

BACKGROUND

Gap Analysis:

- The doctorate of nursing practice (DNP) curriculum for the Adult Gerontology program was evaluated

Review of Key Competencies:

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

Opportunity:

- The gap analysis identified need to include key content specific to older adults and quality and safety in the adult-gerontology APRN DNP curriculum aligning with key competencies

Innovative web-based course:

- Quality and Safety for the Aging Adult was developed adult-gerontology APRN DNP curriculum
- Integration of gerontology and quality and safety content
- Interprofessional collaboration (IPEC, 2011)
- System perspective across the continuum of care

COURSE DESIGN

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

Varied instructional strategies used:

- Small group work to promote collaborative learning
- Scholarly writing activities
- GeriSims (Iowa Geriatric Education Center) - interactive simulation focused on common geriatric syndromes
- Reflection on development of graduate QSEN knowledge, skills, and attitudes

PURPOSE

Evaluate the effectiveness of the *Quality and Safety for the Aging Adult* course to prepare Adult-Gerontology APRN/DNP students as leaders in promoting quality and safety outcomes for aging adults.

Evaluation Plan

- Knowledge and positive perceptions of aging as measured by the "What's Your Aging IQ" quiz (NIA, 2010)
- Perception of **preparedness** and **confidence** with quality and safety as measured by a pre-post 20-item Quality and Safety survey
- Number of students implementing DNP projects addressing issues related to improving care of older adults

Quality and Safety Survey Development

Quality and Safety Survey:

- Developed 20-item survey with a 5-point Likert scale
 - 12- item preparedness subscale
 - 8-item confidence subscale.
- Items based on selected Graduate QSEN competencies that aligned with course objectives

Reliability testing:

Chronbach's Alpha	
Quality & Safety Survey	.923
Preparedness subscale	.907
Confidence subscale	.847

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RESULTS

Knowledge and positive perceptions of aging as measured by the "What's Your Aging IQ" quiz (NIA, 2010)

Average score was 26/28 points (range 20 - 28). Answers and rationale provided with the on-line interactive quiz, so not used as a post-test. Discussion on incorrect answers was valuable to explore students' pre-conceived perceptions or incorrect information about older adults.

Perceptions of preparedness and confidence with meeting quality and safety competencies

Table 1: Pre-Post - Improvement over time						
	Pre-test - Yr. 1	Post-test Yr. 1	Pre-test Yr. 2	Post-test Yr. 2	Pre-test Yr. 3	Post-test Yr. 3
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. There were no significant differences among the pre-test means and the post-test means for the three classes 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 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
- Analyze factors that create a culture of safety and a "just culture"
- Describe nationally accepted quality measures and benchmarks in the practice setting

Top 3 "Confidence" subscale items with greatest improvement:

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

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%)

Application to APRN Education and Practice

Based on the success of this course and positive students outcomes, integrating quality and safety with gerontology content is an effective strategy for preparing advanced practice nurse leaders in promoting quality outcomes in the aging adult population.

This innovative course addresses DNP, Gerontology, Graduate QSEN, and IPEC competencies and can be used as a model for DNP education of Adult Gerontology APRNs.