

Innovative Models for Clinical Education of Nurse Practitioner Students: A Summary of the Literature

Curricular Leadership Committee

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Need for Exploration of Innovative Clinical Models

- Currently, educational standards clearly emphasize:
 - direct observation of clinical performance of students
 - face-to-face population-focused care
 - approved clinical settings
- National shortages of qualified preceptors and clinical placements to adequately support NP students in direct patient care teaching environments
- Aligns with the mission and vision of the NONPF to be the leader in quality NP education and advance innovative models that support NP education

Topics Reviewed – Specific to Clinical Education

1. Telehealth
2. Virtual reality
3. Interprofessional education
4. Objective structured clinical examinations
5. Competency assessment through simulation verses direct clinical observation
6. Clinical residencies

Telehealth

- Lack of research
 - 4 articles (1 related to RN clinical)
- Need for training and experiences in telehealth for faculty and students
- With the anticipated future increase in telehealth, should be incorporated into NP education

Virtual Reality

- Fewer studies
- 1 study examined the use of Second Life with FNP students
- Felt to be more appropriate for beginning students in simple, acute patient encounters
- 1 study explored the integration of an EHR into hi-fidelity simulations
 - Valuable to teach students how to navigate the EHR and extract important data

Interprofessional Education

- Few studies (2; 1 single group pre/post and 1 RCT)
- Dentistry, medicine, pharmacy, social work, respiratory therapy and physician assistants along with NPs
 - Improved attitudes towards interprofessional teams, with the exception of the physician's shared role
- Computer-based virtual reality with SP
 - No evidence that groups "learned together"

Objective Structured Clinical Examinations

- 4 studies reviewed
- Useful for clinical competency evaluation
- Helpful to identify areas in curriculum in need of refinement
- Better prepared students
- Resource-intensive
- 1 study found higher satisfaction in students and preceptors satisfaction with student skills
 - Considerations for "when" to use OSCEs in curriculum

Competency Assessment: Simulation vs. Direct Clinical Observation

- Scarcity of literature
- Simulation performance ≠ direct observation performance
- Various skills (interviewing, assessment, differential diagnosis) were enhanced with simulation

Simulation

Formative and summative evals
Longer retention of skills
Reproducible and standardized

Direct Clinical Observation

Can be biased and subjective
Expensive
Time limitation issues

- Lack of evidence to support use of simulation as sole means of evaluating competency

Clinical Residencies

- Lack of research
- No outcomes data
- Descriptive articles only of various within program and post-program "residencies"
 - 1 within post-baccalaureate DNP
 - 2 within post-Master's DNP
 - 1 post-program within VA
- Further discussion, clarification and outcomes data required

Conclusion

- More research evaluating the outcomes of various innovative models is needed

Expansion of valid clinical options to support student development of NP competencies will depend on continued research and resolution of standards to support varied evidence-based models of clinical education.