Residency Training in North Carolina: Needs for the Future, Opportunities for Expansion

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December 16, 2013

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In case your office calls, here are the presentation Cliff Notes

- Need to shift GME focus from "simple" discussion of increasing overall supply to GME as policy lever to address maldistribution by geography, specialty and institution
- Little accountability exists for public funds spent on residency training
- Need to create governance board to oversee funding for residency expansion. Will increase transparency, accountability and ensure expansions address population's health needs

Graduate Medical Education is a hot topic nationally and in North Carolina

- Concern about emerging physician shortage
- North Carolina expanded medical school enrollment
  - UNC expanded from 160 to 180 positions with regional placements in Charlotte and Asheville for 3rd and 4th year students
  - ECU expanded from 73 to 80 students
  - Campbell admitted first class of 150 students in September 2013
- These expansions not likely to improve workforce supply and distribution in the state

Why not?

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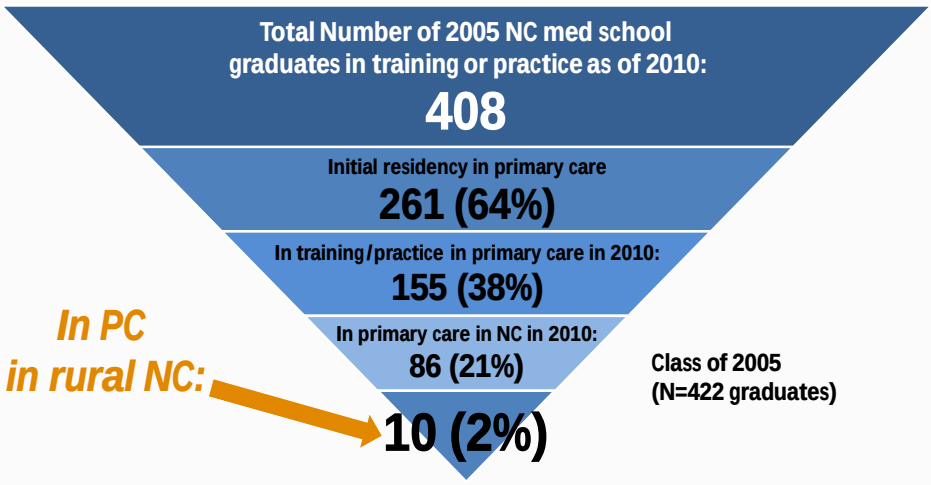
Because most students leave NC and don't practice in needed specialties and geographies

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



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, 2011.

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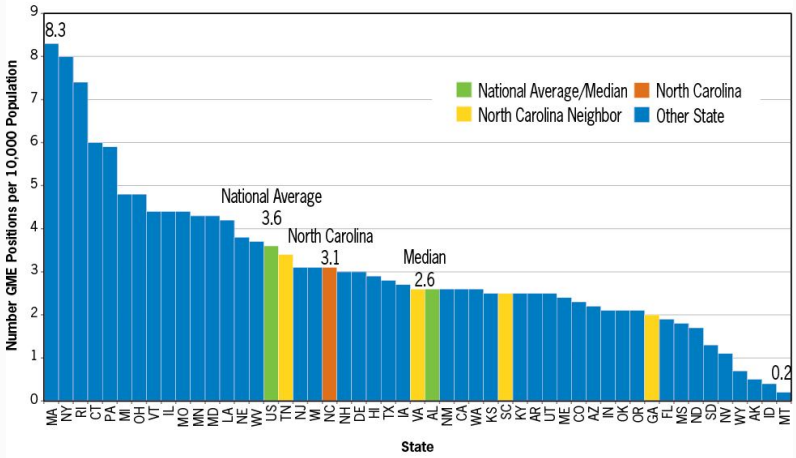
With 3.1 residents per 10,000 population, North Carolina lags behind US

Figure 1. Average number of GME positions by state per 10,000 population, 2011



Source: Brotherton, SE, Etzel SI. (2011). Graduate Medical Education, 2010-2011, JAMA 306(9), 1015-1030.

