

# Interprofessional Collaboration to Advance Nursing Education and Research

Tamatha Arms, Laurie Badzek, Diane Pastor, Victoria Traynor and Patricia White



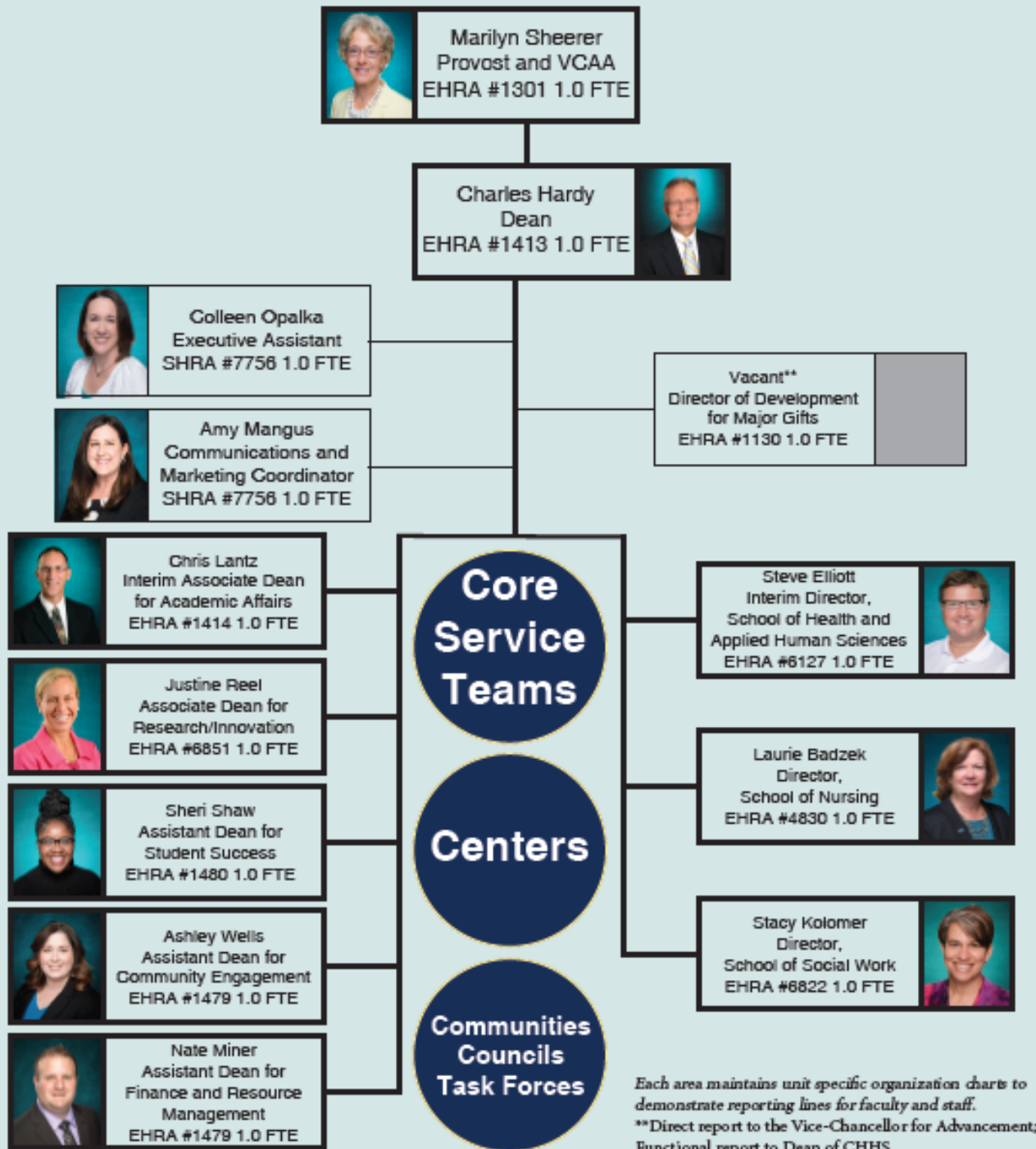
UNIVERSITY *of* NORTH CAROLINA WILMINGTON

# Symposium Objectives

1. Integrate interprofessional education into nursing curriculum.
2. Recognize how interprofessional collaboration can be a catalyst for change in nursing education and research.

