Advanced Practice Nursing: Contributions and Challenges

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My Own Evolution in Advanced Practice Nursing

- Early work on the Clinical Nurse Specialist
- Began to See Advanced Practice as an Overarching Concept
  - Not just about advanced education
  - Multiple Roles
  - Core Competencies
  - The Importance of a Clear and Consistent Definition
Specialization vs APN

- Specialization
  - Selected concentration in clinical area
  - All nurses are specialized in this sense

- Advanced Practice Nursing Includes, but Goes Beyond Specialization
  - Specialization
  - Practice Expansion
  - Educational Advancement
Stages in the Evolution of Specialties to Advanced Practice Nursing

- Stage I: Specialty Begins to Develop
- Stage II: Specialty Organizes
- Stage III: Pressures Mount for Standardization, including APN level
- Stage IV: Maturity and Growing Interdisciplinarity

(Adapted from Hanson & Hamric, 2003, and Salyer & Frazelle, 2014)
My Fundamental Premises

- Advanced practice nursing is an idea: a concept, not a role – many APN roles.
- To be considered an Advanced Practice Nurse, core similarities must be evident.
- Direct clinical practice is central to APN definition.
  - Some specialties (such as administration, informatics) do not meet this definition.
Fundamental Premises, cont.

- Differentiation of levels of nursing practice is necessary for clarity.

- *All nurses are valuable but we are not all the same.*
Integrative Model of Advanced Practice Nursing -- Elements

- Conceptual Definition
- Primary Criteria
  - Necessary, but not sufficient
- Core Competencies
  - One Central to all the others
  - Each has a definition *unique* to APN practice
- Critical Environmental Elements in APN Environments
  - Must be managed for the APN to succeed
A Definition of Advanced Practice Nursing

Advanced practice nursing is the patient-focused application of an expanded range of competencies to improve health outcomes for patients and populations in a specialized clinical area of the larger discipline of nursing.

Hamric, 2014, p. 71
Primary Criteria of Advanced Practice Nursing

- Graduate education
- Certification
- Practice focused on patient/family
Core Competencies of Advanced Practice Nursing

Fig. 3-3. Core competencies of advanced practice nursing.
Fig. 3-5. Critical elements in advanced nursing practice environments.
<table>
<thead>
<tr>
<th>APN Category</th>
<th>2000*</th>
<th>2004†</th>
<th>2008‡</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total No.</td>
<td>Currently in Nursing (%)</td>
<td>Nationally Certified (%)</td>
</tr>
<tr>
<td>CRNA</td>
<td>29,844</td>
<td>85.7</td>
<td>84.4</td>
</tr>
<tr>
<td>CNM</td>
<td>9,232</td>
<td>85.7</td>
<td>88.4</td>
</tr>
<tr>
<td>CNS</td>
<td>54,374</td>
<td>87</td>
<td>36.5</td>
</tr>
<tr>
<td>NP</td>
<td>88,186</td>
<td>89</td>
<td>74</td>
</tr>
<tr>
<td>Blended CNS-NP preparation (not included in CNS or NP numbers)</td>
<td>14,654</td>
<td>95.7</td>
<td>73.4</td>
</tr>
</tbody>
</table>


Table 3-1. Number of Advanced Practice Nurses in the United States
Why Do We Need APNs?

- To improve care to complex and vulnerable populations, not just individual patients
- To expand access to health care for more people
- To strengthen nursing practice by integrating theory, research and practice-based knowledge
- To improve nurse retention and provide a clinical career path for aspiring clinicians
- To translate research into practice improvements
- To help create ethical environments
- To provide leadership in interprofessional teams
Summary of APN Outcomes

Research

- Increased research on APN care outcomes
  - Each role has evidence of favorable outcomes; quality & quantity growing
  - Two *Cochrane Database* reviews focus on impact of primary are NPs and CNMs

- Evidence that APN care is comparable or superior to other providers
Newhouse, et al., 2011

