One State’s Effort to Track the Social Accountability of Medical Education

Katie Gaul, Erin Fraher, Jessica Lyons

With Victoria McGee and Hazel Hadley

North Carolina Health Professions Data System

AAMC Physician Workforce Research Conference

May 3, 2012
Social Accountability

- Increased attention on social accountability of medical education
- Much discussion at national level
  - Scorecards, benchmarking
- Decisions to invest in undergraduate medical education (UME) made at state-level
- Need to develop tracking systems to help policymakers make informed decisions about UME investments
Dilemmas

Collecting data is not enough.

We need to use data to hold educational institutions accountable and to guide the investment of resources.

Audience should be clearly identified.

We need to determine how the audience will receive and use the data to affect policy change.

But who is the audience?
Project Origins

- 1993: North Carolina Legislature concerned about 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 annually to General Assembly
Data Sources, Methods

Data sources

- East Carolina University, Duke University, University of North Carolina, Wake Forest University
- North Carolina State Education Assistance Authority
- AAMC
- North Carolina Medical Board

School rosters: determine initial residency specialty

AAMC: verify/update specialty; identify fellows and those still in training; assign out-of-state practice location

NCMB: Identify physicians practicing in NC, specialty, location

U.S. Census Bureau: Rural status of practice county

Note: For the purposes of this study, primary care includes family medicine, general internal medicine, general pediatrics, internal medicine/pediatrics and obstetrics/gynecology.
## 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.
NC Medical Students: Retention of Grads in PC in Rural North Carolina After Five Years

Total number of 2005 graduates in training or practice as of 2010: 408

- Initial residency choice of primary care in 2005: 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%)

Class of 2005 (N=422 graduates)

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.
Institution’s Mission Matters: The Case of ECU

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

Percent

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 primary care physicians.
Limitations

**HOW** you measure outcomes matters

- How do you define primary care? The case of internal medicine...
- Do you evaluate practice setting? Additional practice locations?
- Should we expand to general surgery, psychiatry, other specialties?

**WHEN** you measure outcomes matters

- Further leakage from primary care 10 years from graduation

**DON’T FORGET GME**

- GME plays an important role, but we have limited accountability for national Medicare dollars
Discussion

- Initial selection into PC residency; subsequent specialization
- Variation exists between schools
- Few NC medical graduates (public or private) are practicing in rural North Carolina five years after graduation
- ECU’s rising contribution to PC workforce in NC
- How do general surgery and psychiatry fit in?
- Making progress on General Assembly guidelines for primary care output
Lessons Learned

1. Data are good.

But, without a clear audience and infrastructure to support the use of data to shape policy decisions and investments, data are not meeting their intended purpose as an accountability tool.

*Example: We have been doing this project for more than 15 years, and have had difficulty linking data to policy change.*
Lessons Learned

2. Need to broaden original mandate to include instate retention and include other shortage specialties critical to population health needs such as general surgery and psychiatry.

*Access to general surgeons and psychiatrists is crucial to primary care physicians and the patients they serve, especially in rural areas.*
Lessons Learned

3. Need to think about various places along the medical student’s trajectory where one might intervene to influence the decision to practice in primary care and in rural settings.

- Develop pipeline of students from rural/lower socioeconomic backgrounds
- Revise admission policies
- Make sure teaching sites are ones that provide good rural/pc experience, mentoring, etc.
Lessons Learned

4. We need more nuanced metrics, not just primary care, HPSA, rural, or diversity. Need to implement a balanced scorecard approach.

*Schools have different missions. Do we create different metrics to measure success? We still need a pool of physicians who will become specialists, physician leaders and researchers who will, in addition to our primary care docs, advance the profession and improve the level of patient care to meet population needs.*
Future Directions

Link data to social accountability decisions at 3 levels:

- Institutional
- State
- Federal
Questions?

Erin Fraher
erin_fraher@unc.edu
(919) 966-5012

Katie Gaul
k_gaul@unc.edu
(919) 966-6529

North Carolina Health Professions Data System
http://www.shepscenter.unc.edu/hp
References


Strategic Plan for the University of North Carolina School of Medicine. March 1, 2012.