# About Us





Each area maintains unit specific organization charts to demonstrate reporting lines for faculty and staff.  
 \*\*Direct report to the Vice-Chancellor for Advancement;  
 Functional report to Dean of CHHS

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# Strategic Vision: Excellence in Teaching & Learning, Research, & Service

## **University 2016:**

Organize for success, engage with community and the world, and communicate efforts broadly and effectively and Foster collaborative campus partnerships

## **College 2017:**

Sustain and expand interprofessional learning experiences by collaborating with university and community partners

Increase interprofessional collaboration in research, scholarly activity and innovation

Maintain high-quality professional and interprofessional community engagement programs

## **School of Nursing 2018:**

Increase the effective use of innovative instructional approaches that enable inter-professional, inclusive, applied, and evidence-based learning experiences for students

# Beyond strategic priorities...

## Other strategies to encourage IP collaborations

- Joint project one time funding at the College level
- Project support with reoccurring College & School of Nursing Funds  
Examples: CHHS week, Corbett Research Funding
- Commitment to support for travel to IP conferences/events with  
College & School of Nursing Funds as well as SSW and SHAHS
- Support for presentation
- Encouraged all faculty to bring IP experiences into the classroom

# Our Presenters Mirror our School

Tamatha Arms, DNP, PhDc, RN, PMHNP-BC, NPC\*



# Our Presenters Mirror our School

Patty White, MSN, RNC, CNE





# Our Presenters Mirror our School

Diane Pastor, PhD



Victoria Traynor, PhD



# Interprofessional Collaboration on Aging

Dr. Tamatha Arms

## Objectives:

1. Identify ways to overcome scheduling barriers.
2. Identify ways to connect and collaborate with healthcare professionals outside of nursing.
3. Describe creative ways of allowing several students to experience simulation.



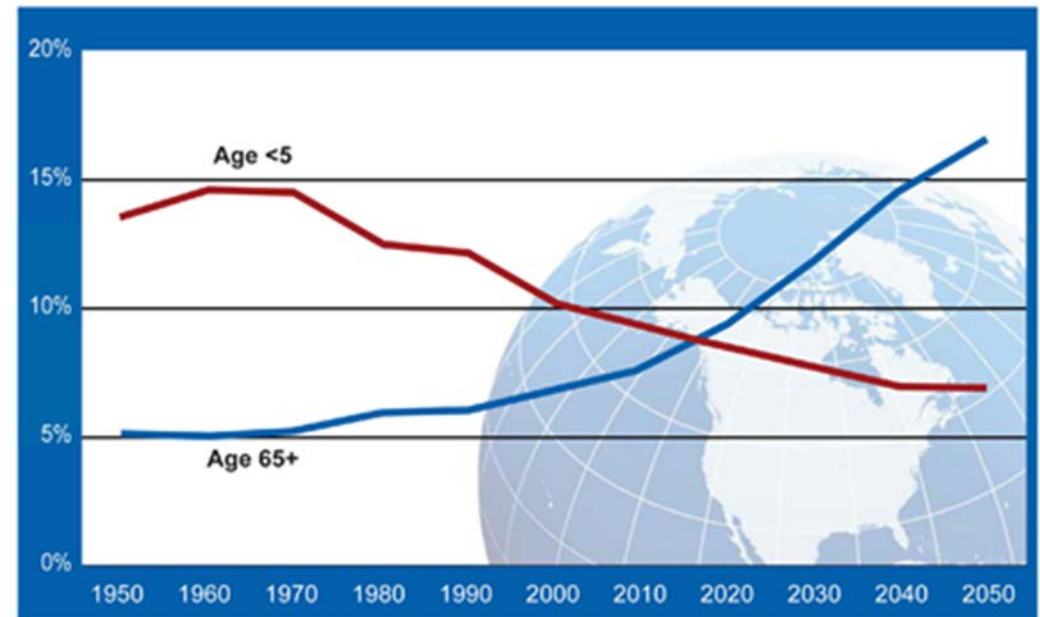
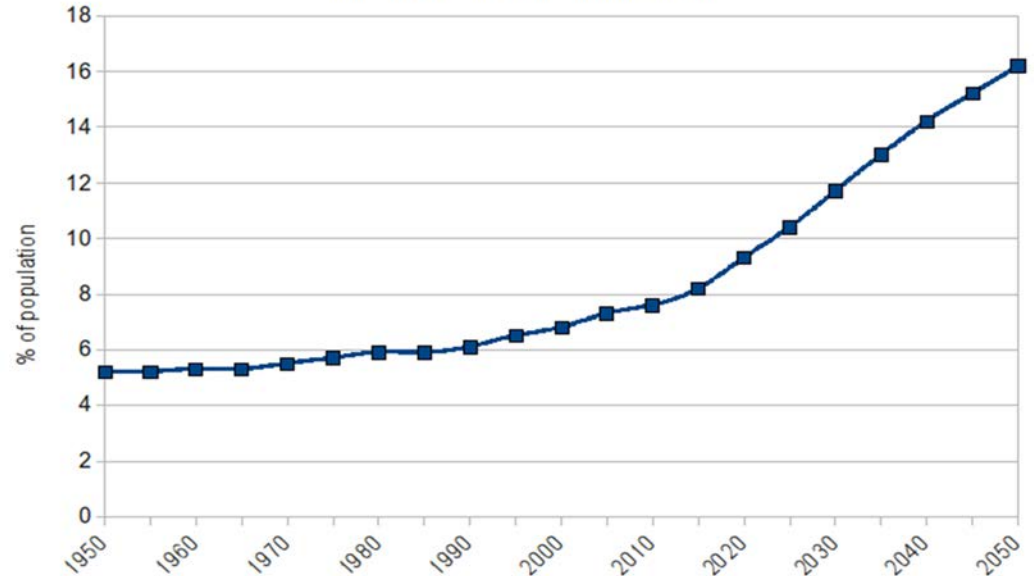
# Global Aging

