UNDERSTANDING THE PIPELINE INTO PSYCHOLOGY

Steven Breckler
American Psychological Association
UNDERSTANDING THE PIPELINE INTO PSYCHOLOGY

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American Psychological Association
OBJECTIVES

• Predicting future employment trends

• Creating quality data for students, trainers, researchers and others

• Sharing data and communicating among stakeholders

• Assessing future demands and needs for internship training
STARTING POINT

APA Task Force on Workforce Analysis (2004)

• Focus at outset on health and human services sector

• Build on-going capacity for psychology workforce analysis

• Need for data
  • Too many gaps in data currently available
  • Lack of coherence and limited scope in national databases

• More information must be routinely collected and shared
• Commitment from APA
• Re-organization of staffing
• Allocation of new resources*
WHY?

• Producing supply appropriate for need and demand

• Knowing where to focus resources

• Allowing students to make informed decisions

• To make training responsive to needs of the future workforce
ECONOMICS 101

Labor Supply and Demand

Supply & Demand

Supply vs. Demand

APPIC Annual Meeting
April 2012
Workforce

Current Evidence Suggests the U.S. Is Headed Toward an Aggregate Shortage of Physicians

Given the extended time required to increase U.S. medical school capacity, and to educate and train physicians, the nation must begin now to increase medical school and GME capacity to meet the needs of the nation in 2016 and beyond.

In addition, a vigorous effort should be undertaken to determine, among other factors, how people use physicians' services over time, the impact of changes in the composition of the physician workforce, and how physician productivity changes over the course of a career. The AAMC Center for Workforce Studies was created to assist in this effort.

Eighth Annual Physician Workforce Research Conference

Registration is now open for the Eighth Annual Physician Workforce Research Conference, which will be held May 3-4, 2012 in Washington, D.C. The theme this year will be "Strengthening Our Health Workforce To Meet Population Need."

Visit the AAMC's Meetings page for more information.

Featured Data and Reports

2011 State Physician Workforce Data Book

This report examines current physician supply and retention, medical school and osteopathic school enrollment, and graduate medical education in the United States. This resource is an update to the 2009 edition and provides data breakdowns by each state.
HOW OTHER DISCIPLINES DO IT
HOW OTHER DISCIPLINES DO IT

2011 State Physician Workforce Data Book
Center for Workforce Studies
November 2011

Map 1. Total Active Physicians per 100,000 Population, 2010

- 176.0 to 209.0
- 209.1 to 233.0
- 233.1 to 256.0
- 256.1 to 294.0
- 294.1 to 873.0
HOW OTHER DISCIPLINES DO IT
HOW OTHER DISCIPLINES DO IT
HOW OTHER DISCIPLINES DO IT

The Future of the Nursing Workforce in the United States
Data, Trends, and Implications

Peter I. Buerhaus
Douglas O. Staiger
David I. Auerbach

Chart 1: National Supply and Demand Projections for FTE Registered Nurses: 2000 to 2020

Source: Bureau of Health Professions, RN Supply and Demand Projections
HOW OTHER DISCIPLINES DO IT

The Future of the Nursing Workforce in the United States
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Chart 8: Population Projections 65 to 84 and 85 and over: 2000 to 2050

SUPPLY AND DEMAND

Figure 2. Projected FTE Physicians, Most Plausible Scenario, 2006-2025

Figure 10-5  Actual and Forecast FTE RN Workforce Supply and Average Age, 1973–2025

Source: Authors’ forecast model based on Current Population Survey
LOOKING AHEAD
TUNED TO ENVIRONMENT
TUNED TO ENVIRONMENT

The demand for geriatricians will increase significantly over the coming decades.

High-Risk Elderly Population
- 1 out of 3 people aged 75+ have 3 or more chronic conditions.
- The number of patients with Alzheimer's Disease is projected to increase 27% by 2020 and 70% by 2030.
- High-risk patients who are seen by a geriatrics team are one-third less likely to lose functional ability compared to those who see their usual physician.

Sources:

Source: Data from U.S. Census Bureau, 2004, “U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin,” (http://www.census.gov/ipc/www/usinterimproj/)
TUNED TO ENVIRONMENT

The current supply of geriatricians is low and unlikely to grow, much less meet rising demand.

Current Supply of Geriatricians
- There are 12,575 active geriatricians (<2% of all active physicians).
- 37.6% are international medical graduates compared to 24.0% for all specialties.
- 39.7% are aged 55 or older compared to 37.6% for all specialties.
- 34.6% are female compared to 28.3% for all specialties.

Source: AMA Masterfile, January 2008
TUNED TO ENVIRONMENT

However, U.S. medical schools are placing increased emphasis on geriatrics training with positive results.

