Shaping Health Workforce Policy through Data-Driven Analyses: The Sheps/NC AHEC Collaboration

Erin P. Fraher, Director
NC Health Professions Data System
Cecil G. Sheps Center for Health Services Research UNC-CH

Presentation to the National AHEC Organization Program Directors
Washington, D.C.
April 26, 2007
Presentation Overview

• The NC Health Professions Data System (HPDS)
  – Monitoring Health Workforce Trends
  – Informing Policy Debates

• Lessons Learned

• The Challenge: Defining AHEC role in context of declining funding and limited national capacity for workforce planning

• Moving Forward: Technical Assistance
North Carolina HPDS

• 30 year collaboration between Sheps Center, NC AHEC and the health professions licensing boards

• Annual licensure data provided *voluntarily* by the boards—there is no legislation that requires this and no appropriation

• ~30 years of continuous, complete data

• Data remain property of licensing board, permission sought for each “new” use

• System is independent of government or health care professionals

• Funding provided by: **NC AHEC Program Office**, data request fees, project cross-subsidies, and the UNC-CH Office of the Provost.
Categories of Health Professionals in Data System

- Physicians
- Physician Assistants
- Dentists
- Dental Hygienists
- Optometrists
- Pharmacists
- Physical Therapists
- Physical Therapist Assistants
- Registered Nurses
- Nurse Practitioners
- Certified Nurse Midwives
- Licensed Practical Nurses
- Chiropractors
- Podiatrists
- Psychologists
- Psychological Associates
- Occupational Therapists (2006)
- Occupational Therapy Assistants (2006)
Basic Data Items

Data elements that *usually* don’t change

- Name
- Date and place of birth
- Race/ethnicity
- Gender
- Basic professional degree (degree conferred, name and location of institution attended, practice qualifications)
- Unique identifier
Data Items Updated Annually

Data elements that change

- Home address
- Employment address
- Type of position
- Employment setting
- Clinical practice area
- Activity status (retired, active practice, not employed in profession)
- Average hours per week/employment status
- Highest degree
- New—Foreign language ability
Annual North Carolina Health Professions Data Book

-Annual Health Professions Data Book, produced since 1979, details state and county level health professions data; current issue: October 2005 data

-Data Book used by policymakers, educators, researchers, the media and health professionals as the official source of health professions statistics in NC
Monitoring Health Workforce Trends & Responding to Policy Makers

The HPDS Can *Help* Answer Questions Like:

- How many dentists are there in North Carolina? Where are they practicing?
- Are there too few psychiatrists in the state?
- Are we retaining health professionals trained in North Carolina?
- Will NC’s supply of physicians keep pace with expected population growth?
- Does the ethnic and racial distribution of health professionals match the population?
BUT it can’t answer some types of questions

- Are fewer physicians delivering babies because of malpractice issues?
- Are we facing a psychiatrist shortage because reimbursement rates are too low?
- Where should we put the new (dentistry, pharmacy, satellite medical) school?

- **Goal**: to provide data-driven, timely and objective analyses to inform the policy debate
Policy Issue: Dental access in rural NC

Key Findings:

• NC lags behind national supply

• Between 1996-2005, 33% of counties experienced decline in dentists per 10K pop, 26 of 33 were rural counties

• Aging dental workforce, especially in rural counties

• 87% of dentists are white

Policy Response: Pending

Legislature considering proposal for $87 million new dental school at ECU
The Supply and Distribution of Psychiatrists in North Carolina: Pressing Issues in the Context of Mental Health Reform

Policy Issue: State decentralizing mental health services—will there be an adequate supply of psychiatrists?

Key Findings:

- Overall supply adequate, distribution is a problem
- 44 counties qualify as mental health professional shortage areas
- Of 19 counties that qualify as primary care HPSAs, 11 have shortage of psychiatrists
- 43 counties have no child psychiatrists

Policy Response:

- Legislature gave $500,000 of one-time funding to AHEC to address maldistribution and increase NP & PA mental health training
**The State of Allied Health in NC**

**Policy Issue:** Making link between allied health workforce vacancies and economic development in rural NC

**Key Findings:**
- Between 1999-2005, overall employment in NC grew by 0.2% compared to 20.2% growth in health care jobs and 45.8% increase in allied health employment
- Allied health comprises 37% of all health care jobs
- 8 of top 10 fastest growing professions (across all employment sectors in are in allied health)

**Policy Response:** Pending
We have requested funding for continued monitoring of allied health workforce

---

May 2005
The Uncomfortable Truth: Lack of Diversity in Most Health Professions in North Carolina, 2005

The graph illustrates the lack of diversity in various health professions compared to the North Carolina population. The professions shown include MDs, PAs, NPs, RNs, LPNs, Dentists, and Pharmacists. The bars represent the percentage of each profession, with different colors indicating different ethnic groups: Other, AI/AN, Asian/PI, Hispanic, Black/NH, and White/NH. The NC Population bar is shown for comparison, highlighting the disparity between the professions and the general population.

The graph indicates a significant lack of diversity across all health professions in North Carolina in 2005.
NC AHEC, Sheps, NC IOM: The Primary Care and Specialty Physician Taskforce

- HPDS data revealed in 2003 that rate of growth of physicians/10K population slowed.
- At same time, supply of primary care physicians did not keep pace with population in many rural counties.
- With funding from Kate B. Reynolds, NC IOM convened taskforce to examine issue.
- Nurse practitioners, physician assistants and certified nurse midwives included.
The Primary Care and Specialty Physician Taskforce: Supply Projections

Key Findings:
- Despite rapid growth of NPs and PAs, NC provider supply will not keep pace with population
- NC IOM made 32 recommendations to the legislature to address supply, diversity and maldistribution
- Draft report available at http://www.nciom.org
- Final report currently in production: expected release May 2007

Projections courtesy of Mark Holmes, NC IOM
Lessons Learned

• Data driven workforce analyses necessary to:
  – Monitor longitudinal trends in supply and distribution—establish benchmarks. Are we worse or better off?
  – Identify emerging workforce issues
  – Challenge anecdotal evidence
  – Be perceived as objective in politically charged policy debates
  – Justify funding requests

• Tackle discrete policy-relevant and manageable size projects

• Disseminate results in short policy briefs with lots of pictures (maps are good…)

AHECs and Health Workforce Planning: The Future

• Workforce issues are not going away

• Federal workforce research funds have been cut and there are limited national data

• Responsibility falls on individuals states—most policy levers are at state-level

• AHECs well-positioned: congruent with mandate, multi-disciplinary, experienced pulling stakeholder groups together

• Focus for future: data-driven analyses to evaluate AHEC impact
Moving Forward: Technical Assistance

• We can provide technical assistance to AHECs as they develop data systems

• Already have had contact with Hawaii, Colorado, Massachusetts, South Carolina, Massachusetts, and others...

• We have developed materials to assist state-level efforts to build health workforce data systems

• Please visit our website

  www.shepscenter.unc.edu/hp