A Primer on the Health Workforce in the United States

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Presentation Overview

- Why do we care?
- Who is in the health workforce?
- Do we have enough? Are they in the right places?
- Education
- Regulation
- Federal versus state roles
- Hot workforce topics
Why do we care?

• ~50% of total health care costs are wages
• 18 million health and social assistance jobs
• 13% of total employment in the United States
• 2% annual growth rate, compared to slightly less than 1% in overall employment
Who is in health workforce?  
The usual professions you think of...

Select Health Care Jobs in the United States, 2013

<table>
<thead>
<tr>
<th>Profession</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians and Surgeons</td>
<td>708,170</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>154,000</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>95,583</td>
</tr>
<tr>
<td>Registered Nurses</td>
<td>2,661,890</td>
</tr>
<tr>
<td>Licensed Practical and Licensed Vocational Nurses</td>
<td>705,200</td>
</tr>
<tr>
<td>Dentists</td>
<td>112,300</td>
</tr>
<tr>
<td>Dental Hygienists</td>
<td>192,330</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>287,420</td>
</tr>
<tr>
<td>Optometrists</td>
<td>32,040</td>
</tr>
<tr>
<td>Chiropractors</td>
<td>28,850</td>
</tr>
<tr>
<td>Podiatrists</td>
<td>8,850</td>
</tr>
<tr>
<td>Therapists</td>
<td>600,660</td>
</tr>
<tr>
<td>Diagnostic technicians</td>
<td>1,350,000</td>
</tr>
<tr>
<td>Other technologists and technicians</td>
<td>599,610</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,536,903</strong></td>
</tr>
</tbody>
</table>

Sources: Physician data from AAMC 2013 State Physician Workforce Data Book; NP data from NCHWA NP sample survey; PA data from the NCCPA 2013 Annual Report; All other professions from the Bureau of Labor Statistics, extracted 2/11/15.
Who work with many support staff

### Select Support Occupations in the United States, 2013

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Assistants</td>
<td>1,427,830</td>
</tr>
<tr>
<td>Home Health Aides</td>
<td>806,710</td>
</tr>
<tr>
<td>Medical Assistants</td>
<td>571,690</td>
</tr>
<tr>
<td>Pharmacy Technicians &amp; Aides</td>
<td>404,940</td>
</tr>
<tr>
<td>Dental Assistants</td>
<td>309,540</td>
</tr>
<tr>
<td>Therapy Assistants and Aides</td>
<td>290,700</td>
</tr>
<tr>
<td>Health Information Technicians</td>
<td>180,760</td>
</tr>
<tr>
<td>Psychiatric Technicians &amp; Aides</td>
<td>142,100</td>
</tr>
<tr>
<td>Phlebotomists</td>
<td>108,210</td>
</tr>
<tr>
<td>Surgical Technologists</td>
<td>97,930</td>
</tr>
<tr>
<td>Opticians Dispensing</td>
<td>68,390</td>
</tr>
<tr>
<td>Ophthalmic Medical Technicians</td>
<td>33,740</td>
</tr>
<tr>
<td>Orderlies</td>
<td>52,030</td>
</tr>
<tr>
<td>Other support occupations</td>
<td>336,870</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,831,440</strong></td>
</tr>
</tbody>
</table>

And with mental health and social service workers

Select Mental Health and Community-Based Occupations in the United States, 2013

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social workers</td>
<td>591,240</td>
</tr>
<tr>
<td>Social and human service assistants</td>
<td>355,500</td>
</tr>
<tr>
<td>Mental Health Counselors</td>
<td>115,580</td>
</tr>
<tr>
<td>Rehabilitation Counselors</td>
<td>103,840</td>
</tr>
<tr>
<td>Substance abuse counselors</td>
<td>83,120</td>
</tr>
<tr>
<td>Health Educators</td>
<td>56,720</td>
</tr>
<tr>
<td>Community Health Workers</td>
<td>45,800</td>
</tr>
<tr>
<td>Marriage and Family Therapists</td>
<td>29,060</td>
</tr>
</tbody>
</table>

Total: 1,380,860

Am I sure about those numbers I just showed you? Not really. Knowing the “real” number of health professionals is challenging.

Exhibit 1. The Estimated Nurse Practitioner (NP) Supply, 2012

- Licensed NP: 154,057
- NP workforce: 132,368
- NP providing patient care: 127,210
- NP working in primary care: 60,407

Another difficult thing to know is whether we have enough providers. Fears of physician shortages grab headlines.
But experts disagree about whether the United States will face a shortage

- AAMC projects shortfall of 45,400 primary care physicians and 46,100 specialists by 2020\(^1\)

- Federal government (HRSA) forecasts shortage of 6,400 primary care physicians in 2020\(^2\) with increased use of NPs and PAs

- We released model in July 2014 that suggests overall supply will be adequate, more pressing issue is maldistribution

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Our model suggests that our nation is a story of haves and have nots.

