EXECUTIVE SUMMARY

On July 23, 2010, the American Academy of Nurse Practitioners Network for Research (AANPNR) and the Fellows of the American Academy of Nurse Practitioners (FAANP) hosted the Nurse Practitioner Research Agenda Roundtable in Crystal City, VA. The Roundtable was attended by designated representatives of all major NP organizations, as well as several relevant nursing organizations and other stakeholders. The purpose of the meeting was to discuss and create a research agenda related to the NP role, and to prioritize critical research issues to guide research efforts over the next five years.

Participants focused their discussion of research priorities within four cross-cutting areas: NP Workforce, NP Policy, NP Practice, and NP Education. Within each of these areas, topics were identified and prioritized through a series of plenary and small-group discussions. Participants also discussed potential barriers and challenges in achieving the agenda, as well as strategies to address these challenges.

The following lists the top three priorities identified in each of the four categories:

NURSE PRACTITIONER POLICY AND REGULATION
Impact of Varying NP Regulatory Environment
Impact of Policy-Guided Practice Models
Engagement in Professional Activism

Nurse Practitioner Workforce
Comprehensive Description of the NP Workforce
Policy and Regulatory Influences on the NP Workforce
Educational Influences on the NP Workforce

NURSE PRACTITIONER PRACTICE
Comprehensive NP Practice Outcomes
Common Elements of NP Practice
Consumer Awareness

NURSE PRACTITIONER EDUCATION
NP Program Variables
NP Preparation Cost
NP Program Participants -- Students & Faculty
NURSE PRACTITIONER RESEARCH AGENDA ROUNDTABLE  
JULY 2010

Nurse practitioners (NPs) have demonstrated high quality healthcare for 45 years. As the demand for access to high quality and cost-effective care along with the visibility of NPs increases, interest is mounting from a wide-range of stakeholders for current data regarding NPs and their practice. Thus, while research has consistently supported the evolution of the NP role, there is a need to ensure ongoing availability of data to support and define advancement of the NP role and to identify mechanisms to support continued research. As the NP role approaches the milestone of 50 years of continuous growth and contribution to healthcare in the U.S., the NP and related nursing community was engaged to identify research priorities for the next five years, as well as strategies to promote implementation of the agenda.

On July 23, 2010, the American Academy of Nurse Practitioners Network for Research (AANPNR) and Fellows of the American Academy of Nurse Practitioners (FAANP) co-hosted the Nurse Practitioner Research Agenda Roundtable in Crystal City, VA. The meeting resulted in the development of a landmark Research Agenda designed to establish a foundation for and advance research activities related to the NP role for the next five years. The 28 Roundtable participants included representatives from all major NP professional societies, several other nursing societies with NP constituents, and additional stakeholders. Participants were selected based on their familiarity with the existing evidence and knowledge regarding NPs. The list of participants and the organizations they represented is provided in Appendix A.

Roundtable discussions concentrated on setting priorities in four crosscutting areas. These areas included NP Workforce Issues, NP Policy & Regulation, NP Clinical Practice, and NP Education. The intent was to identify priorities for research over the next five years.

Additionally, participants addressed the actual purpose of the research agenda, as well as potential challenges in its implementation and strategies to promote implementation of the topics identified. The discussion of potential purpose for creating a research agenda proceeded and informed the topical discussions.

RESEARCH AGENDA PURPOSE

Roundtable participants approached their discussions with the intent of establishing an agenda that would contribute to and strengthen the ability of NPs to meet healthcare needs and policy initiatives. They viewed having one global agenda developed collaboratively by multiple organizations as a means of informing researchers, policy makers, funders, and other stakeholders on essential NP and healthcare research needs. Participants expressed the expectation that the agenda would foster interdisciplinary research, engaging a broad range of individuals with varied expertise in addressing the identified priorities. They further determined that the agenda developed through this process could guide participating organizations’ research agendas,
consistent with their missions and constituents’ needs and interests. The agenda was also seen as a means of increasing research dialogue within the profession.

PRIORITY ISSUES

Participants discussed research priorities in four major, cross-cutting categories. The thread through all four categories was the focus on NPs specifically, with interest in identifying topical issues that would contribute to fulfilling the purpose statements identified above. Priorities were established in each of the four categories through a series of plenary and small-group break-out sessions which included robust discussions. The following review summarizes the top three research priorities in each of the four main categories. The priorities are inter-related and broad, allowing for refinement as specific research projects are proposed and implemented.

