

Health Workforce Technical Assistance Center

State Health Workforce Data Collection: Opportunities and Challenges

February 12, 2014

Katie Gaul, with Erin Fraher

Program on Health Workforce Research and Policy

Cecil G. Sheps Center for Health Services Research, UNC-CH

www.healthworkforce.unc.edu

Where I'm Coming From

The North Carolina Health Professions Data System

<http://www.shepscenter.unc.edu/hp>

Mission: to provide timely, objective data and analysis to inform health workforce policy in North Carolina and the United States

Three main service lines:

1. Provide data and research
2. Conduct policy analyses
3. “Engaged scholarship” that serves state and nation

North Carolina HPDS

- A collaboration between the Sheps Center, NC AHEC and the health professions licensing boards
- Data are provided ***voluntarily*** by the boards—no legislation, no appropriation
- Over 30 years of continuous, complete licensure (***not survey***) data

North Carolina HPDS

- Data housed at Sheps but remain property of licensing board, permission sought for each “new” use
- System is independent of government or health care professionals
- Independence brings rigor and objectivity
- Funding provided by: NC AHEC Program Office, data request fees, project cross-subsidies, and the UNC-CH Office of the Provost.

Why do state-based workforce planning?

- States' role in ACA implementation – what are the implications for workforce?
- States vary from the national picture; there's local/regional variation
- Many policy levers are state-level (e.g., scope of practice)
- Decisions about whether to enact or change policies directed at training, recruiting, and retaining health professionals affect wide range of stakeholders, and are source of contentious debate

What's your state asking?

- Will we have enough of X professionals in the right specialties, employment settings and locations to meet future demand?
- Do we need a new school of pharmacy? Optometry?
- What's the distribution of CNMs, Ob/Gyns and FPs delivering babies?
- What is the age distribution of the current workforce?
- What is the current breakdown of ADN vs BSN nurses?

**But how do we know,
you might ask?**

Different Strokes for Different Folks

- States collect data in different ways. Some don't collect or analyze any data beyond what's needed for regulation of licensure.
- Organizational structure of licensure boards differs from state to state
 - Independent entities
 - State Government – separate boards or under one umbrella
- Capacity of states to collect and analyze data differs
 - Funding sources, collaboration, analytic capabilities, stakeholder support

Methods of Data Collection

- **Licensure process:** Collect data through the initial application and subsequent license renewal forms
- **Surveys:** Comprehensive or sample survey; tied to licensure process or separate
- **Continuous Monitoring:** Start with complete roster of licensees, survey practices/licensees semi-annually, track newspapers for hirings/deaths/retirements/etc.
- **All Payer Data:** Use all payer claims database to enumerate the workforce and describe practice characteristics

To Mandate or Not to Mandate...

- Some states require, by statute, the collection of health workforce data
 - Various degrees of flexibility in how data are collected
- Some states do not require data collection
 - Need good relationships and the right people to make it happen and keep things going
- Challenges to legislation
 - Appropriations
 - Ability to ask the right questions to collect the best data
 - Stakeholder consensus, ability to remain objective

What are the challenges to collecting and using data to inform policy?

Our work has identified some shared challenges:

- **Motivational** – Why do it? Convince policy-makers and funders that it's worth it to collect and analyze workforce data
- **Organizational** – How/where to set it up, what data to collect
- **Analytical** - How do you count/define/locate providers?
- **Financial** - Who pays? How do you sustain?

