Physicians in North Carolina: Sufficiency, Shortage or “Stress”

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The Current Policy Context

- **Demand side**: aging population, increase in chronic disease, insurance expansions, rising patient expectations

- **Supply Side**: health workforce overall is growing, professions operate in silos, turf wars abound, and productivity is lagging

  With, or without health reform, cost and quality pressures will change the physician workforce
Questions

• Can we trust the numbers?
  – **YES**, North Carolina has the most accurate and trustworthy inventory of physician data

• What is a shortage of physicians?
  – Economic: When the prices of service rises because there is less of it available
  – Clinical: When people cannot get needed care because there aren’t enough doctors

• How can we know a shortage exists?
  – Sick people get sicker? People take more time to get to a doctor?
The State of the State: Let’s Drown (or Swim) in a lot of Data
NC Lags US in Physicians per Population

US 23 per 10,000
NC 22 per 10,000
NC Doctor Supply has grown faster than NC Population

Population Growth Rate

Physician Growth Rate

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011
## Doctor Supply is Dynamic: 2002-2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Supply</th>
<th>New Actives</th>
<th>Left File</th>
<th>Total</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>16,734</td>
<td>1,568</td>
<td>1,212</td>
<td>17,090</td>
<td>356</td>
</tr>
<tr>
<td>2003</td>
<td>17,090</td>
<td>1,430</td>
<td>1,171</td>
<td>17,349</td>
<td>259</td>
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<tr>
<td>2004</td>
<td>17,349</td>
<td>1,550</td>
<td>1,004</td>
<td>17,895</td>
<td>546</td>
</tr>
<tr>
<td>2005</td>
<td>17,895</td>
<td>1,951</td>
<td>1,450</td>
<td>18,396</td>
<td>501</td>
</tr>
<tr>
<td>2006</td>
<td>18,396</td>
<td>1,659</td>
<td>1,142</td>
<td>18,913</td>
<td>533</td>
</tr>
<tr>
<td>2007</td>
<td>18,913</td>
<td>1,822</td>
<td>1,193</td>
<td>19,542</td>
<td>629</td>
</tr>
<tr>
<td>2008</td>
<td>19,542</td>
<td>1,808</td>
<td>1,449</td>
<td>19,901</td>
<td>359</td>
</tr>
</tbody>
</table>

Source: North Carolina Health Professions Data System, with data derived from the North Carolina Medical Board, 2002-2009. Prepared 6/16/2010. Counts include active, instate, non-federal physicians. Note: Newly licensed physicians are those who are new to file with a license date in the current or previous year. New Active physicians are those who were licensed in NC in an earlier year but were either inactive or active out of state in the previous year.
Doctor Supply is Older Males and Younger Females

Figures include active, instate, nonfederal, non-resident-in-training physicians licensed in North Carolina as of October 31, 2009.

Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the North Carolina Medical Board, 2009.
NC Bucks National Trend: More Rapid Increase in Primary Care Physicians

Percentage Growth Since 1990 of Physicians and Primary Care Physicians per 10,000 Population, North Carolina, 1991-2009

Sources: North Carolina Health Professions Data System with data derived from the North Carolina Medical Board, 1979 to 2009; North Carolina Office of State Planning. Figures include all licensed, active, instate, non-federal, non-resident-in-training physicians.
And Despite Overall Growth, Persistent Maldistribution

Sources: North Carolina Health Professions Data System, 1979 to 2010; HRSA, Bureau of Health Professions; Area Resource File; US Census Bureau; North Carolina Office of State Planning. Figures include all licensed, active, instate, non-federal, non-resident-in-training physicians.
Primary Care Health Professional Shortage Areas (HPSAs)
North Carolina, 2012

HPSA Status, 2012
(# of Counties)

- Not a HPSA (55)
- Special Population or Part County HPSA (35)
- Single County HPSA (10)