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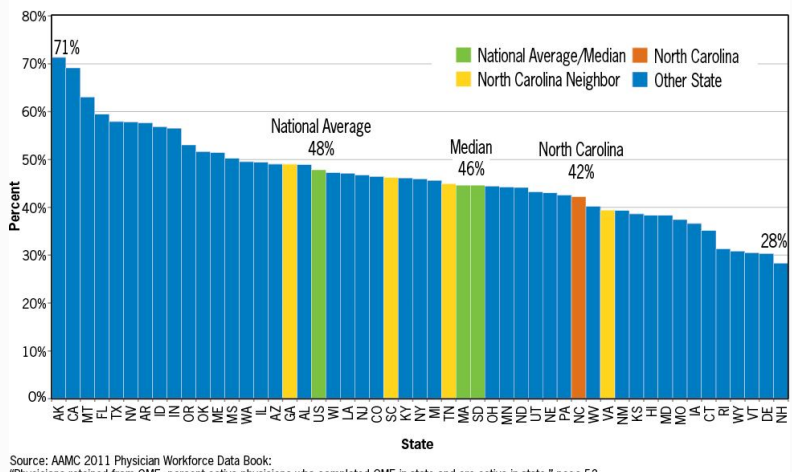
And North Carolina retains fewer residents after completing training

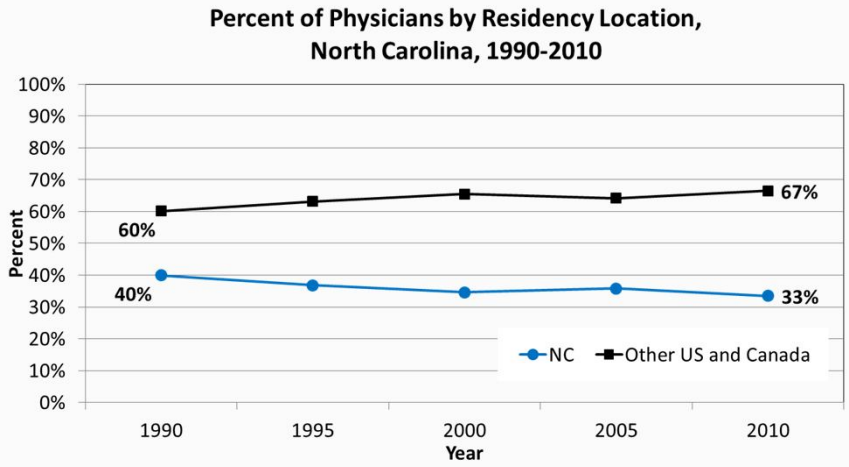
Figure 3. Percent of physicians retained in state after residency, 2010



Source: AAMC 2011 Physician Workforce Data Book:
"Physicians retained from GME, percent active physicians who completed GME in-state and are active in-state," page 52.

Source: AAMC Center for Workforce Studies 2011 State Physician Workforce Data Book

Result: North Carolina increasingly reliant on importing physicians trained outside state



Data exclude physicians missing residency location (N=314 to 753) and those indicating a foreign residency (N=40 to 156). Source: NC Health Professions Data System, Cecil G. Sheps Center for Health Services Research, UNC Chapel Hill, with data derived from the NC Medical Board, 2012.

Completing an AHEC residency increases in-state retention

- **46% of physicians who complete an NC AHEC residency stay in North Carolina to practice**

compared to

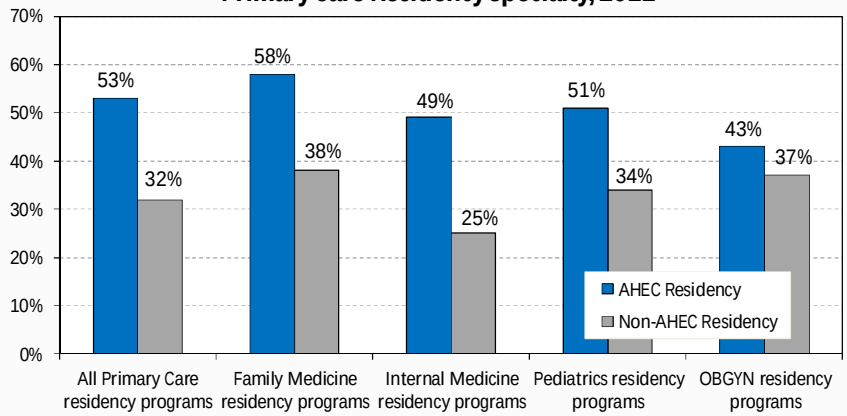
- **31% of physicians who complete a non-AHEC residency stay in North Carolina to practice**

AHEC **Non-AHEC**

Source: NC Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the American Medical Association Masterfile, 2011. "Active" includes federal, as well as non-patient care activities such as teaching, research, administration, etc.

