NURSE PRACTITIONER RESEARCH AGENDA ROUNDTABLE

FELLOWS OF THE

AMERICAN ASSOCIATION OF NURSE PRACTITIONERS

INVITATIONAL THINK TANK

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On October 9, 2015, the Fellows of the American Association of Nurse Practitioners (FAANP) hosted the second *Nurse Practitioner Research Agenda Roundtable* in Washington, DC. Twenty *Roundtable* participants represented a number of nurse practitioner (NP) stakeholder organizations (see Appendix) and were selected based on their knowledge of the existing body of knowledge regarding NPs. The purpose of the *Roundtable* was to revisit and revise the 2010 *NP Research Agenda** created in 2010 (FAANP, 2010). During a sequence of robust facilitated discussions, participants clarified and updated the *Agenda*, highlighting critical research priorities for the next five years, as well as strategies to promote awareness and implementation of the Roundtable recommendations.

2015 marked the 50th anniversary of the nurse practitioner (NP) role, a milestone commemorated by the over 205,000 NPs in the U.S. A wide range of stakeholders continue to seek accessible data and research concerning NPs, their practice, and their outcomes. As one *Roundtable* participant noted, while a solid body of knowledge demonstrates high quality care and contributions by NPs, there is a continual need to "dig deeper" as variables such as the healthcare environment, consumer healthcare needs, practice models, and the number of NPs evolve. Thus, while research has consistently supported the 50-year evolution of the NP role, there is a need promote ongoing rigorous research designed to describe the NP role as part of the overall U.S. healthcare milieu. The purpose of this paper is to capture the essence of the *Roundtable* participants' discussion and provide guidance for research based on their recommendations.

Research Agenda Purpose & Guiding Tenets

Roundtable participants briefly discussed and affirmed the existing body of knowledge on NPs and their outcomes and contributions in the healthcare system. While it is beyond the scope of this document to review the research disseminated in the preceding five-year period, *Roundtable* participants focused briefly on those studies published since 2015 and the ongoing demand and need for continued research in this area. In doing so, they identified the purpose of the 2015 Research agenda to:

> guide research by and about NPs, providing a broad range of stakeholders with a unified set of priorities for continued research on factors impacting NPs and the promotion of access and quality of healthcare. Stakeholders include, but are not limited to NPs, consumers, policy-makers, health services researchers, and numerous other members of the healthcare environment and research communities.

The participants identified tenets to frame their discussion. Their over-arching and fundamental tenet was that NPs are part of the overall healthcare, not isolated healthcare providers. As such, while Roundtable discussion focused on NPs, their intent was to guide research of the NP role, position, outcomes, and contributions <u>within</u> the complexities of the U.S. healthcare system. Other tenets:

- It is not possible to accurately evaluate U.S. healthcare outcomes without measuring the influence of NPs.
- Large healthcare databases, regardless of the source, must identify NPs and allow for measurement of their outcomes.
- Researchers investigating evolving and emerging healthcare trends must ensure that baseline and formative data on NPs is captured
- NP research should include both quantitative and qualitative methods.

Matrix of Priority Issues

Participants discussed research priorities in four major and cross-cutting categories ultimately impacting healthcare outcomes and NP practice. These included the impact of:
- policy and regulation
- varied practice models
- NP workforce distribution and characteristics
- educational models

The thread interweaving all four categories was the focus on NP practice as it contributes to broader healthcare access and outcomes.

A series of facilitation plenary and small-group break-out sessions focused on priorities within the four categories. The following summary illustrates the inter-related nature of the categories and the priorities identified.

Policy and Regulation

Policy decisions at the federal, state, and local levels affect NP practice outcomes. Of these, the top priority is research investigating how federal policy affect NP outcomes. Federal policies impacting NP practice range from national reimbursement strategies to pilot healthcare initiatives and the consequence of these programs on NPs and their aggregate outcomes is significant. Unfortunately, data collected through federal healthcare programs fails to consistently identify NP providers, making it impossible for researchers to investigate the consequences of policy change on the growing NP population and, ultimately, measurable clinical and economic outcomes. NPs are a growing constituent of care providers in a myriad of practice settings and clinical specialties, so that evaluation of the outcomes associated with federal policies is only valid when NPs are included and identifiable.

Examples of federal policies discussed included: pilot healthcare initiatives, programs to incentivize clinicians and facilities for better healthcare outcomes (e.g. those frequently labelled as "pay for performance" or "value-based purchasing") and various reimbursement policies excluding coverage of NPs performing actions within their scope of practice. Research comparing outcome between providers, including NPs, and/or with the addition of providers into the mix would help understand the impact of policies and initiatives on healthcare efficiencies, clinical outcomes, and cost.

While state NP practice environments vary significantly, there is no full understanding of how inter-state regulatory differences affect NP workforce distribution, NP practice patterns and opportunities, consumer access to healthcare, and clinical and economic outcomes. *Roundtable* participants identified relevant research as a high priority, as well as the need for comparable, accessible data between states with different regulatory environments. They emphasized the need for reliable and valid data to be available and measured as state regulatory atmospheres continue to evolve to allow for understanding the outcomes of these changes.