- Care provided by CNMs and NPs similar to physicians (e.x., similar ED visits and hospital readmissions), and in some ways better (ex., lower C-section rates, improved breast feeding rates)
  - Largest number of studies were of NPs:
    - Improved patient satisfaction and health status, blood pressure control, duration of mechanical ventilation
  - CNS: decrease in LOS and costs of care, high patient satisfaction ratings
- Little data on CRNAs, but similar to MD
<table>
<thead>
<tr>
<th>Outcome Indicator</th>
<th>Study (Year)</th>
<th>Study Design</th>
<th>Focus of Indicator</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Neff et al. (2003)</td>
<td>Quasi-experimental comparison</td>
<td>Population-generic</td>
<td>Significantly improved over control group</td>
</tr>
<tr>
<td>Adverse events, unplanned incidents, including drug reactions</td>
<td>Simonson et al. (2007)</td>
<td>Retrospective comparison</td>
<td>Comparable to anesthesiologists</td>
<td></td>
</tr>
<tr>
<td>Amniotomy rates</td>
<td>Cheung et al. (2011)</td>
<td>Randomized control trial</td>
<td>Population-specific</td>
<td>Significant decreased rates compared with usual care</td>
</tr>
<tr>
<td>Anxiety, depression; mental health status; emotional state</td>
<td>Conner et al. (2003) Krichbaum et al. (2005)</td>
<td>Case study Quasi-experimental repeated measures Longitudinal follow-up study</td>
<td>Population-generic</td>
<td>Decreased over time Significantly better than control group</td>
</tr>
<tr>
<td></td>
<td>Lenz et al. (2004)</td>
<td>Program evaluation</td>
<td></td>
<td>Comparable to physicians</td>
</tr>
<tr>
<td></td>
<td>Moore et al. (2002)</td>
<td>Randomized controlled trial</td>
<td>Comparative to physicians</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neff et al. (2003)</td>
<td>Quasi-experimental comparison</td>
<td></td>
<td>Comparable to control group</td>
</tr>
<tr>
<td></td>
<td>Ritz et al. (2000)</td>
<td>Randomized controlled trial</td>
<td></td>
<td>Comparable to control group</td>
</tr>
<tr>
<td></td>
<td>Ryden et al. (2000)</td>
<td>Quasi-experimental comparison</td>
<td></td>
<td>Comparable to control group</td>
</tr>
<tr>
<td>Anemia clinical practice guideline compliance</td>
<td>Gracias et al. (2003)</td>
<td>Quasi-experimental comparison</td>
<td>Population-generic</td>
<td>Significantly better than control</td>
</tr>
<tr>
<td>Asthma control</td>
<td>Borgmeyer et al. (2006)</td>
<td>Observational</td>
<td>Population-specific</td>
<td>Significantly improved</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>Krein et al. (2004)</td>
<td>Randomized controlled trial</td>
<td>Population-generic</td>
<td>Comparable to control group</td>
</tr>
<tr>
<td></td>
<td>Lenz et al. (2004)</td>
<td>Longitudinal follow-up study</td>
<td></td>
<td>Comparable to physicians</td>
</tr>
<tr>
<td></td>
<td>Litaker et al. (2003)</td>
<td>Randomized controlled trial</td>
<td></td>
<td>Comparable to control group</td>
</tr>
<tr>
<td></td>
<td>Scisney-Matlock et al. (2004)</td>
<td>Randomized controlled trial</td>
<td></td>
<td>Comparable to control group</td>
</tr>
<tr>
<td>Cardiact arrest rates after rapid response team call</td>
<td>Morse et al. (2006)</td>
<td>Observational</td>
<td>Population-generic</td>
<td>Significantly decreased</td>
</tr>
<tr>
<td></td>
<td>Scherr et al. (2012)</td>
<td>Retrospective</td>
<td>Population-generic</td>
<td>Significantly decreased</td>
</tr>
<tr>
<td>Caregiver psychosocial status</td>
<td>Dellasega &amp; Zerbe (2002)</td>
<td>Randomized controlled trial</td>
<td>Population-generic</td>
<td>Significantly better than control group</td>
</tr>
</tbody>
</table>

Table 23-3. Advanced Practice Nurse—Sensitive Outcome Indicators Tested in Practice

Shifting to an International Focus

- Advanced practice nursing has evolved internationally over the past 50 years; rapid evolution now
- United States, Canada, and the United Kingdom are often seen as models
- APN roles are evolving with country- or region-specific differences
"A Nurse Practitioner/Advanced Practice Nurse is a registered nurse who has acquired the expert knowledge base, complex decision-making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which s/he is credentialed to practice. A master’s degree is recommended for entry level."

