Framework to Evaluate Policies to Increase Primary Health Workforce Capacity

Brent D. Fulton, Ph.D., MBA
Assistant Research Economist
Nicholas C. Petris Center on Health Care Markets and Consumer Welfare
School of Public Health, University of California, Berkeley

Richard M. Scheffler, Ph.D.
Distinguished Professor of Health Economics and Public Policy
School of Public Health and Richard & Rhoda Goldman School of Public Policy
Director, Petris Center, School of Public Health
University of California, Berkeley

Timothy T. Brown, Ph.D.
Associate Director of Research and Training, Petris Center
Assistant Adjunct Professor of Health Economics, School of Public Health
University of California, Berkeley

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Nicholas C. Petris Center

- Formed in 1999 in the School of Public Health at UC Berkeley
- Focuses on doing research in health care markets and consumer welfare, particularly low-income populations
- Current research areas
  - Health reform
  - Health workforce
  - Health insurance markets and rate regulation
  - Social capital and health
  - Mental health
- WHO Collaborating Center on Health Workforce Economics Research (through our sister Global organization)
Sample of Petris Center Workforce Studies


• Brown TT, Liu, JX, Scheffler RM. Does the under- or overrepresentation of minority physicians across geographical areas affect the location decisions of minority physicians? *Health Services Research*. 2009 May 11 [Epub ahead of print].

Overview

• Expected primary care shortages under health reform
• Methods to estimate health workforce shortages
• Framework to evaluate policies to increase primary health workforce capacity
• Conclusions
Supply of Doctors in 20th Century to Present

1. Doctor shortage (1900–1965)
2. Doctor supply buildup (1965–1980s)
3. Doctor oversupply spurs competition
5. Doctor income drops
7. Redistribution of doctor supply
8. Managed care backlash and decline (2001–present)
9. Where are we headed?

Environment of Technological Change

Figure 1.3. The supply cycle of doctors

Health Reform Will Increase Demand for Primary Care in California

• Almost 7 million newly insured
  – 2 million newly eligible for Medi-Cal
  – 4.7 million eligible for Exchange
• Demand for health care services expected to increase approximately 70% among newly insured
• HRSA grants call for increase in primary care health workforce by 10%-25% over next ten years

Sources: Coffman (2010) and Hadley et al. (2008)
Primary approaches to estimate workforce requirements (summary)

• Needs-based
• Economic-based
Primary approaches to estimate workforce requirements

- Needs-based approach – estimate requirements based on epidemiological need and workforce productivity
  - Committee on the Costs of Medical Care (CCMC, 1933)
  - Graduate Medical Education National Advisory Committee (GMENAC), 1981 (adjusted needs to incorporate economic realities)
- Demand/utilization – extrapolates current utilization and adjusts for demographic/demand/income changes
  - Scheffler et al. (2011)
- Benchmarking – extrapolates certain standard of care to population (e.g., integrated workforce model such as HMO staffing)
- Trends – uses time series data (e.g., economic growth, population growth, and hours worked) to forecast requirements
  - Cooper et al. (2002)

Sources: Bureau of Health Professions (2008) and Scheffler (2008)
Sample of policy alternatives and strategies to increase the primary care health workforce

- **Short term**
  - Increase hours of trained workforce
  - Increase reimbursement in shortage areas
- **Medium term**
  - Increase productivity (e.g., accountable care organizations)
  - Change scope of practice laws
  - Reduce education/training requirements
  - Reform corporate practice of medicine law
  - Increase migration of workers into California
- **Long term**
  - Increase training slots
Sample of criteria to evaluate policy alternatives and strategies

• Workforce capacity
• Access/distribution
• Cost
• Quality/outcomes
• Timeliness
• Political feasibility
Framework to compare strategies and policy alternatives

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Strategies and Policy Alternatives</th>
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One Example

- 23,000 primary care physicians in California
- 16,000 nurse practitioners in California
- 14 states allow NPs to practice independently of a physician (plenary authority)
- California requires general supervision/delegation by a physician

Sources: Grumbach et al. (2009), California Association of Nurse Practitioners, American Academy of Nurse Practitioners
Illustrative simulation showing cost decreases for NP increases
(Results are illustrative, not actual. Simulation method based on Fulton & Scheffler, 2010.)

One nurse practitioner equals this number of doctors: 0.7

Graph: Nurse Practitioner:Doctor Ratio Increase vs. Reduction in Costs
Illustrative simulation showing costs decreases for an increase in NPs

(Results are illustrative, not actual. Simulation method based on Fulton & Scheffler, 2010.)

One nurse practitioner equals this number of doctors:

- 0.9
- 0.8
- 0.7
Conclusions

- Primary care health worker shortages are likely under health reform
- Policy options to address shortages need to be evaluated, based on selected criteria
- Criteria could include health workforce capacity, cost, access, quality/outcomes, timeliness, and political feasibility
Petris Center Health Workforce Publications

- **California and United States**
  - Brown TT, Liu, JX, Scheffler RM. Does the under- or overrepresentation of minority physicians across geographical areas affect the location decisions of minority physicians? *Health Services Research*. 2009 May 11 [Epub ahead of print].

- **Methodological/international**
Other Workforce Publications Cited

- Committee on the Costs of Medical Care (CCMC, 1933)
- Cooper RA, Getzen TE, McKee HJ, and Prakash L. Economic and demographic trends signal an impending physician shortage. *Health Affairs* 21(1); 2002: 140-153.
Questions