Beyond regulations and policies at the federal and state level, localized policies of healthcare payer organizations and healthcare employers impact NPs. Research designed to measure the outcomes associated with these localized policies as they relate to the ability of NPs to contribute to meeting the overall objectives of these organizations is needed.

Practice Models

It is increasingly important to understand how different care delivery models impact NP practice affect their and outcomes, including how state-specific regulatory restrictions influence the opportunity for NPs to participate in various practice models and influence practice-related factors such as role satisfaction, workforce distribution, and practice efficiency--all of which influence the NPs' interest in varied practice models and, ultimately, their contributions to access, clinical and economic outcomes, and more. Within this area, research is recommended on the impact of full implementation of the Consensus Model, which has major implications for NPs, their practices, and their outcomes.

The influence of institutional policies on NP outcomes can be profound and research is warranted in this area. For instance, it is not unusual for institutional privileging and/or payer credentialing of NPs to be more restrictive than a state's authorized scope of practice. When hospitals elect to limit NP admission and/or visiting privileges or require documented oversight by physicians or payers restrict NPs through the credentialing process, the scope of practice is effectively limited with potentially significant consequences. Research is needed to measure the impact of these local policies on NP practice models, outcomes and efficiencies.

Finally, as new practice models emerge, related measurement should include NP providers and associated outcomes. Examples of emerging practice models include integrative care, virtual or technology-based encounters, team-based care, and retail or convenience care. Variations in how models are operationalized can impact NP practice and data must be available to understand how NP practice in these models contributes to access, as well as to clinical and cost outcomes.

Education

NP education is competency based and has evolved with time as healthcare and the healthcare environment have become increasingly complex. As with policy and practice changes, research is needed to understand the influence of evolving or innovative NP academic training and subsequent continuing education on practice and outcomes. In addition to increasing educational entry-level requirements for NP practice over time, recent educational innovations have included growing availability and integration of technology-assisted delivery methods and high fidelity clinical simulations in training. The top priority identified was for research to measure how outcomes such as critical thinking and diagnostic reasoning, as well as program quality, satisfaction, and cost effectiveness are influenced by different educational models, depending on the amount and/or type of simulated experiences, online or/or asynchronous delivery, and integration of interprofessional activities.

Similarly, there is a priority to understand how these same types of educational factors influence program outcomes such as preparation for practice, self-confidence, and readiness for and comfort with full scope of practice by new NPs

A third priority for educational research involved understanding the influence of varied educational models in creating or nurturing leadership skills amongst NP graduates. This is an increasingly important outcome of educational preparation due to the progressive need for all clinicians to successfully participate in interprofessional teams, with team leadership alternating based on patient needs.

Workforce

Within the category of NP workforce research, the top priority is for a national NP database including the universe of individuals prepared in the NP role and identifying each NP with a consistent and enduring individual identifier useful in a variety of other databases. Such a database and identifier would support identification of NP claims data, clinical outcomes, quality measures, and practice history. Although databases exist, there is not a single, universally accepted NP practitioner number that is useful for research purposes. There also is not one database of NPs that has been vetted by critical stakeholders, is accepted as the "gold standard", and which is designed specifically to protect those individuals included in the dataset. Moreover, there should be a process through which state boards of nursing or educational programs contribute to the basic dataset, with clinician permissions.

As second priority involved continued research designed to identify current and projected gaps in the NP workforce. Such research would guide priorities for the preparation of the future NP workforce. While recent reports have been published, they are often based in limited datasets (see above). As the healthcare environment changes, predictions often are based on outdated assumptions.

It is critical to understand how changes the previously mentioned categories (policy, practice models, and education) influence and/or leverage the NP workforce. It is important to understand what factors cultivate an environment that promotes and sustains continued growth and distribution of the NP population to contribute to healthcare access in varied settings.

Summary

In 2010, the AANP Fellows co-hosted in the first NP Research Roundtable, in which specific topical research priorities were identified. In 2015, the AANP Fellows hosted a second Roundtable in which the research agenda was revisited. While the robust discussions included a range of focused research topics, the results of the second Roundtable were more general in nature, as the discussants acknowledged the need for broader recommendations concentration on fundamental needs applicable as changes occur in the categories of policy, practice models, research, and workforce. Moreover, there was an admonition that NP research should be consistently considered within the broader context of the U.S. healthcare environment. The following figure displays the resulting recommendation that NP outcomes should be the central focus of NP research, with efforts to consider the impacts of variations with the areas of Policy & Regulation, Practice Models, Education, and Workforce as singular and inter-related influencers.

FAANP (2010). Nurse practitioner research agenda: July 2010. Accessed at URL. https://www.aanp.org/images/documents/fellows/NPResearchRoundtable.pdf

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