2015 National Conference on Health Statistics

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Agenda

The nurse practitioner (NP) landscape
• What roles do NPs play in the delivery of primary care?
• How are these roles similar/different than other practitioners?

Availability of data for research
• What are the primary sources of NP data?
• What data are needed and what limits their availability?
There are more than 3 million RNs in the U.S.

A. TRUE

B. FALSE
Nursing Today—3.1 Million Largest Health Care Workforce

Source: 1980-2008 National Sample Survey of Registered Nurses
The term “advanced practice nurse” refers to nurses who...

A. Are in the process of becoming “registered”
B. Have advanced education and specialized clinical training
C. Must be employed and supervised by a physician
D. Are independent practitioners
Advanced Practice Registered Nurse

Broad classification that includes nurse practitioners, nurse midwives, nurse anesthetists, and clinical nurse specialists

- Have advanced education and specialized clinical training
  - Certifying boards currently require a minimum of a master’s degree
- Licensed to deliver care consistent with their areas of expertise and state laws that govern their scope of practice
- Diagnose and manage common acute and chronic diseases, order diagnostic tests, prescribe medications, and perform minor procedures

In the U.S., approx. 250,000+ (8.2%) RNs prepared as APRNs (2008)
Which of the following is not an abbreviation for an advanced practice RN (APRN)?

A. CNM
B. CNP
C. **CFRN**
D. CRNA
NPs—Largest Group of APRNs

Source: 2008 National Sample Survey of Registered Nurses, HRSA
Decades of Growth in the Nurse Practitioner Workforce

Source: Morgan, Everett, Hing, 2014

Source: Auerbach, 2012

Source: Morgan, Everett, Hing, 2014
NPs—Fastest Growing Primary Care Workforce

<table>
<thead>
<tr>
<th>Supply of Primary Care Professionals</th>
<th>Number of primary care professionals</th>
<th>Number of primary care professionals per 100,000 people</th>
<th>Average annual percentage change per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Base year</td>
<td>Recent year</td>
<td>Base year</td>
</tr>
<tr>
<td>Primary care physicians</td>
<td>208,187</td>
<td>264,086</td>
<td>80</td>
</tr>
<tr>
<td>Physician assistants</td>
<td>12,819</td>
<td>23,325</td>
<td>5</td>
</tr>
<tr>
<td>Nurse practitioners</td>
<td>44,200</td>
<td>82,622</td>
<td>16</td>
</tr>
<tr>
<td>Dentists</td>
<td>118,816</td>
<td>138,754</td>
<td>46</td>
</tr>
</tbody>
</table>

Source: GAO, 2008
Nurse Practitioners As Primary Care Practitioners

- Estimated 200,000+ NPs nationwide (*AANP National NP Database, 2014*)
- Work across populations with “roots” in rural/frontier health and primary care—e.g., family practice
- 70–80% practice in primary care—(i.e., pediatrics, adult health, geriatrics, women’s health)
- 20% practice in rural settings
- 7,000 new graduates annually; 4 out of 5 prepared to deliver primary care
- Provide a range of services including:
  - Counseling and educating patients and their families
  - Caring for common medical problems and chronic conditions
  - Providing preventive care—physical exams, screenings and immunizations
## NP Practice Patterns

<table>
<thead>
<tr>
<th>Services provided to:</th>
<th>Most patients</th>
<th>Some patients</th>
<th>Few patients</th>
<th>No patients</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counsel and educate patients and families</td>
<td>85.6</td>
<td>11.9</td>
<td>2.0</td>
<td>0.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Conduct physical examinations and obtain medical histories</td>
<td>83.9</td>
<td>11.0</td>
<td>2.9</td>
<td>2.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Prescribe drugs for acute and chronic illnesses</td>
<td>80.4</td>
<td>12.3</td>
<td>3.6</td>
<td>3.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Order, perform, and interpret lab tests, x-rays, EKGs, and other diagnostic studies</td>
<td>75.4</td>
<td>17.6</td>
<td>4.9</td>
<td>2.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Diagnose, treat, and manage acute illnesses</td>
<td>68.3</td>
<td>21.0</td>
<td>7.1</td>
<td>3.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Diagnose, treat, and manage chronic illness</td>
<td>60.9</td>
<td>24.2</td>
<td>10.0</td>
<td>4.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Provide preventive care including screening and immunizations</td>
<td>55.0</td>
<td>19.8</td>
<td>15.1</td>
<td>10.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Provide care coordination</td>
<td>53.3</td>
<td>30.2</td>
<td>12.7</td>
<td>3.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Make referrals</td>
<td>46.1</td>
<td>41.4</td>
<td>10.2</td>
<td>2.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Perform procedures</td>
<td>26.2</td>
<td>30.3</td>
<td>25.8</td>
<td>17.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Source: 2012 National Sample Survey of Nurse Practitioners, HRSA*
Model for MD/NP Practice

- Critical Care
- Acute and chronic Unstable
- Acute limited/Stable chronic illness
- Well care

Nurse Practitioner

- Critical Care
- Acute and Chronic Unstable
- Acute limited/Stable chronic
- Well care

Physician
Which is true?

• Most states require physician oversight of NPs

NPs are reimbursed at 90% of the physician fee schedule under Medicare
Restrictions in Scope of NP Practice


Key:
- fully independent
- reduced practice
- restricted practice
## Existing Sources of NP Data

<table>
<thead>
<tr>
<th>Category/Type</th>
<th>Examples of Existing Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public health, safety, quality, disparities</td>
<td>NCHS <em>(National Ambulatory Medical Care Survey [NAMCS], National Hospital Ambulatory Medical Care Survey [NHAMCS]), AHRQ</em></td>
</tr>
<tr>
<td>Care delivery</td>
<td>VA, IHS, DOD, providers, retail clinics</td>
</tr>
<tr>
<td>Payment, reimbursement, billing, cost of care, claims</td>
<td>CMS <em>(Medicare &amp; Medicaid), private insurers</em></td>
</tr>
<tr>
<td>Labor market conditions and trends, workforce planning and policy</td>
<td>HRSA, DOL <em>(BLS), state nursing workforce centers, educational institutions, employers</em></td>
</tr>
<tr>
<td>Occupational licensing, regulation, enforcement</td>
<td>state boards of nursing, DEA</td>
</tr>
<tr>
<td>Self-regulation, professionalism</td>
<td>professional organizations and societies, credentialing bodies, educational institutions</td>
</tr>
</tbody>
</table>
Data Limitations and Other Challenges in NP Research

Historical focus on physician workforce and relative size of NP workforce

- Exclusion of non-physicians and/or aggregation of dissimilar practitioners
- Confounded by emergence of team-based care

Billing/payment practices

- Incentive to bill “incident to” → NP invisibility
- Number of payers and variation in data collection and availability
- Heighted by emergence of performance-based payment
Data Limitations and Other Challenges (cont.)

Variation in regulatory restrictions and physician oversight
  • “Patchwork” of scope of practice policies

Limitations of survey data
  • Response rate, sample size
  • Definitional issues
  • Documentation adequacy
  • Self-report, recall bias

Scope and availability of proprietary data
Optimizing NP Data Availability

1. Adopt new paradigm—provision of care by a complement of clinicians
2. Establish data collection best practices
3. Modify and standardize data collection vehicles
4. Decouple care from billing/payment
5. Secure additional funding and resource support