

Is it Time for the 4th P in Nurse Practitioner Education? Physical Assessment, Pharmacology, Pathophysiology, and Procedures: A Systematic Review.

Marianne K. Schallmo, DNP, APRN, ANP-BC, Clinical Assistant Professor, Purdue University, Hammond, Indiana, Jonas Scholar 2016-2018

Darryn W. Dunbar, DNP, APN, CNM, NEA-BC, Nursing Faculty, Stratford University, Falls Church, Virginia, Jonas Scholar, 2018-2020

Timian M. Godfrey, DNP, APRN, FNP-BC, Clinical Assistant Professor, University of Arizona, Tucson, Arizona, Jonas Scholar, 2018-2020

Rita D'Aoust, PhD, ANP-BC, CNE, FAANP, FAAN, Associate Dean for Teaching and Learning, Johns Hopkins University School of Nursing, Baltimore, Maryland

Objectives

- Identify the gap between primary care Nurse Practitioner (NP) education preparation and current practice
- Examine current approaches in NP education programs for advanced diagnostic skills and procedures (ADSP)
- Discuss implications for curricular change policy and guidelines

Background

- The Bureau of Labor Statistics Occupational Outlook Handbook identifies there is a 36% increase in demand for NPs from 2016-2026¹
- Physician shortages, an aging population, and insurance expansions contribute to the increased need for primary care NPs in the U.S.²
- Consensus document requires core APN (advanced practice nurse) education include the 3Ps but does not currently include the 4th P, Procedures
- The AACN Essentials and NONPF competencies provide a foundation for APN education and competencies to help prepare APNs to work to their full scope of practice
- Advances in state practice acts reflect increase in autonomous practice
- Procedural training and diagnostic interpretation are core competencies of advanced practice nursing
- In practice, > 93% of all NPs order, perform, and interpret lab tests, x-rays, EKGs, and other advanced diagnostic studies regularly
- Over 26% perform procedures regularly
- Many NPs feel unprepared to perform full scope practice at graduation
- It is essential that APNs work to their full scope

PICOT

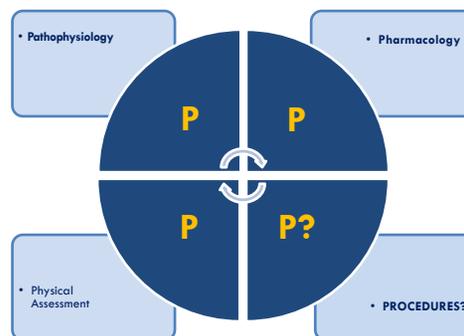


Question: Among primary care NPs, does current program curriculum align with current procedures, skills & performance in the clinical setting, with competent, independent skill level

Systematic Review of the Literature

- Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines followed
- Literature search consultation with JHU Welch Medical Informaticist
- Data bases: PubMed, Cochrane, Scopus, CINAHL, Embase
- Inclusion and exclusion criteria
- Covidence screening and data extraction software utilized
- Protocol: 2 reviewers title and abstract
 - Tie
 - 2 reviewers full text
 - Included study summary table
- 9 articles reviewed (all from U.S.)
 - 8 descriptive survey design
 - 1 utilized actual claims data for analysis
- Due to limited statistical analysis in selected studies, meta-analysis was not completed

Intra-Disciplinary PhD/DNP Project



Results

Two common themes emerged:

Education

- Perception of importance to teach during initial education program
 - Faculty (3 studies)
 - State level professional organization (1 study)
 - Procedure taught in program (5 studies)

Employment

- Frequency of procedures performed
 - Self-reported ADSP in clinical practice (2 studies)
 - Actual ADSP in clinical practice → billing claims (1 study)
- NP Perceptions about procedures performed
 - Importance of ADSP skill on the job (2 studies)
 - Need for additional training post-graduation (1 study)

Conclusions

- There is scant research on the current state of educational preparation of ADSP for APNs
- Findings indicate that primary care NP programs are not teaching all the procedures that program directors found to be important
- The studies provide implications for APN educators regarding the need to review the scope of ADSP training in APN programs
- Educating APNs about ADSPs should be congruent with those regularly used in clinical practice
- A survey of primary care NPs regarding the scope and depth of their education, practice and competency in ADSP preparation at graduation is critical to determine whether additional guidelines relative to a "4th P" is indicated for APN education
- One strategy may be to offer a structured approach for minimal ADSP education for all NP curricula. It is important to differentiate cognitive competency (knowledge) from clinical application competency in order to ensure that primary care NP graduates are better prepared to meet today's practice realities



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