Source: Bureau of Health Professions, Shortage Designation Branch, HRSA, August 2012.
Produced by the North Carolina Rural Health Research and Policy Analysis Center, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.
WHERE DO DOCTORS IN NORTH CAROLINA COME FROM?
Total Enrollment and Residency Status of First Year Students North Carolina and Neighboring States’ Medical Schools, 2010-2011

- Wake Forest: 483
- ETSU: 483
- UNC-CH: 650
- Duke: 419
- ECU: 309
- Campbell: 600*

School of Osteopathy

No State Residency Status Available


Produced by the North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.
Post Graduate Residency Programs: AKA “Teaching Hospitals”

• 10 programs in North Carolina. 2,681 residents in training
  – UNC Hospitals 714
  – Duke Hospitals 709
  – Wake Forest Baptist 506
  – ECU Pitt County 294
  – Charlotte AHEC 254
  – Other AHECs 204

• Nationally 8,750 programs with 109,000 Trainees
North Carolina’s Physicians Come from Outside the State

Medical School Location of Primary Care Physicians Practicing in North Carolina, 1990-2010

<table>
<thead>
<tr>
<th>Year</th>
<th>North Carolina</th>
<th>Other US and Canada</th>
<th>International Medical Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>36.2%</td>
<td>57.2%</td>
<td>6.6%</td>
</tr>
<tr>
<td>1995</td>
<td>27.7%</td>
<td>55.7%</td>
<td>6.6%</td>
</tr>
<tr>
<td>2000</td>
<td>19.8%</td>
<td>55.7%</td>
<td>16.7%</td>
</tr>
<tr>
<td>2005</td>
<td>20.1%</td>
<td>55.7%</td>
<td>17.4%</td>
</tr>
<tr>
<td>2010</td>
<td>16.7%</td>
<td>55.7%</td>
<td>17.8%</td>
</tr>
</tbody>
</table>

Sources: North Carolina Health Professions Data System with data derived from the North Carolina Medical Board, 1990 to 2010; Figures include all licensed, active, instate, non-federal, non-resident-in-training physicians.
Distribution of Active Primary Care Physicians Who Graduated from a North Carolina Residency Program AHEC and Academic Medical Center Programs, North Carolina, 2006

Metropolitan Status
(# of Counties)
- Nonmetropolitan (60)
- Metropolitan (40)

Legend
(# of Physicians)
- 1 Dot = 1 AHEC Active Primary Care Physician (938)
- 1 Dot = 1 Academic Medical Center Active Primary Care Physician (2,027)

Produced by: North Carolina Health Professions Data System; Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.
Source: NC Health Professions Data System; NC Area Health Education Centers Program, 2006; US Census Bureau, 2007.
Data are for active, in-state, non-federal, non-resident-in-training physicians indicating primary care specialties of FP, GP, IM, Ob/Gyn or Pediatrics, who were licensed as of October 2006 with residency graduation dates from 1972 and later. Internship data were used if residency data were missing.
*Note: Core Based Statistical Areas are current as of the December 2006 update. Nonmetropolitan counties include micropolitan and counties outside of CBSAs.
Percent of All Active Physicians* in 2010 who Graduated from a School of Medicine in North Carolina

Total North Carolina Graduates: 5,221
Total Physicians: 20,752

Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the North Carolina Medical Board, 2010.

*Counts include active, instate, nonfederal, non-resident-in-training MDs and DOs currently practicing in North Carolina who graduated from ECU, Duke, UNC-CH or Wake Forest University Schools of Medicine. Graduates from schools outside of North Carolina are counted as "other."
Percent of All Active Primary Care Physicians* in 2010 who Graduated from a School of Medicine in North Carolina

Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the North Carolina Medical Board, 2010.

*Counts include active, instate, nonfederal, non-resident-in-training MDs and DOs currently practicing in North Carolina who graduated from ECU, Duke, UNC-CH or Wake Forest University Schools of Medicine. Graduates from schools outside of North Carolina are counted as "other." Primary care physicians include physicians indicating a primary specialty of family practice, general practice, internal medicine, ob-gyn or pediatrics.
Percent of Pharmacists by School

1,100
550
110
UNC
Campbell
Wingate
Outside of NC

Source: North Carolina Health Professions Data System, with data derived from the North Carolina Board of Pharmacy, 2008.