Motivational Challenges

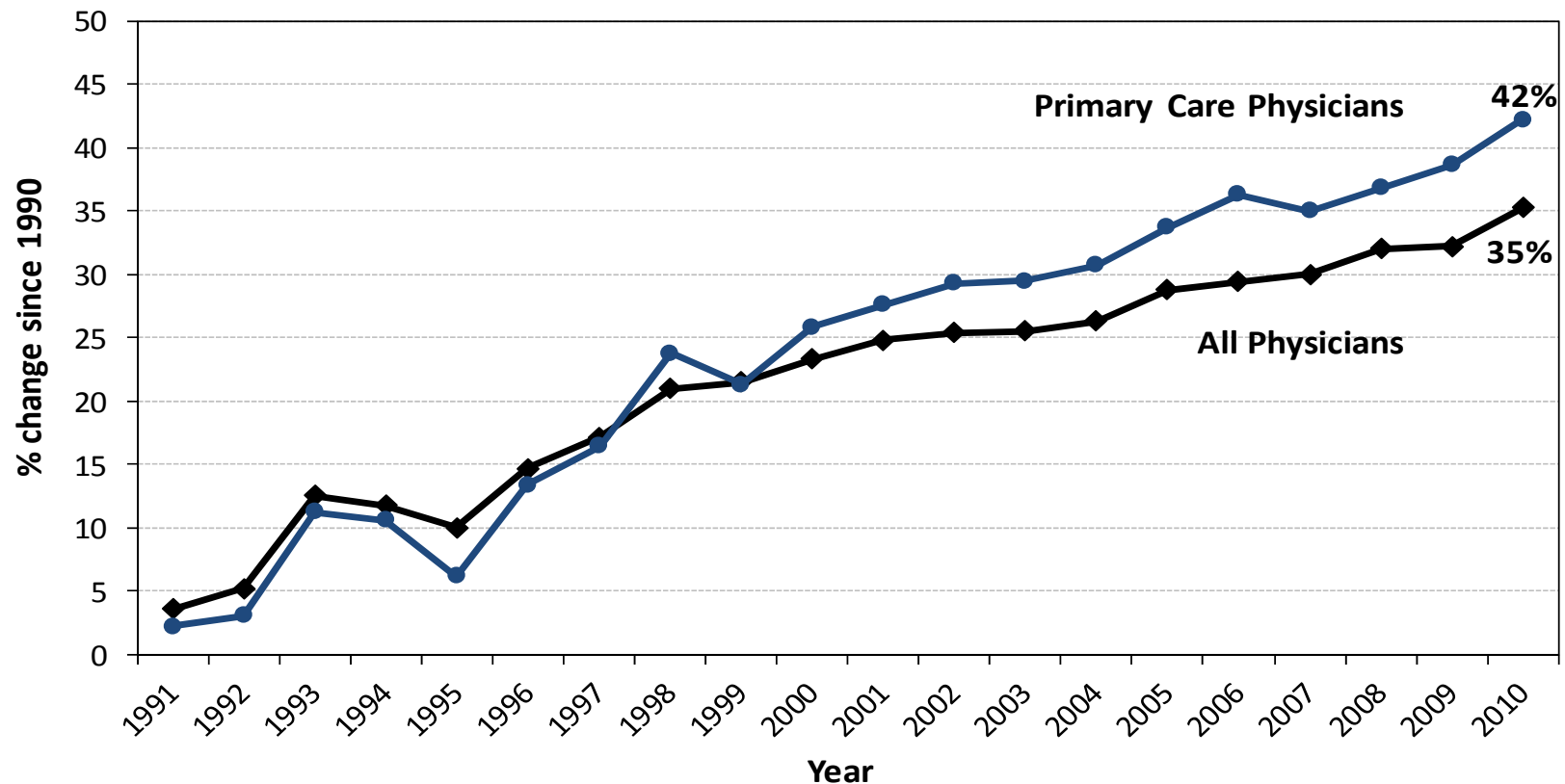
Lessons Learned: Need to convince 'em of value of data to day job

Data-driven workforce analyses necessary to:

- Monitor longitudinal trends in supply and distribution ...establish benchmarks. Are we worse or better off?
- Challenge anecdotal evidence
- Justify funding requests
- Evaluate success of existing programs
- Identify “uncomfortable truths”