Medical Students’ Assessment of Instruction in Geriatrics
(Percent Strongly Agreed or Agreed)

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>I learned about the healthcare needs of older adults during my medical training</td>
<td>69.5%</td>
<td>64.8%</td>
</tr>
<tr>
<td>I am well prepared to care for older adult patients in acute settings</td>
<td>76.1%</td>
<td>74.5%</td>
</tr>
<tr>
<td>I am well prepared to care for older adult patients in ambulatory settings</td>
<td>81.1%</td>
<td>61.5%</td>
</tr>
<tr>
<td>I was exposed to geriatric care by the attending faculty of my medical program</td>
<td>49.5%</td>
<td>54.3%</td>
</tr>
<tr>
<td>Geriatrics/gerontology was part of all four years of my medical education</td>
<td>33.7%</td>
<td>46.1%</td>
</tr>
</tbody>
</table>

Source: Data from the 2001 and 2007 Medical School Graduation Questionnaires

Geriatric Faculty, Divisions, and Departments

- The number of full time geriatrics faculty has increased 12.0% from 1,193 in 2001 to 1,336 in 2007.
- There are currently 30 medical schools with one or more divisions of geriatrics and 8 with departments of geriatrics; whereas, in 1978 there were only 2 schools with divisions and 2 with departments.

Source: AAMC Faculty Roster
The Impact of Health Care Reform on the Future Supply and Demand for Physicians Updated Projections Through 2025
June 2010

Overview

Health care reform (the Patient Protection and Accountable Care Act--PPACA) signed into law in March 2010 is expected to make health insurance coverage available to more than 30 million previously uninsured Americans by 2014. It will also improve coverage and access to care for many others. Questions have been raised as to whether there will be a sufficient supply of physicians and other health professionals to serve the nation, especially in light of concerns that the nation was facing potentially significant shortages even before health care reform.

A 2008 AAMC report\(^1\) concluded that the nation was likely to face a significant shortage of physicians in the future under a variety of scenarios. While the report included a scenario of universal coverage, that scenario does not adequately reflect the final PPACA provisions. Therefore, in order to assess the potential impact of the PPACA on the expected shortage, the AAMC Center for Workforce Studies, working with The Lewin Group (who assisted AAMC on the development of the original projections) has updated the 2008 projections to reflect the actual PPACA provisions, and also incorporated more recent physician supply and utilization data and updated population projections. Based on these revisions, under our most plausible scenario, described below, we project an overall shortage of 91,500 and 130,800 active patient care physicians in 2020 and 2025 respectively, and a primary care shortage of 45,400 and 65,800 physicians in 2020 and 2025, as indicated in the table below.
HOW PSYCHOLOGY DOES IT

Number of Psychology Degrees Conferred by Level of Degree: 2007

- Doctorate: 5,163
- MA/MS: 21,037
- BA/BS: 30,039


Note: Doctorate degree includes PsyDs.
HOW PSYCHOLOGY DOES IT

Number of PhDs and PsyDs Awarded in Psychology

Source: APA Graduate Study in Psychology. Compiled by the APA Center for Workforce Studies, April 2009.
HOW PSYCHOLOGY DOES IT

Psychology PhDs Awarded by Degree Field: 1986-2006


Notes: Data for "Family Psychology" was not available for 1986. "Other" category includes the Other Psychology subfield, as well as all subfields related to the field of psychology (e.g., Human Factors). The use of NSF data does not imply NSF endorsement of the research, research methods, or conclusions contained in this report.
Debt Related to Graduate Education by Subfield for Recent Doctorates in Psychology: 2005

Clinical Subfields
- No Debt: 21%
- Debt: 79%

Research/Other Subfields
- No Debt: 48%
- Debt: 52%

Median: Clinical $80,000 vs. Research/Other $35,000
Mean: Clinical $82,428 vs. Research/Other $46,526
SD: Clinical $53,630 vs. Research/Other $39,496

Note: Includes PsyDs. Clinical includes clinical neuropsychology subfields
Primary Sources of Financial Support by Broad Subfield for Recent Doctorates in Psychology: 2005

Health Service Provider Fields

- Loans 36.2%
- Univ. RA/TA 25.9%
- Grants 2.7%
- Own Earnings/Family Support 30.0%
- Other 1.9%
- Not Specified 3.2%

Research/Other Fields

- Loans 11.4%
- Grants 11.8%
- Own Earnings/Family Support 21.6%
- Other 1.3%
- Not Specified 3.1%
- Univ. RA/TA 60.8%


Note: Includes PsyDs.
HOW PSYCHOLOGY DOES IT

Gender of Faculty in U.S. Graduate Departments of Psychology by Academic Year

Source: Faculty Salary Survey (Selected years). Compiled by the APA Center for Workforce Studies, April 2009.

