

# Hot Topics in Nurse Practitioner Clinical Education: An Evidenced-based Review

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## Introduction

Clinical competence is the core of nurse practitioner (NP) practice. High quality clinical education is crucial to the development of NP competence. One survey conducted at a national NP conference revealed that only 10% felt well prepared after completing their NP education while 51% felt only somewhat or minimally prepared (Hart, 2006). NP educators need to consider and apply available evidence to improve student outcomes and change outdated requirements.

### Reference

Hart, A.M. & Macnee, C.L. (2007). How well are nurse practitioners prepared for practice: Results of a 2004 questionnaire study. *Journal of the American Academy of Nurse Practitioners* ,19, 35–42

## Purpose

To present controversial issues related to clinical preparation of NPs. Evidence on the four issues will be presented and discussed, including: registered nurse (RN) experience prior to NP preparation, requirements for a minimum number of hours of student clinical practicum, use of simulation to supplement or replace clinical practica, and incorporation of interprofessional education (IPE) in order to produce graduates who are ready to create interprofessional practice.

## Conclusions

A competency approach may yield better post-graduate clinical competencies. However, there is a critical need for better quality evidence-based support for NP clinical education.

## Registered Nurse Requirements

### Background

Initially, admission to NP programs required at least 2 years of professional nursing experience. However several years ago, NP programs began offering admission to highly qualified students immediately after graduating from their initial nursing education. Acute care NP programs are the notable exception to this trend. Advocates for so called ‘direct entry’ from the BSN to the MSN argue that the requirement for RN experience is an outdated notion that they are just as successful in certification examinations after graduating. Opponents argue that those without RN experience are weak clinically and lack the clinical judgment and confidence that is forged in practice.

### What is the evidence?

Most existing studies were conducted in the 1980’s and early 1990’s and focused on academic performance using grade point averages, as an example. The most recent study published was published almost 10 years ago and was a cross-sectional correlational study examining duration of prior RN experience and level of NP clinical skills in practice. Data based on 116 NPs suggested no significant correlation between RN experience and NP skills while the same data from their collaborating physicians suggested a negative correlation.

### Reference:

Rich, ER. (2005). Does RN experience relate to NP clinical skills? *The Nurse Practitioner*, 30(12), 51-56.

Rich, ER et al. (2001). Assessing successful entry in nurse practitioner practice: a literature review. *Journal of the New York State Association*, 32(2), 00287684

## Clinical Requirements

### Background

Accreditors require NP programs in the US to provide students with a specific minimum number of hours of supervised direct patient care during which they can practice clinical skills. Students preparing for practice with a single age group population (e.g. pediatric NPs who care only for children) must complete at least 500 hours of supervised clinical practicum. Students preparing to provide care across age groups (e.g. Family NPs who care for adults, pregnant women, and children) are expected to complete more than 500 hours of supervised clinical practicum. The rationale for requiring 500 hours, rather than some other number has been the focus of much discussion at recent meetings of NP faculty. The number of clinical practice hours vary among schools, and can range from 500 to close to 1000 for a single age group population.

### What is the evidence?

National surveys supported school requirements varied between 500 and 1000 hours but that few schools required only 500 hours while most required between 550 and 750 hours. However, not all of these hours were direct care. One retrospective, nonexperimental correlational study found that the 500 clinical hours correlated to expected competencies but students were not exposed to some of the patient diagnoses that were part of the competencies.

### References:

Bray, CO & Olson, KK. (2009). Family nurse practitioner clinical requirements. Is the best recommendation 500 hours? *Journal of the American Academy of Nurse Practitioners*,21, 135-139.

Hallas, D. et al. (2012). Evaluation of the clinical hour requirement and attainment of core clinical competencies by nurse practitioners. *Journal of the American Academy of Nurse Practitioners*, 24, 544-553

## Clinical simulation.

### Background

Simulation is a commonly used educational strategy in nursing education and practice. It provides learners an opportunity to apply critical thinking and clinical skills to complex situations without exposing real patients to the risk associated with an inexperienced provider. NP accreditation criteria do not allow simulation to replace required practice time. However, there is growing interest in greater use of simulation to supplement NP preparation. This strategy has been suggested during a time when it is increasingly difficult to secure high quality precepted clinical placements for NP students. Some programs are considering the use of objective structured clinical examinations (OSCE) to assess student competency.

### What is the evidence?

Research conducted with NP students is growing but at this time, primarily exists for acute care NPs – the one specialty that continues to require prior RN experience. Most studies are descriptive only. We found two one-group pre-post and two randomized controlled trials. Outcomes were limited to student knowledge, confidence or satisfaction. What does exist for other NP students suggests that clinical simulation is most effective in the beginning of the educational program.

### References

Corbridge, S. J et al. (2010). Online learning versus simulation for teaching principles of mechanical ventilation to nurse practitioner students. *International Journal of Nursing Education Scholarship*, 7, article 12.

Corbridge, S. J. et al. (2008). Using simulation to enhance knowledge and confidence. *The Nurse Practitioner*, 33, 12-13.

Rosenzweig, M. et al. (2008). Patient communication simulation laboratory for students in an acute care nurse practitioner program. *American Journal of Critical Care*, 17, 364-372.

Tiffen, J. et al. (2011). Patient simulator for teaching heart and lung assessment skills to advanced practice nursing students. *Clinical Simulation in Nursing*, 7, e91-e97.

## Interprofessional education.

### Background

Schools that prepare health care professionals are being pushed to develop and increase the use of IPE. IPE requires that students from at least two different health professions learn together during their pre-licensure professional education. NP faculty struggle to form alliances with faculty from other health care professions and to create meaningful opportunities to integrate IPE into sometimes rigid curricula.

### What is the evidence?

The predominance of the research that includes NP students targets attitudes towards and perceptions of IPE. A notable exception is one study of medical residents, NP and pharmacy students focusing on diabetes care that compared interprofessional team care versus medical residents’ care alone. Team care was observed to be more effective in improving processes of care such as hemoglobin A1c measurements.

### References:

Thistlewaite, J & Moran, M. (2010). Learning outcomes for interprofessional education: literature review and synthesis. *Journal of Interprofessional Care*, 24(5), 503-515.

Reeves, S. et al. (2013). Interprofessional education: effects on professional practice and healthcare outcomes. *Cochrane Library*, issue 3



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