(ICN:INP/APNN, 2012)
Evolution of NP Role in the Netherlands

- First NP program created in 1997, with 1,373 registered NPs/Nurse Specialists in 2012
- Origin of NP role resulted from lack of medical specialists in hospitals
  - “Supernurses” initially called NPs and now called nurse specialists
  - Trained to take over medical tasks
- Core role clinical expert
  - Six complementary roles are professional, communicator, collaborator, manager, health advocate, and scholar
# Titles for Advanced Practice Nurses

<table>
<thead>
<tr>
<th>Title Given as NP or APN Equivalent*</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse practitioner; certified registered NP</td>
<td>39 (45)</td>
</tr>
<tr>
<td>Advanced practice nurse</td>
<td>15 (17)</td>
</tr>
<tr>
<td>Advanced nurse practitioner</td>
<td>9 (10)</td>
</tr>
<tr>
<td>Clinical nurse specialist or nurse specialist</td>
<td>11 (12)</td>
</tr>
<tr>
<td>Professional nurse, staff nurse, RN, basic nurse</td>
<td>6 (7)</td>
</tr>
<tr>
<td>Expert nurse</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Chief professional nurse with postbasic training in primary health care</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Nurse consultant</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Specialist nurse practitioner</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Primary health care nurse</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Advanced nurse in a specialty</td>
<td>1 (1)</td>
</tr>
</tbody>
</table>

# Specialties (Types) of NPs and APNs*

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Percent of Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community health</td>
<td>76</td>
</tr>
<tr>
<td>Mental health</td>
<td>76</td>
</tr>
<tr>
<td>Hospital, acute care</td>
<td>71</td>
</tr>
<tr>
<td>Specialty</td>
<td></td>
</tr>
<tr>
<td>Disease-specific</td>
<td>67</td>
</tr>
<tr>
<td>Age- or population-specific</td>
<td>57</td>
</tr>
<tr>
<td>Family NP</td>
<td>52</td>
</tr>
<tr>
<td>Geriatric NP</td>
<td>62</td>
</tr>
<tr>
<td>Pediatric NP</td>
<td>71</td>
</tr>
<tr>
<td>Adult NP</td>
<td>62</td>
</tr>
<tr>
<td>Women’s health, midwifery</td>
<td>71</td>
</tr>
<tr>
<td>Other</td>
<td>38</td>
</tr>
</tbody>
</table>

APN International Practice Settings

- Large proportion of NPs/APNs worked in hospitals, community- or hospital-based clinics, and mental health areas (Pulcini et al., 2010)
- High proportion of APNs worked in specialty practices
- Many countries equate APN with NP
APN Role: Nurse Midwifery

- Different history and evolution than other APNs
- Some midwives are not nurses
- Skilled birth attendants have improved maternal and infant mortality (WHO, 2010)
- Differing types and levels of CNM education exist internationally
APN Role: Nurse Anesthetist

- CNRA role common in United States and certain other countries (e.g., France)
- Nurse anesthetists are participating in 80% of all anesthesia in the world and sole providers in 60% of the cases (International Federation of Nurse Anesthetists, 2012)
- Role continues to expand, especially with improved health care technologies and more surgeries being performed
APN Role: Clinical Nurse Specialist (CNS)

- Originated in United States in hospital settings dating back to 1950s; Predates role of NP
- Initial distinction between NP and CNS
  - Primary care practice vs. hospital practice
  - Direct care vs. indirect care
  - Generalist practice in primary care vs. specialty practice based on disease conditions or systems
- International confusion between roles of CNS & NP
  - For example: In Asia, advanced practice started in hospital setting and was not successful in primary care settings
Issues/Challenges Seen in International APN Evolution

- Titling
- Power Differential Between Nursing and Medicine
- Lack of Physician Support for APN Roles
- Lack of Educational Preparation
- Valuing Clinical Practice Expertise
- Infusing Evidence Into Role Development
Issues/Challenges, cont.