Shortage/Surplus for All Visits, All Settings, 2014
Despite increasing medical school enrollment

Projected First-Year Enrollment Growth Through 2020

Historical data

Survey data

Projections

- 30% target increase (by 2015, over 2002 enrollment)
- Current Schools (n=141)
- Original Schools (n=125)

Chart courtesy of Clese Erikson, Association of American Medical Colleges.
Source: Results of the 2013 Medical School Enrollment Survey
Resulting in nearly 9,000 additional MDs and DOs enrolled by 2018

Combined MD and DO growth since 2002

Chart courtesy of Clese Erikson, Association of American Medical Colleges.
Source: Results of the 2013 Medical School Enrollment Survey; 2013 AACOM Survey of Colleges of Osteopathic Medicine
Lots of attention paid to physicians but nursing workforce is 4 times in size

Key Findings
After predicting a shortage a decade ago, HRSA now forecasts that nationally RN supply will outpace demand between 2012 and 2025.

Why?
Nursing schools responded to previous projections and significantly increased enrollments

Growth in Nurse Practitioner pipeline mirrors RN growth

Growth in Nurse Practitioner Graduates
2001 - 2013

Chart courtesy of Ed Salsberg, George Washington University.
Source: American Association of Colleges of Nursing and National Organization of Nurse Practitioner Faculties Annual Surveys
Counts include master’s and post-master’s NP and NP/CNS graduates, and Baccalaureate-to-DNP graduates.
But it’s not just nurses. PA pipeline has also expanded rapidly.

Chart courtesy of Ed Salsberg, George Washington University.
And so have pharmacists

Pharmacy School Graduation Trends
2000 - 2015

Number of Graduates

Chart courtesy of Ed Salsberg, George Washington University.
Source: AACP 2012 Enrollment. Data represent first professional degrees including B.S. Pharmacy, B.Pharm., and Pharm.D.
*Note: Graduation projection figure based on enrollment data.
Health professions programs react independently and on different timelines.
Regulation differs between states, even for same health workers

- Health workforce is mix of licensed and unlicensed health professionals
- Licensure is state function. State licensure boards determine requirements to enter practice and set boundaries on scope of services permitted
- Result—heterogeneity between states in:
  1. who is required to be licensed; and
  2. what services licensed health professionals can provide patients
Example 1: Some states require radiologic technologists to be licensed, others do not

What they do:
RTs use various technologies to take pictures of a patient’s body for radiologists, who interpret the images.

Note: in my home state of North Carolina, hairdressers - but not RTs - are licensed.

Map adapted from American Society of Radiologic Technologists; personal communication, 2/16/15.
Example 2: Nurse Practitioners are licensed in all states, but what they can do varies

**Examples:**

Federal regulation does not allow NPs to independently order home health for Medicare patients. Some states allow it for patients covered by other payers.

Significant variation exists in prescriptive authority, who counts as a primary care provider, and whether NPs can order physical therapy, admit patients to hospitals, and sign workers’ comp claims, death certificates, and handicap permits.

What’s the difference between licensure and certification?

- **Licensure**: Recognition of competence to practice a given occupation to an individual who completes required training and testing and is held accountable to practice within established standards of safety.

- **Certification**: The action by which an authorized body evaluates and recognizes (certifies) an individual, institution, or educational program as meeting predetermined requirements, such as standards.

**What’s the difference?**
Licensure is required to practice, certification is voluntary. Licensure determines who can and can’t do what to the patient.

Definitions based on CLEAR (Council on Licensure, Enforcement & Regulation: http://www.clearhq.org/resources/glossary_general.pdf.)
Education, regulation, certification requirements makes it very difficult to coordinate and align to address workforce needs.
Result: we lurch from oversupply to shortage because like health care, health workforce planning is fragmented and uncoordinated.
### How to smooth the cycle?

#### Example federal vs. state roles in workforce planning

<table>
<thead>
<tr>
<th></th>
<th>Federal Roles</th>
<th>State Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data</strong></td>
<td>Invest in better data and workforce projections</td>
<td>Invest in better data and workforce projections to illuminate regional/state variations</td>
</tr>
<tr>
<td><strong>Strategy</strong></td>
<td>(Unfunded) National Health Workforce Commission was supposed to use data to advise Congress and the Administration</td>
<td>States seeking strategy guidance through National Governors Association and Health Workforce Technical Assistance Center.</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Need targeted, evidence-based, investments in training (and retraining!), address maldistribution issues</td>
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</tr>
<tr>
<td><strong>Money</strong></td>
<td>Lead in innovation of payment policy to shape future workforce</td>
<td>Strategically use state appropriations and Medicaid dollars to shape workforce</td>
</tr>
</tbody>
</table>
Some burning health workforce issues

- Why can’t we get the numbers/models right?
- Medicare funding of GME and social accountability
- Scope of practice and payment for non-physician providers
- Workforce implications of new models of care
Questions?

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