Advanced Practice Registered Nurse: What Skill Set Do You Need? Does It Matter?

Session C836, 2015 National Magnet Conference®
October 8, 2015 2:15 p.m. – 3:15 p.m.
Marygrace Hernandez Leveille, PhD, RN, ACNP-BC¹
Sonya Flanders, MSN, RN, ACNS-BC, CCRN²
Kathleen Shuey, MS, RN, ACNS-BC, AOCN¹
Sandy McCoy, MSN, RN, FNP-BC¹

Overview
Research project – Strong Model
Present study overview and results
Highlight two of the APRN roles
• Nurse Practitioner (NP)
• Clinical Nurse Specialist (CNS)
Recommendations for future practice

Background
Multi-hospital system
Hospital-based Advanced Practice Registered Nurses (APRN) within the Dep. of Nursing
• CNSs
• NPs
APRN practice varies depending on role, job, position requirements
• Population based vs. geographically based vs. specific clinical focus
• ± prescriptive authority
Practice variation – difficult to succinctly describe what ARPNs are & do
Scope

+ United States
  - 158,348 NPs
  - 69,000+ CNSs
+ Texas
  - 9432 NPs
  - 3414 CRNAs
  - 1408 CNSs
  - 363 CNMs
+ Baylor Health Care System (BHCS)
  - 29 APRNs

---

Review of Literature

+ Strong Model (Ackerman, Norren, Martin, & Kitzman, 1996)
  - Patient centric model with five APRN practice domains
    - Direct comprehensive care
    - Education
    - Research
    - Support of systems
    - Publication and professional leadership
  - Varying levels of experience: novice to expert
+ Follow up study (Ackerman & Mick, 2000)
  - Eighteen APRNs (NP = 12; CNS = 6)
  - Self ranked level of expertise using practice domains
  - CNSs ranked selves higher in all practice domains
  - NPs placed greater value on tasks related to direct care
  - CNSs ranked education, research, leadership more important
  - Conclusions:
    - CNS and NP roles are different
    - Model reflected CNS practice more than NP practice

---

Review of Literature, cont.

+ Role clarity (Gardner, Chang, Duffield, 2007)
  - Examined practice of 9 APRNs in 3 Australian hospitals
  - Concluded Strong Model representative of subjects’ practice
+ Expert panel to validate content depicting role (Chang, Gardner, Duffield, & Rams, 2010)
  - Expert panel of Australian nurses, not limited to APRN
  - Concluded model useful in defining core activities; could be used to help with appropriate utilization, adoption and evaluation of roles
+ Professional development and mentoring needs (Doekson, 2010)
  - 14 hospital based CNSs and NPs in Canada
  - Findings indicate need for ongoing professional development and mentoring across all practice domains
Study Purpose

Purpose:
• Differentiate roles of CNSs and NPs in various BHCS hospital clinical settings

Research Question:
• Is there a difference of BHCS employed CNSs and NPs in the five domains of the Strong Model of Advanced Practice?

Methods

Non-experimental, exploratory, descriptive online survey

Invitation sent via internal email to the 29 APRNs employed by BHCS

Setting
• Non-profit organization, Dallas-Fort Worth Metroplex

Sample
• Non-probability convenience sample

Survey

5 domains 41 questions

1. Conduct and document patient history and physical examination.
2. Assess psychosocial, cultural, and religious factors affecting patient needs.
3. Make a medical diagnosis within specialty scope of practice and practice guidelines.
4. Identify and initiate required diagnostic tests and procedures.
5. Gather and interpret assessment data to formulate plan of care on the
Research Team

+ Primary Investigator
  - Marygrace Leveille, PhD, RN, ACNP-BC
+ Co-Investigators
  - Sonya Flanders, MSN, RN, ACNS-BC, CCRN
  - Sandy McCoy, MSN, RN, FNP BC, CBN
  - Kathleen Shuey, MS, RN, ACNS-BC, AOCN

Subjects

+ Inclusion criteria
  - Currently employed CNS or NP in selected BHCS facilities
  - Male or female
  - Age 18 or older
  - Willing & able to give informed consent
+ Exclusion criteria
  - Non-BHCS employed CNSs & NPs
  - CRNAs
  - CNMs

Nurse Practitioner Role
Areas of Focus/Certification for NPs

- Adult-Geriatrics
- Family
- Acute Care
- Psych-Mental Health
- Woman’s Health
- Neonatal

Nurse Practitioner History

NP History Timeline

- **1950-1960s**
  - Physicians began training nurses
  - Physicians more specialized (8% primary care)
  - Shortage primary care physicians