Produced by: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Size of circle represents total number of active pharmacists in the county.
Size of slices indicates percent of those pharmacists by school.

a School of Pharmacy in North Carolina

Percent of Active Pharmacists in 2008 Graduating from

Mountain AHEC
Southeast AHEC
Western AHEC
Charlotte AHEC
Southern Regional AHEC
Southeast AHEC
Eastern AHEC
Greensboro AHEC
Wake AHEC
Area L AHEC
NC’s Trade Surplus/Deficit: Medical Students

Blue: Import more than we export
Orange: Export more than we import

Net Import/Export
Net importer of med grads from 30 states & DC
Net exporter of med grads to 18 states

NC imports 6,939 more medical students than it exports

Data Source: AMA 2009 Physician Masterfile.
Notes: Includes only clinically active, non-federal, non-resident in training, non-locum tenens physicians. One physician practicing in North Carolina was missing medical school state.
Produced by: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.
NC’s Trade Surplus/Deficit: Resident Physicians

Blue: Import more than we export
Orange: Export more than we import

Net Import/Export
Net exporter of residents to 25 states

Net importer of residents from 23 states & DC

Up to 1,145 Gained
0 - No Gain/Loss
Up to 160 Lost

Data Source: AMA 2009 Physician Masterfile.
Notes: Includes only clinically active, non-federal, non-resident in training, non-locum tenens physicians.
Three physicians were missing practice state; 570 physicians practicing in North Carolina were missing residency state.
Produced by: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.
Contribution of NC Medical Schools to NC Supply

North Carolina Medical School for Primary Care Physicians Practicing in North Carolina, 1990-2010

How will this look when Campbell starts graduating 150 students per year?

Sources: North Carolina Health Professions Data System with data derived from the North Carolina Medical Board, 1990 to 2010; Figures include all licensed, active, instate, non-federal, non-resident-in-training physicians.
Graduate Training by Med School Affiliated Hospitals

Class of 2011: Distribution of NC Medical Student Residencies

- Psychiatry: 5%, 35%, 57%, 6%
- General Surgery: 5%, 6%, 9%, 28%
- Other: 1%, 4%, 4%, 9%
- Primary Care: 44%, 49%, 57%, 57%

Prepared by the North Carolina Health Professions Data System and the North Carolina AHEC Program.

Source: 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.
Why Do We Care Where Physicians Trained?

Because it affects specialty choice, practice location and workforce diversity
## NC Medical Students: Retention of Graduates in Primary Care After Five Years

<table>
<thead>
<tr>
<th>School</th>
<th>2005 Graduates</th>
<th>% Initially Selecting PC Specialty</th>
<th>2010: % in Primary Care (Anywhere in US)</th>
<th>2010: % in Primary Care (in NC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duke</td>
<td>78</td>
<td>60%</td>
<td>23%</td>
<td>8%</td>
</tr>
<tr>
<td>ECU</td>
<td>73</td>
<td>82%</td>
<td>59%</td>
<td>41%</td>
</tr>
<tr>
<td>UNC</td>
<td>152</td>
<td>60%</td>
<td>38%</td>
<td>21%</td>
</tr>
<tr>
<td>Wake Forest</td>
<td>105</td>
<td>60%</td>
<td>37%</td>
<td>17%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>408</strong></td>
<td><strong>64%</strong></td>
<td><strong>38%</strong></td>
<td><strong>21%</strong></td>
</tr>
</tbody>
</table>

Prepared by the North Carolina Health Professions Data System and the North Carolina AHEC Program.