## Older Adults:

- Older adults (OAs) will outnumber children younger than 5 by 2020.
- Life expectancy is increasing; birth rate is decreasing globally.
- OAs will make up 20% of the population by 2030
- By 2050, the 85+ age group will be 24% of OA population

Percentage of the World Population Over 65, 1950-2050

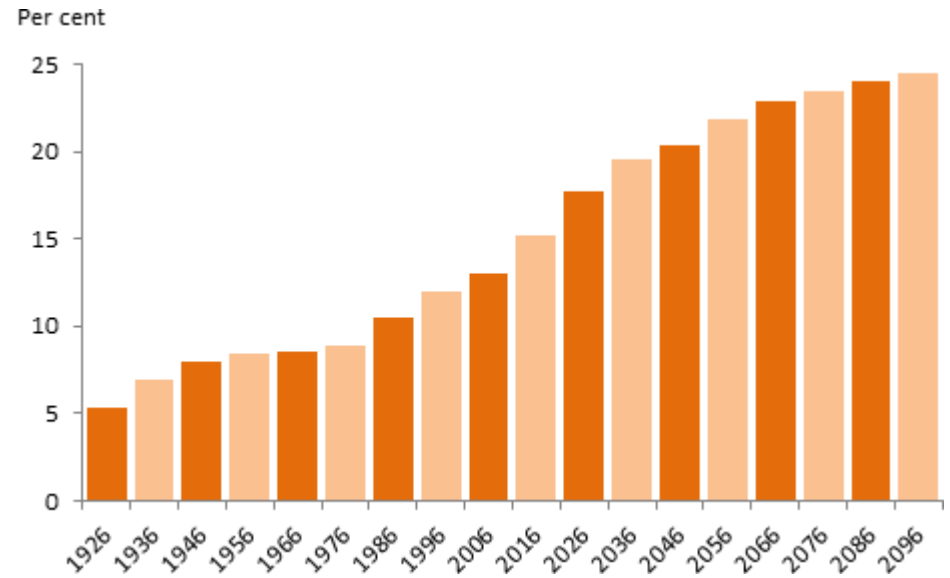
Source: UN World Population Prospect, 2008