AHEC residents more likely to stay in NC and choose primary care

Former North Carolina Residents Practicing in NC by Primary Care Residency Specialty, 2011



Source: NC Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the American Medical Association Masterfile, 2011. "Active" includes federal, as well as non-patient care activities such as teaching, research, administration, etc.

AHEC-trained residents more likely to practice in rural areas

NC AHEC Residents: Metropolitan vs. Non-Metropolitan Practice Location, 2011

Specialty	Residency Type	Practicing in NC, 2011	
		% in Metro Area	% in Nonmetro Area
ALL	AHEC	85%	15%
	Non-AHEC	88%	12%
Primary Care	AHEC	85%	15%
	Non-AHEC	85%	15%
General Surgery	AHEC	70%	**30%**
	Non-AHEC	81%	**19%**

- Of the active and practicing physicians who completed a NC AHEC residency, 1,491 (46%) are practicing in NC and 1,739 (54%) are practicing outside of NC.
- Of the active and practicing physicians who completed a NC Non-AHEC residency, 6,092 (31%) are practicing in NC and 13,639 (69%) are practicing outside of NC.

Note: Primary Care includes the following specialties: Family Medicine, Internal Medicine, Obstetrics and Gynecology, and Pediatrics.

Source: NC Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the American Medical Association Masterfile, 2011. "Active" includes federal, as well as non-patient care activities such as teaching, research, administration, etc.

Sources of GME funding, North Carolina

- Biggest barrier to residency expansion in NC is cost, estimated at ~$143,000 per resident, per year.
- Residency costs covered from four sources of revenue:
  - Medicare payments to teaching hospitals (dominant source)
  - Medicaid GME payments to teaching hospitals
    - *North Carolina ranks 5th highest in the country at $115 million*
  - Clinical income
  - State appropriation to AHEC ~$32 million

Looking beyond North Carolina

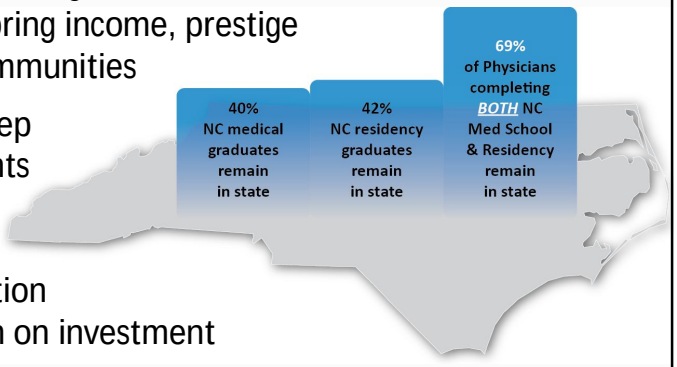
- Much of GME debate has been at national level, but most action at state level
- States are "policy laboratories" to study GME innovation
- Sheps Center conducted study of GME activities in 17 states, 45 participants, 2-4 interviews/state
- Structured interviews on data, financing, governance and accountability

Lesson #1:
Use Workforce Data to Shape GME Policy

- Most states did not have robust data systems to monitor workforce needs
- But even when they did, evidence generally wasn't used to shape GME policy (NC, FL, TX)
- Health system undergoing rapid change—need *dynamic, state-specific* monitoring systems
- Data need to be used to determine specialties, geographies and institutions in which to expand GME
- Data can also be used to increase accountability and drive decisions about where to direct funding increases

Lesson #2:
Best way to recoup investments in medical school expansion is to invest in GME to keep physicians instate