- **1965**
  - Medicare/Medicaid increase demand primary care service
  - Loretta Ford & Henry Silva created 1st training for NPs at University of Colorado

**Opposition from physicians and nurses**
Loretta Ford 2013

Major Influences on the NP Role

+ **2008** - Gov. Accounting Office report NPs fastest growing group of primary care providers
+ **2008** - Consensus Model for APRN Regulation: Licensure, Accreditation, Certification, and Education
  - Framework to increase APRN role and improve health outcomes in US
+ **2010** - Robert Wood Johnson Foundation Initiative on the Future of Nursing at the IOM
  - “Remove Scope of Practice Barriers” “Practice to full extent of their education and training”
+ Each state regulates NP scope of practice
  - 21 states and the District of Columbia allow NP full autonomy to practice according TNP

Role Responsibilities Comparisons for Strong Model*

<table>
<thead>
<tr>
<th>NP</th>
<th>CNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide health &amp; medical care for diverse populations of primary, acute &amp; long term care.</td>
<td>• Expert in defined area of a selected clinical area of nursing</td>
</tr>
<tr>
<td>• Direct practice of Nursing &amp; Medicine</td>
<td>• Direct Practice of Nursing Education: mentor, educator of staff &amp; pts (Consensus Model changing role)</td>
</tr>
<tr>
<td>• Primary function to provide direct patient care including medical practice whether delegated or autonomous</td>
<td>• Functions as consultant to staff, research, change agent</td>
</tr>
<tr>
<td>• Teach pts, family, groups</td>
<td>• Assess pts, nursing personnel, organization, networks, and intervene by participating in multidisciplinary activities, designing &amp; evaluating programs of care</td>
</tr>
<tr>
<td>• Usually in outpatient settings but when in hospital settings serves on committees to implement change</td>
<td>• Usually in hospital settings</td>
</tr>
<tr>
<td>• Educated through program for prescriptive authority</td>
<td>• Requires additional education for prescriptive authority however, many are adding to program</td>
</tr>
</tbody>
</table>

*Texas Nurse Practitioners

*National Association for CNS

*Society for CNS Education
Strong Model

The 5 domains applied to NPs

Direct Comprehensive Care
- Assess, examine, treat, perform procedures either in clinics or offices
- Order & interpret labs & diagnostic studies
- Prescribe & order medications
- Family planning services
- Healthcare during pregnancy
- Health risk evaluation
- Psychological counseling
- Coordination of health care services
- Consult & refer as necessary

Support of Systems
- Consult with colleagues & physicians regarding patient care
- Participate in QI projects
- Participate in strategic planning for facility/organization
- Serve as a leader in initiating or updating policies & procedures
- Advocating for the role of the NP by serving on committees & educating physicians, administration, & colleagues.
**Education**

- Teach patient & families specifics of their care
- Serve as a mentor/preceptor to NP students & new NP employees
- Provide in-services to the staff within the facility & at present at local and state NP chapters
- Educate legislators on the role of NP to try to get legislation passed to broaden the scope of practice

**Research**

- Participate in research projects
- Incorporate research findings into policy & procedures
  - (e.g. LMWH* for DVT prevention)
- Conduct research pertinent to your practice:
  - NPs more likely on how they are saving money or how they can make money
  - Unless they work with a physician that does research or a teaching facility

*LMWH = low molecular weight heparin

**Publication & Professional Leadership**

- Letters to the editors
- Letters to the legislators
- Submitting articles in magazines
- Chair committees in the organization
- Run for local or state leadership positions
- Talk with legislators
- Testify before the State House or Senate on Nursing Issues
- Serve on local Boards
Clinical Nurse Specialist

- CNS graduate preparation
  - 1954
- Expert clinicians with a nursing practice specialty
  - populations, settings, diseases, type of care, or specific problem

CNS Areas of Certification

**Current**
- Acute/ Critical Care
- Adult Health*
- Adult-Gerontology
- Psych-Mental Health
  - Adult
  - Child/Adolescent
- Pediatric
- Neonatal

**Retired**
- CNS Core
- Diabetes Mgmt
- Gerontological
- Home Health
- Public/Community Health


Image: Thinkstock

http://www.nursecredentialing.org/certification.aspx#specialty
Clinical Nurse Specialist