Monitoring Trends: State Trends May Differ from National Ones

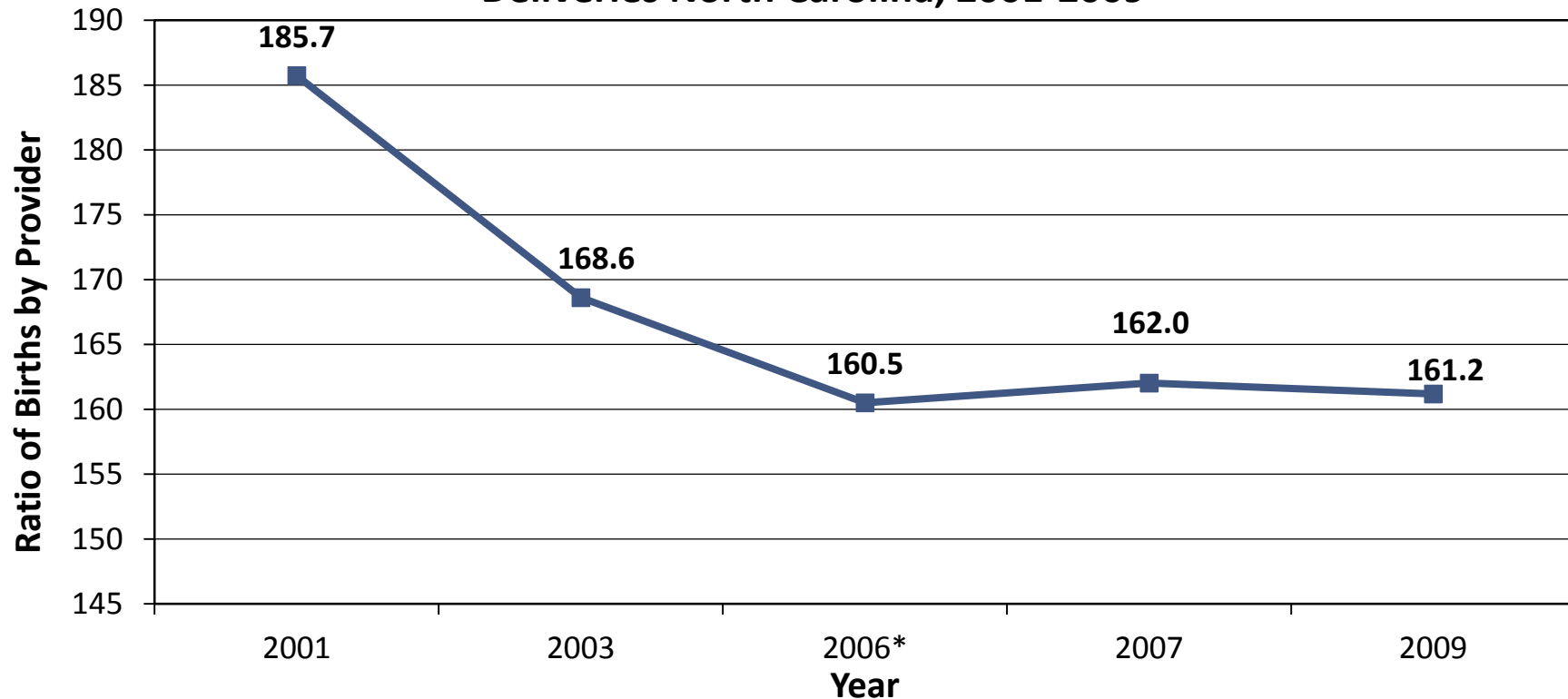
Percentage Growth Since 1990 of Physicians and Primary Care Physicians per 10,000 Population, North Carolina, 1991-2010



Sources: North Carolina Health Professions Data System with data derived from the North Carolina Medical Board, 1979 to 2010
North Carolina Office of State Planning. Figures include all licensed, active, in-state, non-federal, non-resident-in-training physicians.

Data Challenge Anecdotal Evidence

Annual Number of Births per OB/GYN Providing Obstetric Deliveries North Carolina, 2001-2009



*2005 data contained a large percentage of missing values, therefore 2006 data were used.

Source: NC Health Professions Data System with data derived from the North Carolina Medical Board. Data are for active, in-state, non-federal, non-resident-in-training physicians licensed by the NC Medical Board as of October of each year. Data are self-reported at time of initial licensure and subsequent renewal.

Justifying Funding Requests

- **Dental school:** HPDS data instrumental in decision to build new dental school in eastern part of state
- **Pharmacy school:** HPDS data “saved” the state an estimated \$80 million by showing NC had more than adequate supply of pharmacists
- **Medical school and GME expansion:** HPDS data used to identify geographic and specialty areas in short supply

Data Used for Evaluation: Medical Student Tracking

- 1993: NC legislature expressed concern over primary care shortage
- Required four medical schools to develop programs to increase percentage of primary care graduates
- Set goal for UNC and ECU at 60%
- Set goal for Duke and Wake Forest at 50%
- Required that the Board of Governors track progress and report regularly to General Assembly

