

Google is training machines to predict when a patient will die

By MARK BERGEN | BLOOMBERG | JUN 18, 2018 | 11:10 AM

Health workforce of the future...

- Increasing use of home health
 - Desire by elderly to age in place
 - Shifting care out of institutions (hospitals/nursing homes)
- Available supply of workers
 - As economy changes, what other industries are we competing with?
 - High turnover in lower skilled jobs, which are often also lower quality jobs
 - As we cut healthcare costs, which jobs are impacted?
- “Future of work”
 - Gig economy
 - Automation of jobs

Evolving Data and Methods

- Increasing availability of data
 - Claims data (e.g., private, Medicaid)
 - Complex longitudinal surveys (e.g., individual professions, ACS, CPS)
 - Novel data sources (e.g., real time labor market info, Sentinel Network, social networks)
- Advancing methods
 - Regression modeling
 - Microsimulations
 - Machine learning

Thank you!

Contact

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