NURSE PRACTITIONER POLICY AND REGULATION

Impact of Varying NP Regulatory Environment:
The highest priority in the area of policy and regulation is for studies comparing NP practice among states with varying regulatory environments, i.e. based on statutory variation in independence, collaborations, and supervision. There is a critical need for continued exploration of how, if at all, NP outcomes vary dependent on these requirements or lack thereof. Examples recommended included comparative studies of outcomes in the areas of physiologic, economic, resource utilization, interdisciplinary collaboration, etc.

Impact of Policy-Guided Practice Models:
A second area of priority within the policy category relates to the need to evaluate the NP role and associated outcomes within innovative models of care as policies and incentives are introduced promoting these models. Examples include patient-centered primary care homes, accountable care organizations, and healthcare teams,

Engagement in Professional Activism:
Recognizing the importance of NP activism and advocacy on critical issues, research is needed to explore models of empowering and motivating practicing and student NPs to participate in the process and to identify who or what their influencers are. Related studies would also investigate how NPs influence policy

NURSE PRACTITIONER WORKFORCE

Description of the NP Workforce:
The top priority within the NP Workforce category concentrates on the continuing need to collect accurate and timely data on the NP Workforce, including data on the number of NPs, their location, practice settings, clinical specializations, and patient populations.
**Policy and Regulatory Influences on the NP Workforce:**
A related priority area within the workforce category includes factors related to the variation in federal and state policies and regulations as these impact the distribution, supply, contributions, and function of the NP Workforce. As practice models such as the patient-centered healthcare home, accountable care organizations, and transitional care emerge and evolve, it is a priority to further understand how the NP workforce functions within each of these models, as well as how models influence the demand and distribution of the NP workforce. Longitudinal data in all available areas is necessary for trending and predictions.

**Educational Influences on the NP Workforce:**
Another priority area within the workforce category includes considerations related to NP education, related to the supply and continued competence of NPs. Examples of educational variables impacting the NP workforce include the availability and quality of clinical experiences and preceptors, the qualification of NP faculty, the time to program completion, and how continuing education is acquired and relates to the continuing competency of the workforce.

**NURSE PRACTITIONER PRACTICE**

**NP Practice Outcomes:**
The major research priority within the practice category is for ongoing studies to define and measure NP practice outcomes. Large-scale, multi-site investigations are recommended, to include various populations, settings, acuity levels, models of care, etc. Measurements should include, but not be limited to, those related to cost-savings-benefit analysis, physiological outcomes, resource utilization, patient engagement, and satisfaction.

**Common Elements of NP Practice:**
Although evidence has supported positive outcomes of NP practice, there is continued need to demonstrate the distinct elements of care that NPs bring to their practice and that differentiate them from other healthcare providers and which contribute uniquely to their outcomes. Examples identified include NPs’ approach to patient education, counseling and communication; decision-making processes; and processes within interdisciplinary teams.

**Consumer Awareness:**
It is important to further understand the level of consumer awareness of and factors related to consumer confidence in NPs. In addition to consumer confidence being an outcome of NP care, awareness and confidence are also indicators of demand.

**NURSE PRACTITIONER EDUCATION**

**NP Program Variables:**
As NP preparation evolves to the DNP model, there is interest in exploring variables related to the emerging curricula, teaching modalities, and faculty. For instance, there should be ongoing
analysis the relationship between program variations, within the accepted standards, as they relate program outcomes.

**NP Preparation Cost:**
There is an ongoing need to identify the cost to prepare NPs at the MSN and DNP levels, with assessed return on investment for students, institutions, state and federal funding sources, and other funders/stakeholders, with comparisons against other professions, such as medicine.

**NP Program Participants -- Students & Faculty:**
Related to workforce issues and the future demand for NP care, there is a need to identify the characteristics of those entering NP programs, both from within nursing and as second-career. Discussed program variables also included the faculty, with a need to identify characteristics and factors relevant to NP faculty, including their ongoing education and experience, the influencers in choosing an academic career, and strategies related to faculty retention.

**BARRIERS, CHALLENGES**

Based on the priorities identified, participants discussed potential challenges and barriers to accomplishing the proposed research agenda. The most obvious challenge involves securing funding and other support necessary to complete the research. In addition to financial obstacles, there are inherent challenges associated with the varied degrees of understanding regarding the role of the NP within various models of care, as well as the variation in policies related to their care. Moreover, there are inconsistencies in available data sources, as well as measurement issues related to identifying reliable and valid measures relative to NP practice. Implementation could be further hampered by restricted access to subjects and settings for primary research as well as challenges to recruit practice-based NP participation due to concerns that may come from limited previous participation in direct practice-based research and the pressures of clinical production and time constraints. A significant challenge involves the limited number of databases which identify NPs as providers, so that they are often “invisible” or “embedded” within the data, making NP-specific data points difficult to obtain. Clearly expertise is needed across a wide-range of methodologies and one challenge will involve engaging expertise from a range of disciplines.