North Carolina Medical Students: Retention of Graduates in Primary Care After Five Years

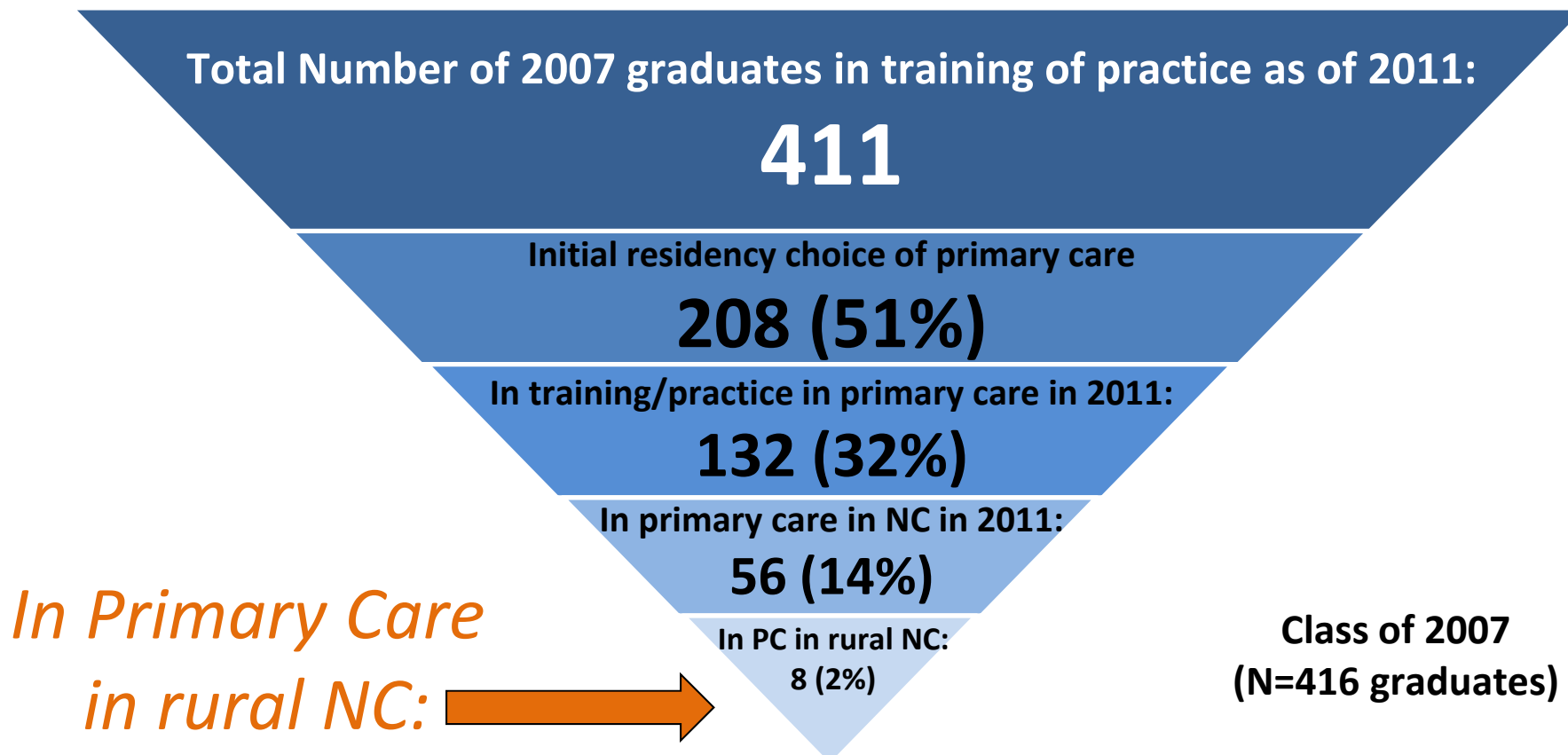
What is Class of 2007 Doing in 2012?

School	2007 Graduates	% in Primary Care (Anywhere in US)	% in Primary Care (in NC)
Duke	91	25%	7%
ECU	60	48%	28%
UNC-Chapel Hill	155	35%	16%
Wake Forest	105	25%	8%
Total	411	32%	14%

Source: North Carolina Health Professions Data System with data derived from the Duke Office of Medical Education, UNC-CH Office of Student Affairs, ECU Office of Medical Education, Wake Forest University SOM Office of Student Affairs, Association of American Medical Colleges, and the NC Medical Board, 2012.

