The Supply and Distribution of Psychiatrists in North Carolina: Pressing Issues in the Context of Mental Health Reform

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Presentation Overview

- North Carolina’s physician supply compared to national context
- Psychiatrists: supply, education and distribution
- Child psychiatrists: supply and distribution
- Policy Considerations
National Context

- Recognition of potential shortage by national groups:
  - American Association of Medical Colleges (AAMC) has suggested a future shortage is looming and has called for a 30% increase in medical school enrollments by 2015.
  - Council on Graduate Medical Education reversed position in 2004 to say there may be a shortage coming.
  - American Medical Association has acknowledged need to increase overall supply as well as improve distribution in underserved areas.
North Carolina: Supply of Physicians Has Slowed

- Between 2000 and 2004 supply of physicians per population declined

- Slight rebound in 2005, but may be data anomaly

- This may cause future access problems in North Carolina
Why examine psychiatrist supply now?

- Potential for a national physician shortage
- North Carolina is a fast population growth state and our supply has slowed
- Psychiatrists are an important specialty group within overall physician workforce
- North Carolina is in the process of redesigning mental health delivery system
- Rising prevalence of common mental health disorders
Rising need for mental health services

- Nearly 1 in 3 non-elderly adults experiences a mental disorder in a given year

- NC pediatricians report 15% of children have behavioral disorder such as attention deficit disorder, anxiety or depression

- Despite need, many adults go untreated due to combination of factors:
  - Inadequate insurance coverage
  - Lack of co-payments
  - Perceived stigma
  - Inadequate supply and distribution of mental health professionals

- This presentation focuses on one component of issue—psychiatrist supply
In 2004, NC was 21st in nation in overall supply

Psychiatrists per 10,000 Population, 2004

Physicians with a Primary Specialty in Psychiatry per 10,000 Population, North Carolina, 1995-2004
Location of Medical School and Residency, North Carolina Psychiatrists, 2003

<table>
<thead>
<tr>
<th>Location</th>
<th>Medical School</th>
<th>Residency</th>
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<tbody>
<tr>
<td>NC</td>
<td>55%</td>
<td>27%</td>
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<tr>
<td>Other US and Canada</td>
<td>55%</td>
<td>45%</td>
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<tr>
<td>Outside US</td>
<td>18%</td>
<td>1%</td>
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</tbody>
</table>
Psychiatrist Full-Time Equivalents per 10,000 Population
North Carolina, 2004

Total Psychiatrists = 1,061
Psychiatry FTEs per 10,000 Population
(# of Counties)

- 0.99 to 10.27  (18)
- 0.60 to 0.98   (20)
- 0.33 to 0.59   (18)
- 0.01 to 0.32   (27)
- No Psychiatrists (17)

*Psychiatrists include active (or unknown activity status), instate, nonfederal, non-resident-in-training physicians who indicate a primary specialty of psychiatry, child psychiatry, psychoanalysis, psychosomatic med, addiction/chemical dependency, forensic psychiatry, or geriatric psychiatry, and secondary specialties in child psychiatry and forensic psychiatry.

Source: LINC, 2005; North Carolina Health Professions Data System, with data derived from the North Carolina Medical Board, 2004; NC DHHS, MHDDSAS, 2005.
Produced by: North Carolina Health Professions Data System, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.
Change in Psychiatrist Full-Time Equivalents per 10,000 Population
North Carolina, 1999 to 2004

Change in Psychiatrist FTEs per 10,000 Population
(# of Counties)

- 50% or Greater Increase (9)
- 1% to 49% Increase (22)
- 1% to 49% Decrease (41)
- 50% to 99% Decrease (7)
- Lost all Psychiatrists (5)
- No Psychiatrists in 1999, At Least 1 in 2004 (4)
- No Psychiatrists in 1999 or 2004 (12)

Psychiatrists include active (or unknown activity status), instate, nonfederal, non-resident-in-training physicians who indicate a primary specialty of psychiatry, child psychiatry, psychoanalysis, psychosomatic med, addiction/chemical dependency, forensic psychiatry, or geriatric psychiatry, and secondary specialties in psychiatry, child psychiatry and forensic psychiatry.

Source: LINC, 2005; North Carolina Health Professions Data System, with data derived from the North Carolina Medical Board, 2004; NC DHHS, MHDDSAS, 2005.
# Primary Practice Location of Psychiatrists and Non-Psychiatrist Physicians, North Carolina, 2004

<table>
<thead>
<tr>
<th></th>
<th>Non-Metropolitan Counties</th>
<th>Metropolitan Counties</th>
<th>Whole County HPSAs</th>
<th>Part County HPSAs</th>
<th>Not a HPSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychiatrists (%)</td>
<td>15.6</td>
<td>84.4</td>
<td>2.1</td>
<td>26.4</td>
<td>26.4</td>
</tr>
<tr>
<td>All Other Physicians (%)</td>
<td>21.6</td>
<td>78.4</td>
<td>3.3</td>
<td>34.6</td>
<td>34.6</td>
</tr>
<tr>
<td><strong>Ratio of Psychiatrists per 10,000 Population</strong></td>
<td><strong>0.58</strong></td>
<td><strong>1.49</strong></td>
<td><strong>0.30</strong></td>
<td><strong>0.83</strong></td>
<td><strong>0.83</strong></td>
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Note: HPSAs are Health Professional Shortage Areas.
If there is not an adequate supply of psychiatrists in certain counties, the burden of care will likely fall on primary care physicians. In 2004:

- There were 17 counties in which no psychiatrists claimed a primary, secondary or other practice location, and 7 of these 17 counties were also whole-county primary care HPSAs.