**STRATEGIES**

Just as the major issues identified as research priorities were cross-cutting with significant overlap between categories such as policy and practice, the strategies identified by participants to promote achievement of the research agenda were often directed towards multiple challenges.

One key set of strategies involved creating an environment supportive of NP-conducted research. Participants stressed the importance of education to develop research skills by NPs, including interdisciplinary research methods. Similar strategies involved engaging both practicing and
student NPs in implementing research, including reframing questions to have a quality or practice improvement focus and identifying feasible projects to measure outcomes within practice sites.

Development of research partnerships and collaborations was identified as an important strategy. Partnerships and collaborative models to engage participants from academic centers in projects involving practicing clinicians will enhance discussion and efforts between academia and practice in addressing measurement, methodology, and analysis issues. Moreover, recognizing limitations in resources, partnerships and collaborative were identified as a means to avoid unnecessary redundancy in efforts, while enhancing both the funding and implementation of priority projects. Participants discussed the need for organizations to support the proposals and funding efforts of other organizations and of individual researchers who presented well-designed plans with potential to contribute to the research agenda. Partnerships between participating organizations were encouraged, as well as those with agencies such as the National Center of Health Statistics.

Participants stressed the need to better to use existing large databases as data sources, as well as for advocating that databases be designed to identify NPs providers. Other data source strategies involved data collection from electronic health records, particularly for outcome studies. Participants further discussed the strategic need to identify those outcomes that were most sensitive to NP care, as well as to pursue consistent measures related to these outcomes. They called for promoting multi-setting and longitudinal studies using consistent, valid, and reliable measures. In addition to physiological measures, the need for outcome driven projects with focus on cost, quality, and savings was raised several times.

As demonstration and translational projects are pursued, participants voiced the importance of ensuring that protocols be based on rigorously tested and evidence-based recommendations. In this way, studies will contribute to advancing the science related to the recommendations, while demonstrating NP outcomes and roles.

Participants proposed disseminating information about the proposed research agenda widely. Dissemination efforts should be designed to reach beyond the NP community to potential funders, policy makers, health economists, workforce researchers, the public, and other stakeholders. DNP students were further identified as a significant audience for the agenda, as they present a sizeable resource through which to contribute to the translational and demonstration projects described.

**NEXT STEPS**

Participants expressed the advantage of having the collective focus of many on pursuing and fostering projects designed to fulfill the identified research agenda through collaborative projects, when possible. It was proposed that participants share this document within their organizations with the intent of engaging each organization in establishing their own strategies to promote supporting the agenda. For instance, organizations might establish their own strategic research agendas, which would include opportunities for collaborative activities. In this way, each
organization would determine their potential to contribute to the achievement of the proposed agenda, within the focus of their missions, resources, and strategic initiatives.

Participant organizations should use their influence to promote the agenda through their various means to encourage a broad range of researchers, funders, and policy-makers to acknowledge and play a part in ensuring its implementation. Organizations should identify the aspects of the agenda that are most pertinent to various contacts and stakeholders, in order to garner interest in and support of assisting in its achievement.

It was proposed that a process be designed to monitor progress towards achievement of the agenda and that the meeting host organizations serve as a central repository for tracking progress, cataloging related projects, and informing other organizations regarding movement in this effort. It was further suggested that the organizations seek opportunities to formally discuss progress on an annual basis.

SUMMARY

The NP Research Agenda Roundtable provided a unique opportunity for participants to explore the advantages of a shared research agenda and to identify priority topics in the overlapping and cross-cutting areas of NP policy and regulation, NP workforce, NP practice, and NP education. The major areas of recommendations include that research be promoted to ensure studies designed to investigate:

- The up-to-date description of the NP workforce including numbers, specialties, practice settings, and geographic distribution
- The impact of variations on NP regulatory environment on the NP workforce and NP practice
- The impact of policy-guided, innovative practice models on the NP workforce, as well as NP practice
- The influence of educational program variation on the NP workforce and practice environment
- The outcomes of NP practice as measured through multisite, longitudinal demonstration projects
- Identification of the distinct elements of NP practice
- Consumer understanding and awareness of the NP role
- The existing NP program variation in curricula, faculty, and student characteristics.
APPENDIX A: NP RESEARCH AGENDA ROUNDTABLE PARTICIPANT LIST

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