North Carolina Medical Students: Retention of Graduates in PC in Rural NC After Five Years

NC Medical Students: Retention in Primary Care in NC's Rural Counties



Source: North Carolina Health Professions Data System with data derived from the Duke Office of Medical Education, UNC-CH Office of Student Affairs, ECU Office of Medical Education, Wake Forest University SOM Office of Student Affairs, Association of American Medical Colleges, and the NC Medical Board, 2012.

Organizational Challenges

Key Organizational Challenges

- Licensure body does not see data collection as their role
- Licensure body lacks staff able to undertake data collection
- Organization of licensure body: housed within government versus as independent entity?
- Do you legislate this?

Key Organizational Challenges

- Can highlight underlying turf issues between existing organizations
- Where are data housed?
- How to protect confidentiality?
Who can access data and for what purpose?
- How to protect data objectivity?
Data must be reliable and objective

Analytical Challenges

Analytic Challenges

Defining

- Active versus inactive practice
- Head count versus full-time equivalents

Locating

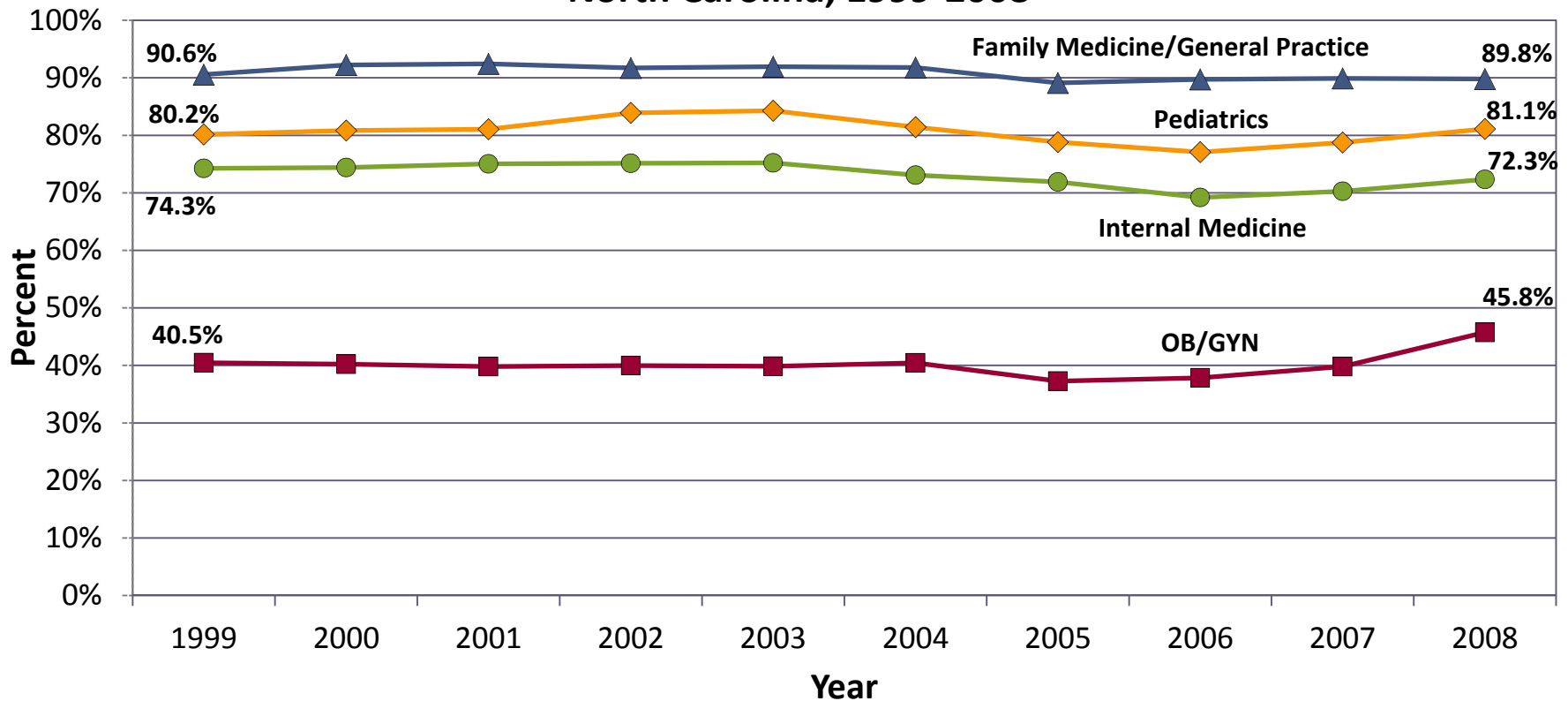
- Locating docs – they are a mobile group with multiple practice locations; practice vs. home address