- Of the 19 whole-county primary care HPSAs, 11 face a shortage of psychiatrists.

- In counties that are not primary care HPSAs but that have low psychiatrist to population ratios, the burden of mental health care is likely falling upon primary care docs to provide services (such as prescribing, diagnosing and developing treatment plans)
Physicians with a Primary Specialty in Child Psychiatry per 10,000 Child Population, North Carolina, 1995-2004
Child Psychiatrist Full-Time Equivalents per 10,000 Child Population
North Carolina, 2004

Child psychiatrists include active (or have unknown activity status), instate, nonfederal, non-resident-in-training physicians who indicate a primary or secondary specialty of child psychiatry. Child population includes children 18 and under.

Total Child Psychiatrists = 223

Child Psychiatrist FTEs per 10,000 Child Population
(# of Counties)

- 5.0 to 10.3 (2)
- 2.0 to 4.9 (5)
- 1.0 to 1.9 (8)
- Fewer than 1 (42)
- No Child Psychiatrists (43)

Produced by: North Carolina Health Professions Data System and the Southeast Regional Center for Health Workforce Studies, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Source: LINC, 2005; North Carolina Health Professions Data System, with data derived from the North Carolina Medical Board, 2004; NC DHHS, MHDDSAS, 2005.

*Child psychiatrists include active (or have unknown activity status), instate, nonfederal, non-resident-in-training physicians who indicate a primary or secondary specialty of child psychiatry. Child population includes children 18 and under.
Summary of Findings

- **Psychiatrists**: Issue is less one of overall supply, more an issue of distribution. NC residency programs provide relatively high yield; residency programs need to maintain or increase number of graduates.

- **Child Psychiatrists**: There is a critical shortage and maldistribution of child psychiatrists.

- **Psychiatrists and Primary Care Providers**: Many counties facing a psychiatrist shortage also face a shortage of primary care providers—may jeopardize access to care for patients with mental disorders.
How to Affect Change? Policy Levers To Increase Supply/Improve Distribution

Accessible Supply

- Medical School
- Residency
- INMigrations

Career Change
- Retirement
- Death
- OUTMigrations
Increase Entry into the Supply

Accessible Supply

Medical School
Residency
INMigration

Career Change
Retirement
Death
OUTMigration
Reduce Exit from the Supply

Accessible Supply

Medical School
Residency
INMigration

Career Change
Retirement
OUT-Migration
Death
Another option: expand supply of other mental health care providers
Possible Policy Options

- Create a Psychiatrist Service Corps
- Reduce isolation of providers in rural areas
- Support training in publicly funded settings
- Develop new educational programs for nurse practitioners and physician assistants focused on mental health
- Support and disseminate successful models of care that:
  - Strengthen ties between primary care providers and psychiatrists
  - Provide team-based care and/or consultation models that expand efficiency of existing workforce
AHEC Plans for Strengthening Psychiatry/Mental Health Training for Serving Rural Underserved Communities

Thomas J. Bacon, DrPH
North Carolina AHEC Program

Presentation to the House Select Committee on Health Care Subcommittee on Healthcare Workforce October 25, 2006
**AHEC’s Goal:**

A comprehensive and coordinated educational approach to training psychiatrists and other mental health providers

- **Components**
  1. Training experiences at the community level
  2. Strengthened infrastructure to serve public patients
  3. Recruitment and retention strategies
  4. Better integration of mental health services with primary health care
AHEC’s Role:
Strengthen training at the community level for psychiatry residents

- Partner with Departments of Psychiatry at all four medical schools
- Place residents in community settings to foster an interest in serving public mental health patients
  - Historically, within area mental health centers
  - Now, within LMEs and large provider groups
  - NC known as a state with success in keeping psychiatrists and placing large numbers in public practice
AHEC Plans: 2006-2007

- Received $500,000 in 2006 Session to strengthen training of psychiatrists and other mental health providers to serve rural and underserved communities
AHEC Plans: 2006-2007

- July – September: Needs Assessment Phase
  - Meetings with:
    - academic departments of psychiatry
    - state agencies
    - selected NP/PA Programs
    - other stakeholders
  - Close collaboration with Office of Rural Health & Community Care and Division of MH/DD/SAS

- September – December: Implementation Phase
**AHEC Plans: 2006-2007**

- **Psychiatry**
  1. Strengthen existing training sites for residents (UNC, Duke)
  2. Identify new sites for psychiatry residents (all)
  3. Expand role of university to integrate care and training (ECU)
     - additional faculty
     - use of faculty/resident teams in counties currently without psychiatrist
  4. Explore use of rural hospital linkages as training sites (Wake Forest)
  5. Develop new models for training psych residents while strengthening delivery system (all)
AHEC Plans: 2006-2007

Primary Care/Mental Health Integration

1. Add psych/mental health fellowship for selected PA grads (Duke)

2. Recruit students with mental health background into primary care PA and NP programs (Duke)

3. Develop psych/mental health track within NP program and add off-campus program in western NC (UNC-CH)

4. One year psych/behavioral health fellowship for family physician residents (Southern Regional AHEC)
Other Issues

- Immediate short-term solutions versus longer-term strategies
- In many cases, need to link incentives for practice in underserved areas to training programs
- Reimbursement for mental health services still an issue in placing providers in underserved areas