- Cultural Norms
- Health Care Delivery System Values
- APN Payment
- APN Regulations and Standards
- High-Quality, Interdisciplinary APN Education
Titling

- For NP and CNS, titling issues have and will continue to affect evolution of APN roles
- Titling language differs from country to country and within countries
- Titling issues lead to role confusion among nurses, patients, and other professions
Power Differential Between Nursing and Medicine

- Nurses in different parts of the world possess different levels of power, authority, and influence.
- Usually nurses have less authority than physicians, but are important in influencing change through their positive patient relationships.
- Low status and lack of high-quality formal education can translate to poor public image of the nurse.
Lack of Physician Support for APN Roles

- Organized medical groups often fail to support APN roles even if individual physicians support their advancement.

- In countries where nursing does not have high status, opposition can be a major barrier to implementation of the roles.
Level of Educational Preparation

- Key component of development of APN roles in any country is level of educational preparation
- Graduate level education is becoming international standard for APN education
- Education for APNs evolving in U.S. with Doctor of Nursing Practice (DNP) degree rapidly increasing
- Need more data on APN education internationally
Valuing Clinical Practice Expertise

Important area for future APN education is the degree to which clinical practice is valued and encouraged at practice level and in educational institutions.
Canada is an example of a country that made significant progress in evolution of NP and CNS roles but has had setbacks and uneven growth.

Evidence proposed in the “PEPPA” framework is a key component for successful introduction of any new role into a country.
Cultural Norms

- Language differences lead to differences in APN roles internationally
  - Most countries with successful APN roles are either English speaking or are bilingual
- Cultural issues are complex and have to do with mores and norms surrounding health and illness
Health Care Delivery System Values

- Health care financing systems create powerful incentives for what care is delivered and who delivers care.
- Depth and breadth of the health care system in a country influences development of advanced practice.
A country’s reimbursement structures dictate how care is paid for and who gets paid.

- In privatized systems such as United States, reimbursement policies have strong influence on which APNs can practice.

- Limited information on reimbursement for APNs outside of United States.

- More information needed on how reimbursement is related to regulation.
APN Regulations and Standards

- In US, state policy is as important as federal policy in reimbursing and regulating APNs
  - US has long way to go to standardize APN practice
- Canada has made efforts to have coordinated approach to APN regulation
- National standards are often needed to ensure that roles are relatively uniform within and across countries
High-Quality, Interdisciplinary APN Education

- Education that leads to an understanding of interdisciplinary practice is essential
- Key component is faculty who are well trained and continue to practice in an APN role
Continued International Development of APN

- Common or similar titling would create more clarity for advancing these roles
- Cultural differences must be honored and celebrated by all APNs
- Goal of expanding APN to improve health outcomes of world populations
  - Evaluating APN outcomes critically important
Continued International Development of APN (Cont.)

- Nurses have special expertise in coordinating care, managing transitions across settings, and focusing on maintaining or improving health status.

- Move toward consistent competencies, common definitions, regulatory clarity, and educational standards can help to remove undue barriers.
What is Your Preferred Future?

- Where are you in in your evolution to advanced practice?
  - Differences in specialist nurse and APN definition, requirements, and practice?
- Alignment with other APN definitions or develop your own to best advance?
- Desirable to standardize across Europe?
“The nursing profession, nationally and internationally, remains at a critical juncture with regard to advanced practice nursing. In each country in which APNs practice, the need to move forward with one voice on this issue is urgent if APNs and the nursing profession as a whole are to fulfill their social contract with the individuals, institutions, and communities we serve”.

- Spross, 2014
I look forward to talking with you and learning from you over the next two days!


ROLE OF NURSING PROFESSION AND APN COMMUNITY

- Define basic, expanded, specialized and advanced nursing roles and scope of practice
- Define standards of care and APN role competencies
- Define a model of advanced practice
- Establish APN education programmes
- Evaluate APN outcomes

1. Define patient population and describe current model of care
2. Identify stakeholders and recruit participants
3. Determine need for a new model of care
4. Identify priority problems and goals to improve model of care
5. Define new model of care and APN role
   - Stakeholder consensus about the ‘fit’ between goals, new model of care, and APN roles
6. Plan implementation strategies
   - Identify outcomes, outline evaluation plan, and collect baseline data
   - Identify role facilitators and barriers (stakeholder awareness of role; APN education; administrative support and resources; regulatory mechanisms, policies, and procedures

7. Initiate APN role implementation plan


Fig. 4-2. PEPPA framework.