Describing

- Self-reported specialty: who's in primary care anyway?

Who's in PC and how much primary care do they report providing?

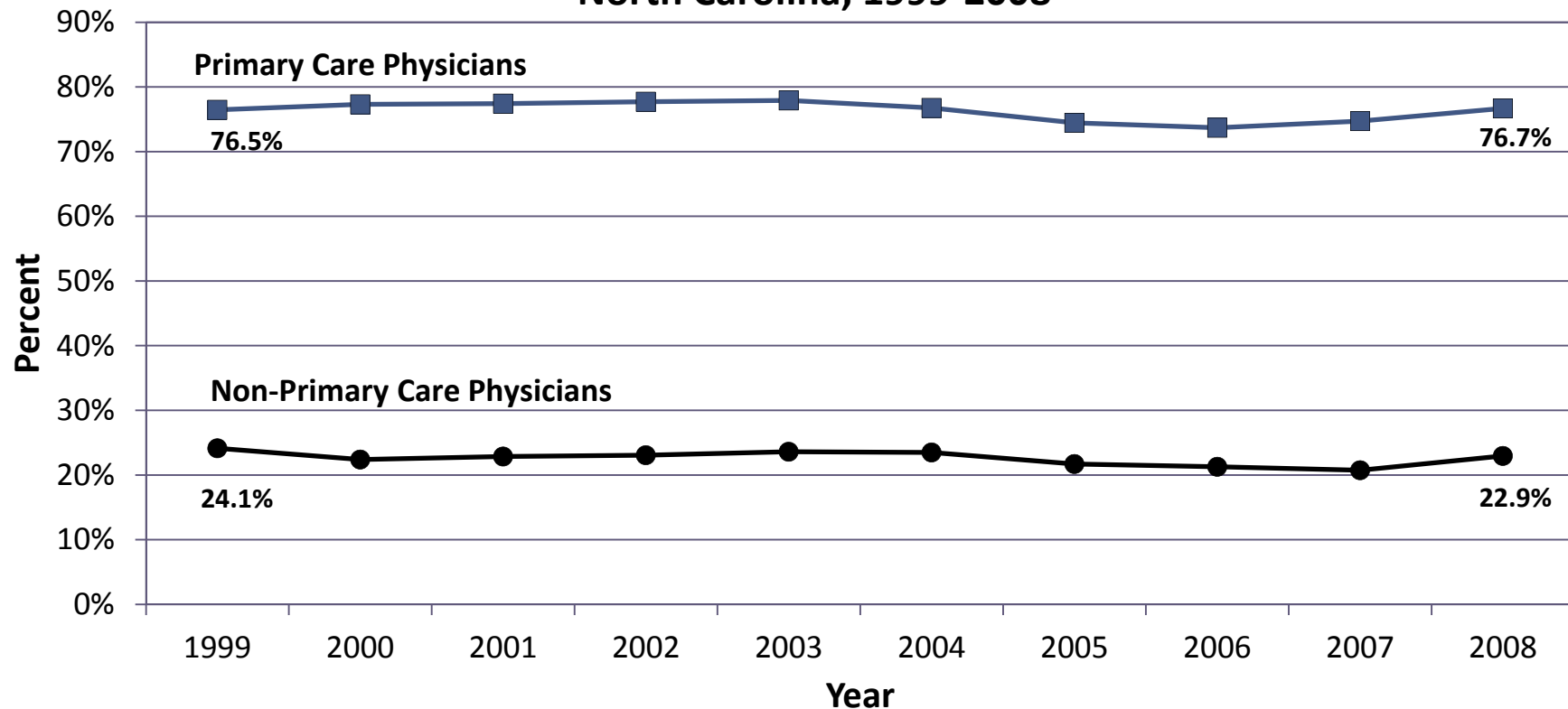
Percentage of Total Clinical Care Hours Spent in Primary Care
North Carolina, 1999-2008



Source: NC Health Professions Data System with data derived from the North Carolina Medical Board. Data are for active, in-state, non-federal, non-resident-in-training physicians licensed by the NC Medical Board as of October of each year. Data are self-reported at time of initial licensure and subsequent renewal.

