

BACKGROUND

Gap Analysis:

- The doctorate of nursing practice (DNP) curriculum for the Adult Gerontology program was evaluated to determine if key competencies were addressed.

Review of Key Competencies:

- Graduate-Level Quality and Safety Education for Nurses (QSEN) (AACN, 2012) competencies
- Doctorate of Nursing Practice Essentials* (AACN, 2006)
- Adult Gerontology Nurse Practitioner and Clinical Nurse Specialists Core Competencies (2010, 2012)

Opportunity:

- Develop quality and safety competencies in DNP students
- Develop confidence to lead quality improvement (QI) initiatives
- Integrate interprofessional collaborative practice (IPEC, 2016)

COURSE DESIGN

15 week on-line course

Course objectives align with key competencies:

- Evaluate national trends and factors influencing the quality and patient safety mandates for aging adults
- Analyze the impact of physical, psychological and social aging processes on quality and safety issues
- Examine the quality and patient safety priorities specific to the aging adult
- Examine how models of interprofessional collaboration are employed to create cultures of patient safety and quality
- Analyze current models, processes, and tools of quality improvement and patient safety
- Apply methodological approaches to address a quality improvement and/or patient safety issue for the aging adult

Key course components:

- Integration of quality and safety with gerontological content
- Interprofessional collaboration (IPEC, 2011)

Instructional strategies:

- Group QI case analysis
- Scholarly writing activities
- Geriasims (Iowa Geriatric Education Center) - interactive simulation focused on common geriatric syndromes
- Culture of safety analysis – discussion board

PURPOSE

The purpose of the *Quality and Safety in the Aging Adult* course was to prepare Adult-Gerontology APRN-DNP students as leaders to promote quality and safety outcomes for aging adults.

Evaluation Plan

- Perception of **preparedness** and **confidence** with quality and safety as measured by a pre-post 20-item Quality and Safety survey
- Self-assessment of development of graduate QSEN knowledge, skills, and attitudes
- Number of students implementing DNP projects addressing quality and safety issues related to improving care of older adults

Quality and Safety Survey Development

Quality and Safety Survey:

- Developed a 20-item survey with a 5-point Likert scale
 - 12-item preparedness subscale
 - 8-item confidence subscale
- Items based on selected Graduate QSEN competencies (Quality, Safety, Teamwork/Collaboration) that aligned with course objectives.

Reliability testing:

	Chronbach's alpha
Quality & Safety Survey N of items = 20	.923
Preparedness subscale N of items = 12	.907
Confidence subscale N of items = 8	.847

RESULTS

Perceptions of preparedness and confidence with meeting QSEN quality and safety competencies

	Pre-test – Yr. 1 N= 27	Post-test Yr. 1 N=27	Pre-test Yr. 2 N= 30	Post-test Yr. 2 N = 29	Pre-test Yr. 3 N= 40	Post-test Yr. 3 N = 38
Preparedness	$\bar{X} = 2.76$	$\bar{X} = 3.70$	$\bar{X} = 2.74$	$\bar{X} = 3.46$	$\bar{X} = 2.62$	$\bar{X} = 3.73$
Confidence	$\bar{X} = 2.66$	$\bar{X} = 3.50$	$\bar{X} = 2.39$	$\bar{X} = 3.50$	$\bar{X} = 2.39$	$\bar{X} = 3.54$

Table 2: Tests of Between-Subject Effects

	df	Mean Square	F	p value
Year	2	281	1.493	<.227
Pre/Post	1	44.665	237.736	<.000

The three classes were comparable across the three years. No significant differences were found between the pre-test and the post-test means for each class across the three years.

There were statistically significant improvements ($p < .000$) between pre and post scores across all three years. Students felt more prepared and more confident with meeting QSEN quality and safety competencies upon completion of the course.

Top 3 “Preparedness” subscale items with greatest improvement:

- Analyze potential and actual impact of national patient safety resources, initiatives, and regulations on systems and practice (Safety Competency)
- Analyze factors that create a culture of safety and a “just culture” (Safety Competency)
- Describe nationally accepted quality measures and benchmarks in the practice setting (Quality Competency)

Top 3 “Confidence” subscale items with greatest improvement:

- Select and use quality improvement tools to achieve best possible outcomes (Quality Competency)
- Use existing resources to design and implement improvements in practice (e.g. National Patient Safety Goals) (Safety Competency)
- Use quality indicators and benchmarks for improving system processes and outcomes (Quality Competency)

Interest in implementing a DNP project addressing issues related to improving care of older adults.

	2015	2016	2017	Total
AGPCNP	4/9 (2 in LTC)	5/11 (2 in LTC)	12/16 (6 in LTC)	21/36 (58%)
AGACNP	13/16	5/17	7/21	25/54 (46%)

Conclusion

Based on the success of this course and positive student outcomes, integrating quality and safety with gerontology content is an effective strategy to prepare advanced practice nurse leaders to promote quality and safety outcomes for aging adults.

This course offers a successful model for innovative DNP education of Adult-Gerontology APRNs.