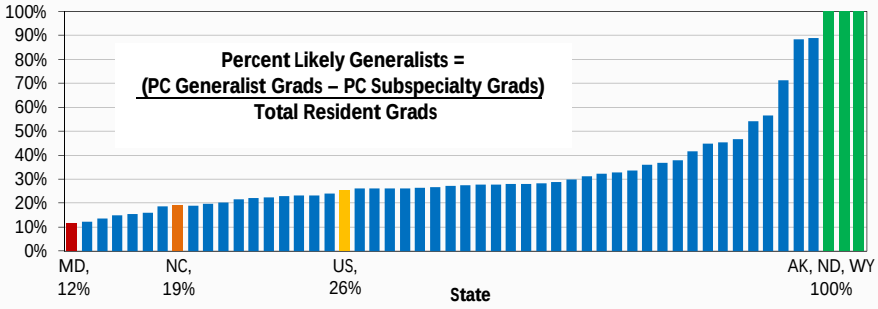
- Many states opening new med schools because they bring income, prestige and jobs to communities
- But need to keep medical students instate for residency to increase retention rate and return on investment



Lesson #3:
Relative to other states, North Carolina residents less likely to remain generalists

Pouring more generalists in front end will not produce more generalists out back end without better targeting expansions toward programs producing generalist and rural physicians

Percent of 2011 GME graduates likely to be generalists



Source: Data derived from Sarah Brotherton, AMA, with data derived from the AMA Masterfile.

Lesson #4:
Accountability is critical but hard to implement

- Nation spends $13 billion annually on GME; virtually no accountability for these funds*
- Teaching hospitals drive GME training decisions, even with public funds
- Teaching hospitals focus on GME expansion for service lines and will resist accountability until tied to funding
- No states in our sample tracked accountability of public funds. Few states have data or analytic capacity

*Sources: Rand, MedPAC, AAFP-Graham Center, numerous pundits

Lesson #5:
Medicaid underutilized as tool to shape GME Policy

- Medicaid treated in same "hands-off" way as Medicare funding
- Medicaid GME funding buried in hospital payments, not easy to track. Creates "Medicaid Soup" that even GME experts find confusing
- Massachusetts example – efforts to increase accountability of Medicaid dollars met with resistance

Lesson #5:
More funding is not the answer

- All-payer systems appealing to increase GME funds
- But Maryland has all payer system with no accountability. Result: funding does little to address imbalances by specialty, geographic and setting

Need to implement pay-for-performance type measures that reward residency programs that produce physicians that meet state's health needs

Lesson #6:
GME governance structures needed but lacking

- Some states have GME governance boards that:
  - use data to identify state's physician workforce needs
  - discuss (coordinate?) individual institution expansion plans
  - target GME expansion toward institutions producing physicians in needed specialties and geographies

There is precedent (and interest!) among stakeholders in a governance board

North Carolina's Former GME Taskforce

- **Composition**
  - Appointed by former UNC President Erskine Bowles
  - Representatives from private and public academic health centers and AHEC
  - Met over 8 months beginning in April 2008
- **Charge**
  - Identified areas of greatest need for residency growth
  - Benchmarked NC supply of various specialties against national averages

Taskforce proposed a GME Board: Recommendations (1)

- Establish Graduate Medical Education Board reporting to Secretary of Health and Human Services
- Board's primary task: identify GME strategies to meet population healthcare needs
- Board developed to allocate ***new*** state funds for GME positions, no role in allocating ***existing*** federal or self-funded sources
- Proposed pilot program of 12 new residency training slots/year targeted to "high priority" areas of family medicine, general surgery and psychiatry

Proposed GME Board: Recommendations (2)

- Recommended state appropriation of $100,000 per new residency position
- Money to flow through AHEC to GME Board
- Board would decide how to allocate among specialties and geographies
- $2 million in funding for recruitment and retention program, through the Office of Rural Health to improve retention of residency grads in state

Time to revive that proposal?

North Carolina should develop "model" legislation that calls for:

1. Developing routine and dynamic workforce monitoring systems, not static "lists" of specialties
2. Creating a GME governance and coordinating body
3. Targeting population health needs with any new GME funds
4. Requiring accountability metrics to track outcomes of public investments
5. Developing policies aimed across physician's career pathway

Questions?

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