State Scope of Practice Laws and Nurse Practitioners’ Autonomy

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Value of Autonomy

NP Autonomy

- Regulatory Rules
- Professional Rules
- Organizational Rules

Value of Autonomy

- Access to primary and preventive care
- Quality and safety of patient outcomes
- Job satisfaction and retention
- Turnover and burnout
- Etc.

- Low-value care
- More tests and visits that increases costs
- Etc.
State SOP

- Each state grants *legal* authority for NPs to practice
  - Entry-to-practice qualification
  - Physician involvement in treatment and diagnosis
  - Prescription authority
  - Reimbursement and costs
  - Etc.
- State SOP has been cited as a *primary barrier* to NP independent practice
Research evidence suggests that NPs provide care of equal quality at lower cost than physicians do.

National organizations (IOM, NGA, FTC) recommended that states remove SOP barriers to increase efficiencies in health care delivery.

Affordable Care Act

- Insurance expansion
- NPs can be key to practice transformation
1998-2012, 11 states loosened SOP regulations

Despite this trend, SOP remains a highly contentious topic among different stakeholders and state legislative changes have been slow.

In 2015, less than half the states (21 states and DC) allow full legal authority for NPs
Barriers to Autonomy

Regulatory Rules

Professional Rules

Organizational Rules

Insurance/Payer Policies →

NP Autonomy

← Practice Culture
← Individual Relationship

Access to primary and preventive care
- Quality and safety of patient outcomes
- Job satisfaction and retention
- Turnover and burnout
- Etc.

- Low-value care
- More tests and visits that increases costs
- Etc.
Study Questions

• To what extent are state SOP laws related to the degree of autonomy that NPs report?

• How much variation in autonomy is there for NPs in states where they have the same legal authority?
Data and Study Population

- 2012 National Sample Survey of Nurse Practitioners linked to the state NP SOP laws
- 9,021 NPs (70% of all respondents) who provided direct patient care in their primary NP position
  - 3,471 primary care NPs (38.7%)
  - 5,550 specialty care NPs (61.3%)
## 2012 State SOP

<table>
<thead>
<tr>
<th>SOP</th>
<th>Practice Authority</th>
<th>Prescription Authority</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent</td>
<td>O</td>
<td>O</td>
<td>AK, AZ, CO, DC, HI, ID, IA, ME, MD, MT, NH, NM, ND, OR, VT, WA, WY (16 states and DC)</td>
</tr>
<tr>
<td>Restricted Prescription</td>
<td>O</td>
<td>X</td>
<td>AR, IN, KY, MA, MI, NJ, OK, RI, TN, UT, WV (11 states)</td>
</tr>
<tr>
<td>Restricted</td>
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<td>X</td>
<td>AL, CA, CT, DE, FL, GA, IL, KS, LA, MN, MS, MO, NE, NV, NY, NC, OH, PA, SC, SD, TX, VA, WI (23 states)</td>
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# Autonomy Measures

<table>
<thead>
<tr>
<th>Autonomy</th>
<th>Coding</th>
<th>(%)</th>
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<tbody>
<tr>
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<td>Strongly disagree</td>
<td>(2.2)</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>(13.5)</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>(34.6)</td>
</tr>
<tr>
<td></td>
<td>Strongly agree</td>
<td>(49.7)</td>
</tr>
<tr>
<td>Collaborative relationship w/ physician</td>
<td>Hierarchical</td>
<td>(16.0)</td>
</tr>
<tr>
<td></td>
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<td>(84.0)</td>
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<tr>
<td>Billing independence</td>
<td>Bill under other provider/clinic number</td>
<td>(53.8)</td>
</tr>
<tr>
<td></td>
<td>Bill under my provider number</td>
<td>(46.2)</td>
</tr>
<tr>
<td>Managing own panel of patients</td>
<td>No</td>
<td>(54.1)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>(45.9)</td>
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<tr>
<td>Hospital admitting privileges</td>
<td>No</td>
<td>(79.3)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>(20.7)</td>
</tr>
</tbody>
</table>
Analyses

- Ordered logistic or logistic regressions to examine the association between SOP and autonomy
  - Gender, years since graduating from initial NP program, race/ethnicity, degree, hourly salary, urban/rural location, and work settings
  - Primary care NPs vs. specialty care NPs
  - Robust standard errors clustered at state-level
- Chi-squares to examine variation in each autonomy measure
“To what extent are state NP SOP laws related to the degree of autonomy that they report?”
Skills are fully utilized (OR, 95% CI)
Collaborative relationship w/ physician (OR, 95% CI)

**p<0.05;***p<0.01
Billing independence (OR, 95% CI)

**p<0.05; ***p<0.01
Managing own panel of patients (OR, 95% CI)

![Graph showing OR values for managing own panel of patients across different categories such as Independent, Restricted Prescription, and Restricted.]
Hospital admitting privileges (OR, 95% CI)
“How much variation in autonomy is there for NPs in states where they have the same legal authority?”
Skills are fully utilized***

- Independent
  - Strongly disagree: 1.39
  - Disagree: 31.9
  - Agree: 57.7

- Restricted Prescription
  - Strongly disagree: 2.2
  - Disagree: 12.7
  - Agree: 34.8
  - Strongly agree: 50.3

- Restricted
  - Strongly disagree: 2.4
  - Disagree: 14.7
  - Agree: 35.1
  - Strongly agree: 47.8

***p<0.01
Collaborative relationship w/ physician***

- Independent: 9.4% Hierarchical, 90.6% Collaborative
- Restricted Prescription: 16.1% Hierarchical, 83.9% Collaborative
- Restricted: 17.0% Hierarchical, 83.0% Collaborative

***p<0.01
Billing independence***

- **Independent**
  - Bill under other provider/clinic number: 43.6
  - Bill under my provider number: 56.4

- **Restricted Prescription**
  - Bill under other provider/clinic number: 54.5
  - Bill under my provider number: 45.5

- **Restricted**
  - Bill under other provider/clinic number: 55.7
  - Bill under my provider number: 44.3

***p<0.01
Managing own panel of patients***

**Independent**
- No: 46.9%
- Yes: 53.1%

**Restricted Prescription**
- No: 55.9%
- Yes: 44.1%

**Restricted**
- No: 55.1%
- Yes: 44.9%

***p<0.01
Summary of Key Findings

- Independent prescription authority is critical
- SOP matters more to those NPs who provide primary care
- SOP is the primary barrier, but other barriers exist
Limitations

• No causal linkage
• Variation within each SOP category
• Validity for measuring autonomy
Implications

• SOP not a silver bullet
• Removing both legal and administrative barriers for NPs is critical to
  • Meet increased primary care needs
  • Deliver continuous, comprehensive, and coordinated team-based care
  • Support health care delivery innovation
  • Make NPs more efficient and effective provider
Questions?
SOP and Autonomy (OR, 95%CI)

Skills are fully utilized

Collaborative relationship w/ physician

Billing independence

Managing own panel of patients

Hospital admitting privileges

GW

**p<0.05; ***p<0.01
### Variation in Autonomy

#### Skills are fully utilized ***

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#### Collaborative relationship w/ physician ***

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<td>90.6</td>
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#### Billing independence ***

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#### Managing own panel of patients ***

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#### Hospital admitting privileges

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