Source: 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.
Retention in North Carolina of Class of 2005 in 2010: Primary Care

**Total Number of 2005 NC med school graduates in training or practice as of 2010:**

- **408**

**Initial residency in primary care:**

- **261 (64%)**

**In training/practice in primary care in 2010:**

- **155 (38%)**

**In primary care in NC in 2010:**

- **86 (21%)**

**In PC in rural NC:**

- **10 (2%)**

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.
Declining Interest in and “Leakage” from Primary Care Over Time

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.
And Where Physician Completed a Residency Even More Important Predictor of Retention in NC

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.

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

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Residency Type</th>
<th>Practicing in NC, 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>% in Metro Area</td>
</tr>
<tr>
<td>ALL</td>
<td>AHEC</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td>Non-AHEC</td>
<td>88%</td>
</tr>
<tr>
<td>Primary Care</td>
<td>AHEC</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td>Non-AHEC</td>
<td>85%</td>
</tr>
<tr>
<td>General Surg</td>
<td>AHEC</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>Non-AHEC</td>
<td>81%</td>
</tr>
</tbody>
</table>

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.
And More Likely to Choose Primary Care

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

- All Primary Care residency programs: 53% (AHEC Residency), 32% (Non-AHEC Residency)
- Family Medicine residency programs: 58% (AHEC Residency), 38% (Non-AHEC Residency)
- Internal Medicine residency programs: 49% (AHEC Residency), 25% (Non-AHEC Residency)
- Pediatrics residency programs: 51% (AHEC Residency), 34% (Non-AHEC Residency)
- OB/GYN residency programs: 43% (AHEC Residency), 37% (Non-AHEC Residency)

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.
But Who Counts as “Primary Care”?
Who does Primary Care?

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

- Family Medicine/General Practice: 90.6% in 1999, 89.8% in 2008
- Pediatrics: 80.2% in 1999, 81.1% in 2008
- Internal Medicine: 74.3% in 1999, 72.3% in 2008
- OB/GYN: 40.5% in 1999, 45.8% in 2007

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

- **Primary Care Physicians**
  - 1999: 76.5%
  - 2008: 76.7%

- **Non-Primary Care Physicians**
  - 1999: 24.1%
  - 2008: 22.9%

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.
Are NPs and PAs the Answer to Physician Supply Stress?

Percentage Growth Since 1990 of Physicians, PAs and NPs per 10,000 Population, North Carolina, 1991-2009

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.
How Many NPs are in Primary Care? Depends on Definitions

Defining Primary Care Nurse Practitioner Specialty, NC, 1997-2010: Comparison of Certification and Supervisory Definitions

Notes: Data for primary specialty (“supervisory”) include active, in-state NPs indicating a primary specialty of family practice, general practice, internal medicine, Ob/Gyn, or pediatrics, who were licensed in NC as of October 31 of the respective year. Data for physician extender type (“certification”) include active-instate NPs indicating a physician extender type of family nurse practitioner, adult nurse practitioner, ob/gyn nurse or pediatric nurse practitioner who were licensed as of October 31 of the respective year.

Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the NC Medical Board.
And PAs are Increasingly Specializing

Physician Assistants in Specialty vs. Primary Care, North Carolina, 1996-2009

Notes: Data include active, instate physician assistants licensed in NC as of October 31 of the respective year. Primary care includes family practice, general practice, internal medicine, Ob/Gyn, or pediatrics.

Source: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, with data derived from the NC Medical Board.
General Surgery has both supply and distribution issues.

Percent Change in Ratio of General Surgeons to Population 1997 - 2008
North Carolina


Source: North Carolina Medical Board physician licensure data, 1997 - 2008; and 2010 Area Resource File for population data.