Note: Includes PsyDs.
HOW PSYCHOLOGY DOES IT

Gender of Tenured Faculty in Psychology Graduate Departments: Selected Years

Source: APA Faculty Salaries in Graduate Departments of Psychology Survey, Selected Years. Compiled by the Center for Workforce Studies, April 2009.
Median Annual Full-time Salaries in Psychology By Degree Type: 2006

- BA/BS: $30
- MA/MS: $40
- PhD: $70


- Full professor* (N=1187)
- Associate professor* (N=752)
- Assistant professor* (N=791)
- Lecturer/Instructor* (N=69)
- Research position (N=487)
- Indiv. Priv. Practice (N=1029)
- VA medical center (N=235)
- Comm. mental health center (N=256)
- Admin of human svcs (N=688)
- Applied psych./I-O (N=312)


Note. Graph includes first quartile, median, and third quartile values. Includes PsyDs. * Faculty salaries are reported for a 9-10-month academic year. To calculate 11-12 month equivalent, multiply by 11/9.
HOW PSYCHOLOGY DOES IT

Unemployment Rates for Doctoral Level Social Scientists by Field: 2003 and 2006

Econ | Poli Sci | Psych | Soc | Other
--- | --- | --- | --- | ---
0 | 6 | 2 | 3 | 5
1 | 4 | 1 | 2 | 3
2 | 3 | 0 | 1 | 2
3 | 2 | 1 | 0 | 1
4 | 1 | 2 | 0 | 0
5 | 0 | 3 | 1 | 2
6 | 0 | 4 | 2 | 3

How Many Psychologists Are Needed? A Call for a National Psychology Human Resource Agenda

William N. Robiner
Health Psychology Clinic
University of Minnesota Hospital and Clinic

Rightsizing the Workforce of Psychologists in Health Care: Trends From Licensing Boards, Training Programs, and Managed Care

William N. Robiner
University of Minnesota Medical School
Donovan P. Crew
University of Minnesota

The mental health professions: Workforce supply and demand, issues, and challenges

William N. Robiner*
Health Psychology, Department of Medicine, University of Minnesota Medical School, Mayo Mail Code 395, 420 Delaware Street, Southeast, Minneapolis, MN 55455-0392, United States

How Many Psychological Practitioners Are Needed? It's Too Early to Know!

Gary R. VandenBos
American Psychological Association
Cynthia D. Belar
University of Florida

A National Human Resources Agenda for Psychology: The Need for a Broader Perspective

Georgine M. Pion
Vanderbilt University
### 2012 APPIC Match Statistics

**Combined Results: Phase I and Phase II**

March 26, 2012

This report provides statistics and information about the combined results for both phases of the 2012 APPIC Match.

Regarding the 4,435 students who registered for the Match:

- 2,363 (53%) matched to an accredited position
- 789 (18%) matched to a non-accredited position
- 1,283 (29%) did not match to a position (includes unmatched and withdrawn applicants)

### Applicants

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<tr>
<th>Participation - Combined Phase I/II</th>
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<tbody>
<tr>
<td>Applicants Registered in the Match</td>
<td>4,435</td>
</tr>
<tr>
<td>Applicants Who Withdraw or Did Not Submit Ranks</td>
<td>368</td>
</tr>
<tr>
<td>Applicants Participating in the Match</td>
<td>4,007</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Match Results - Combined Phase I/II</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Applicants Matched</td>
<td>3,152</td>
</tr>
<tr>
<td>(78%)</td>
<td></td>
</tr>
<tr>
<td>Participating Applicants Not Matched</td>
<td>915</td>
</tr>
<tr>
<td>(22%)</td>
<td></td>
</tr>
</tbody>
</table>
HOW PSYCHOLOGY DOES IT

APPIC Annual Meeting
April 2012
HOW PSYCHOLOGY DOES IT
TAKING STOCK

• Lots of demographics . . . few projections
• Inspired by medicine . . . but psychology is not medicine
• A diverse discipline . . . focusing on one subset at a time
UNDERSTANDING THE PIPELINE INTO PSYCHOLOGY

- No single entry or pathway
- Multitude of parallel and alternate routes
- Many entrances and exits along the way
- Road conditions vary
UNDERSTANDING THE PIPELINE INTO PSYCHOLOGY

- Decades of debate
- Some data collection
- Growing concerns and crises
DATA, DATA, DATA

• Too many gaps in data currently available
• Lack of coherence and limited scope in national databases
• More information must be routinely collected and shared
• Holders and stakeholders
  • Training programs
  • Gatekeepers (accreditors, licensing boards, professional boards, insurers)
  • Employers
• Culture of data collection and data sharing
• Allocation of new resources

• Taskforces

• Visiting scholars

• Data and resource acquisition
BUMPS IN THE ROAD

• Who is a psychologist?
• Who provides psychological services?
• Dealing with our own diversity
• Loose network of professional gatekeeping
• Poor quality of national/federal data
Using Workforce Analysis to Answer Questions Related to the Internship Imbalance and Career Pipeline in Professional Psychology

Ronald H. Rozensky
University of Florida

Catherine L. Grus, Cynthia D. Belar, Paul D. Nelson, and Jessica L. Kohout
American Psychological Association
CONNECTION TO INTERNSHIP TRAINING

Invitation for partnership
OBJECTIVES REVISITED

• Predicting future employment trends

• Creating quality data for students, trainers, and researchers

• Sharing data and communicating among stakeholders

• Assessing future demands and needs for internship training
UNDERSTANDING THE PIPELINE INTO PSYCHOLOGY

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