- Spheres of influence

Patient and Family

Nurses / Nursing Practice

System

http://www.nacns.org/docs/NACNS-Statement.pdf

CNSs and Prescriptive Authority

- 2014 Clinical Nurse Specialist Census
  - 1 in 4 CNSs has authority to prescribe medications

http://www.nacns.org/docs/CensusInfographic.pdf
https://www.ncsbn.org

Strong Model

The 5 domains applied to CNSs

Direct Comprehensive Care
Support of Systems
Education
Research
Publications & Professional Leadership
CNS – Direct Comprehensive Care

- Perform specialty-specific procedures
- Collaborating with other services
- Medical Diagnosis
- Consultant for patient care & nursing practice

CNS – Support Systems

- Direct and participate in QI
- Advocate for the role of the APRN
- Serve as a mentor

CNS – Research

- Conduct, facilitate, and/or participate in clinical research
- Recommend policy changes on the basis of research
CNS – Education

Identify learning needs... development of education programs and resources.

CNS – Publication & Professional Leadership

Sserve as a resource or committee member in professional organizations.

Disseminate nursing knowledge through presentation or publication at local, regional, national, and international levels.

CNS Practice is VERY Diverse
Back to OUR Study

Statistical Analysis

- Descriptive Statistics
- Fisher’s Exact test
  - to determine if there are non-random associations between two categorical variables (CNS/NP group)

Demographics 22/29 respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>CNS</th>
<th>(%)</th>
<th>NP</th>
<th>(%)</th>
<th>Total</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>0</td>
<td>0.0</td>
<td>2</td>
<td>10.5</td>
<td>2</td>
<td>9.06</td>
</tr>
<tr>
<td>30-39</td>
<td>5</td>
<td>20.0</td>
<td>2</td>
<td>10.5</td>
<td>7</td>
<td>31.02</td>
</tr>
<tr>
<td>40-49</td>
<td>1</td>
<td>5.0</td>
<td>2</td>
<td>10.5</td>
<td>3</td>
<td>13.41</td>
</tr>
<tr>
<td>50-59</td>
<td>3</td>
<td>15.0</td>
<td>3</td>
<td>15.0</td>
<td>6</td>
<td>27.27</td>
</tr>
<tr>
<td>60+</td>
<td>1</td>
<td>5.0</td>
<td>2</td>
<td>10.5</td>
<td>3</td>
<td>13.41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>(%)</th>
<th>Female</th>
<th>(%)</th>
<th>Total</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>10.0</td>
<td>15</td>
<td>31.5</td>
<td>20</td>
<td>90.62</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Single</th>
<th>(%)</th>
<th>Married</th>
<th>(%)</th>
<th>Total</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>8.0</td>
<td>7</td>
<td>35.0</td>
<td>11</td>
<td>52.63</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>High School</th>
<th>(%)</th>
<th>College/University</th>
<th>(%)</th>
<th>Total</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>10.0</td>
<td>15</td>
<td>31.5</td>
<td>20</td>
<td>90.62</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of Experience [years]</th>
<th>CNS</th>
<th>(%)</th>
<th>NP</th>
<th>(%)</th>
<th>Total</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td>2</td>
<td>10.5</td>
<td>2</td>
<td>9.06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of Experience as APN [years]</th>
<th>CNS</th>
<th>(%)</th>
<th>NP</th>
<th>(%)</th>
<th>Total</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td>2</td>
<td>10.5</td>
<td>2</td>
<td>9.06</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean (Min, Max)</th>
<th>Median (Min, Max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>High School</td>
<td>College/University</td>
<td>Single</td>
</tr>
<tr>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean (Min, Max)</th>
<th>Median (Min, Max)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td>2</td>
</tr>
</tbody>
</table>
Results - Importance

Which tasks and concept domains differ by nursing role when reported by importance?

Results - Frequency

Direct Comprehensive Care:
- Perform specialty-specific procedures \( p = 0.0142 \)
- Document appropriately on patient record \( p = 0.0000 \)

Education:
- Identify learning needs of various populations (e.g. patients and nurses) & contribute to development of education programs & resources \( p = 0.0215 \)

Publication & Professional Leadership:
- Serve as a resource of committee member in professional organizations \( p = 0.0274 \)

Know what you want
Know what you need
Recommendations

+ Clear understanding of:
  - Job description
  - Goals
  - Outcome measures

Recommendations

+ Resources available for APRN success
+ Support Systems
+ Research and Continuing Education
+ Dissemination

Invest in your investment!

Questions & Comments

Thank you
M. Leveille  Marygrace.Leveille@baylorhealth.edu
Sonya Flanders  sonyaf@baylorhealth.edu
Sandy McCoy  tsmac5@twc.com
Kathleen Shuey  Kathleen.Shuey@baylorhealth.edu