Produced by the Cecil G. Sheps Center for Health Services Research, UNC-CH, August 3, 2010.
Half of NC’s Counties Qualify as Mental Health Professional Shortage Areas

Psychiatrist Full-Time Equivalents per 10,000 Population
North Carolina, 2008

Produced by: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill. Source: North Carolina Health Professions Data System, with data derived from the North Carolina Medical Board, 2008; UNC, 2010; NC DHHS, MHDDSAS, 2010. Note: Psychiatrists include active, instate, nonfederal, non-resident-in-training physicians who indicate a primary specialty of psychiatry, child psychiatry, psychoanalysis, psychosomatic Medicine, addiction/chemical dependency, forensic psychiatry, or geriatric psychiatry, and secondary specialties in psychiatry, child psychiatry and forensic psychiatry.
Work Harder? More Health Worker are Doing Less

- Of $2.6 trillion spent nationally on health care, 56% is wages for health workers
- Workforce is LESS productive now than it was 20 years ago...

IF WE NEED MORE PEOPLE, WHAT KINDS OF PEOPLE?
Diversity and Workforce Needs

In context of emerging workforce shortfalls and maldistribution:

- Are we adequately accessing a talented pool of workers?
- Is there access to education and upward job mobility?

A transformed health care system will emphasize population health, reducing health disparities, and community-based models of care.

Can we accomplish this system without increasing workforce diversity?
Race/Ethnicity of Practitioners Falls Short of Matching Population Diversity

Diversity of North Carolina’s Population vs. Diversity of Selected Health Professions, 2009

<table>
<thead>
<tr>
<th>Profession</th>
<th>NC Population</th>
<th>Licensed Practical Nurses</th>
<th>Primary Care Physicians</th>
<th>Respiratory Therapists</th>
<th>Registered Nurses</th>
<th>Dentists</th>
<th>Pharmacists</th>
<th>Surgeons</th>
<th>Nurse Practitioners</th>
<th>Dental Hygienists</th>
<th>% nonwhite</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33%</td>
<td>31%</td>
<td>27%</td>
<td>17%</td>
<td>16%</td>
<td>16%</td>
<td>12%</td>
<td>12%</td>
<td>11%</td>
<td>6%</td>
<td>33%</td>
</tr>
<tr>
<td>Other/Multiracial</td>
<td>67%</td>
<td>69%</td>
<td>73%</td>
<td>83%</td>
<td>84%</td>
<td>84%</td>
<td>88%</td>
<td>88%</td>
<td>89%</td>
<td>94%</td>
<td>67%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>African American/Black</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td>0%</td>
</tr>
</tbody>
</table>
Health Professions are Diversifying Over Time at Different Rates

Change in Non-White Diversity of Selected Health Professions, North Carolina: 1994-2009

Dental Hygenists
Certified Registered Nurse Anesthetists
Surgeons
Physical Therapy Assistants
Primary Care Physician
Registered Nurse
Licensed Practical Nurse
Pharmacists
Dentists
North Carolina
Majority of NC’s Non-White Primary Care Physicians Educated in Other States and Countries

Non-White Primary Care Physicians by School
North Carolina, 2009

- 42.0% IMG
- 5.5% HBCU
- 33.5% Other U.S. schools (non-HBCU)
- 17.6% NC
- 0.9% Puerto Rico
- 0.4% Canada
- 2.6% Howard
- 2.2% Meharry
- 0.8% Morehouse

n=2,250
North Carolina does “planning” for workforce

State has long history of workforce planning:

• Well-established AHEC

• Strong public community college and university system

• History of collaboration and trust

• Better data and analytical capacity than most states

• Strong base from which to move forward
North Carolina’s Workforce Planning: The Critique

- Starts from professional, silo-based perspective
- Little accountability for matching workforce to population health needs
- Limited employer involvement
- Generally not interdisciplinary
- Reactive, heavy reliance on market
- Lacks coordination
Health Workforce Planning in North Carolina the Traditional Way
Result is a “Compromised” Workforce Planning System

- Resembles “a version of Goldilocks written by Albert Camus” with approaches that are either “too hot, or too cold, but never just right” (Grumbach, Health Affairs 2002; 21(5): 13-27)

- Often lurches from oversupply to shortage

- Generates “vigorous” disagreements about what constitutes an adequate supply, distribution and “right” mix of health providers

- Data not linked to policy action