But, specialists also provide primary care

**Percentage of Total Clinical Care Hours Spent in Primary Care
North Carolina, 1999-2008**



Source: NC Health Professions Data System with data derived from the North Carolina Medical Board. Data are for active, in-state, non-federal, non-resident-in-training physicians licensed by the NC Medical Board as of October of each year. Data are self-reported at time of initial licensure and subsequent renewal.

Let's not forget allied health

- Difficulty: Many allied health professions are not licensed
- Must rely on other data sources and methods for analysis
- Examples of work we've done, data we've used
 - Allied Health Job Vacancy Tracking Project – *job ads*
 - NC Hospital Workforce Trend Analysis – *hosp assoc data*
 - State of Allied Health Brief – *BLS, ESC*
 - State of Allied Health: A Focus on the Clinical Laboratory Sciences Workforce – *prof assoc data*

Financial Challenges

Funding: Where Do States Get Money to Support Increased Data Collection?

- Start up costs: separate, new and shiny entity versus embedding data collection in existing entity
- Cost of maintaining system to ensure longitudinal data
- Who bears the costs? The licensure body?
The tax-payer? AHEC? Private foundations?
Professional associations?
- Staffing: need data management, analytic, cartographic, policy analysis, writing, presentation skills, etc.

If I might make some suggestions...

Suggestions: Data Collection

Have a
clear idea who will:



Suggestions: Data collection



Have a clear idea what the policy questions are in the short-, medium- and long-terms. These can help guide your efforts, as well as help sell the idea of collecting data.

Find ideas and additional info at

<http://www.shepscenter.unc.edu/product/program-on-health-workforce-nursing-data-system-briefs-for-robert-wood-johnson-foundations-interdisciplinary-nursing-quality-research-initiative-inqri/>

Suggestions: Dissemination

- Remain objective
 - People must trust your data, so the data collectors, analysts and reporters must be objective. Let other individuals and organizations interpret the data for advocacy/other purposes.
 - *Repeat after me: “**THE DATA ARE THE DATA.**”*
- Know thy audience
 - Who are the key stakeholders?
- Write short, easy-to-read briefs and use lots of graphics
 - Some folks love maps. Some love tables. Some have trouble interpreting data. Make it easy for them.

Suggestions: Dissemination

Before you release your findings:

- Run a draft by select stakeholders.
Does it pass the sniff test?
- Give stakeholders a heads up
if the findings will affect them.

Who Uses Data & For What Purposes?

Government

- Policy Decisions
- Allocate funding
- Program planning
- Evaluation
- HPSA analysis
- Grant proposals

Workforce Policy

- Evaluation
- Program planning
- Policy analysis
- Regulatory questions
- Grant proposals
- Pipeline and diversity

Education, Research

- Planning for new schools
- Planning for new programs
- Pipeline and diversity
- Evaluation
- Research projects
- Grant proposals

Funders

- Program planning
- Allocate funding
- Evaluation

National Organizations

- National policy
- Evaluation
- Dissemination
- Improve data quality

Professional Associations

- Advocacy, Membership
- Policy analysis
- Program planning
- Grant proposals

Other

News stories; class projects; locational analysis; loan repayment; court cases; advertise seminars

And finally, from a selfish standpoint..

- We're very interested in knowing what you're doing in your state. Are there other barriers/issues you face?
- Are you looking for more information? Contact us to see how we can help. We're happy to chat.

Questions?

Katie Gaul

k_gaul@unc.edu

(919) 966-6529

Program on Health Workforce Research & Policy

<http://www.healthworkforce.unc.edu>

North Carolina Health Professions Data System

<http://www.shepscenter.unc.edu/hp>

Health Workforce Technical Assistance Center

www.HealthWorkforceTA.org