# Aging in Australia

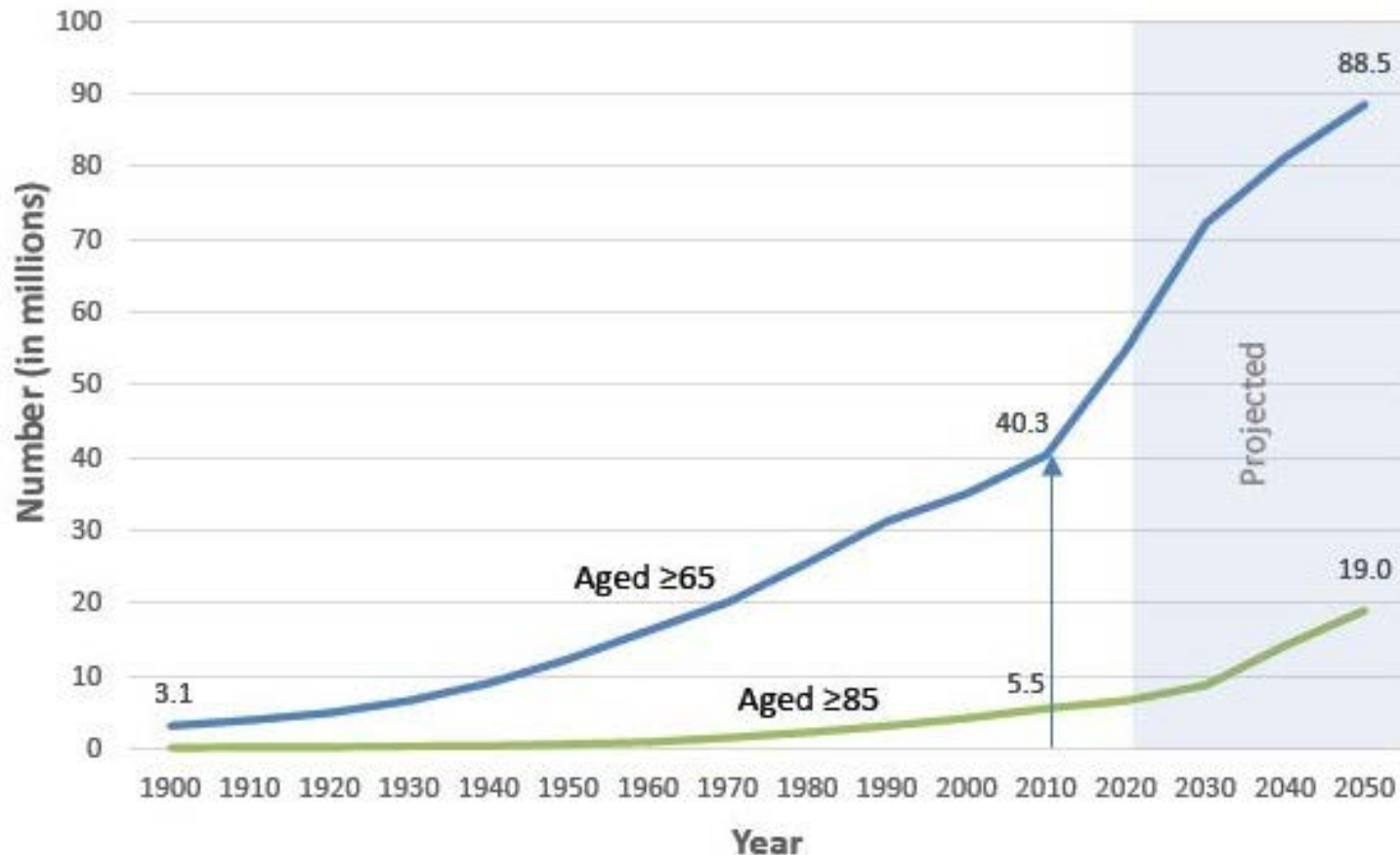
- Females – 55% of 65+
- Males – 45% of 65+
  
- By 2056 – 22% of population will be 65+

**Figure 1: Australian population aged 65 and over, at 30 June, over time (per cent)**



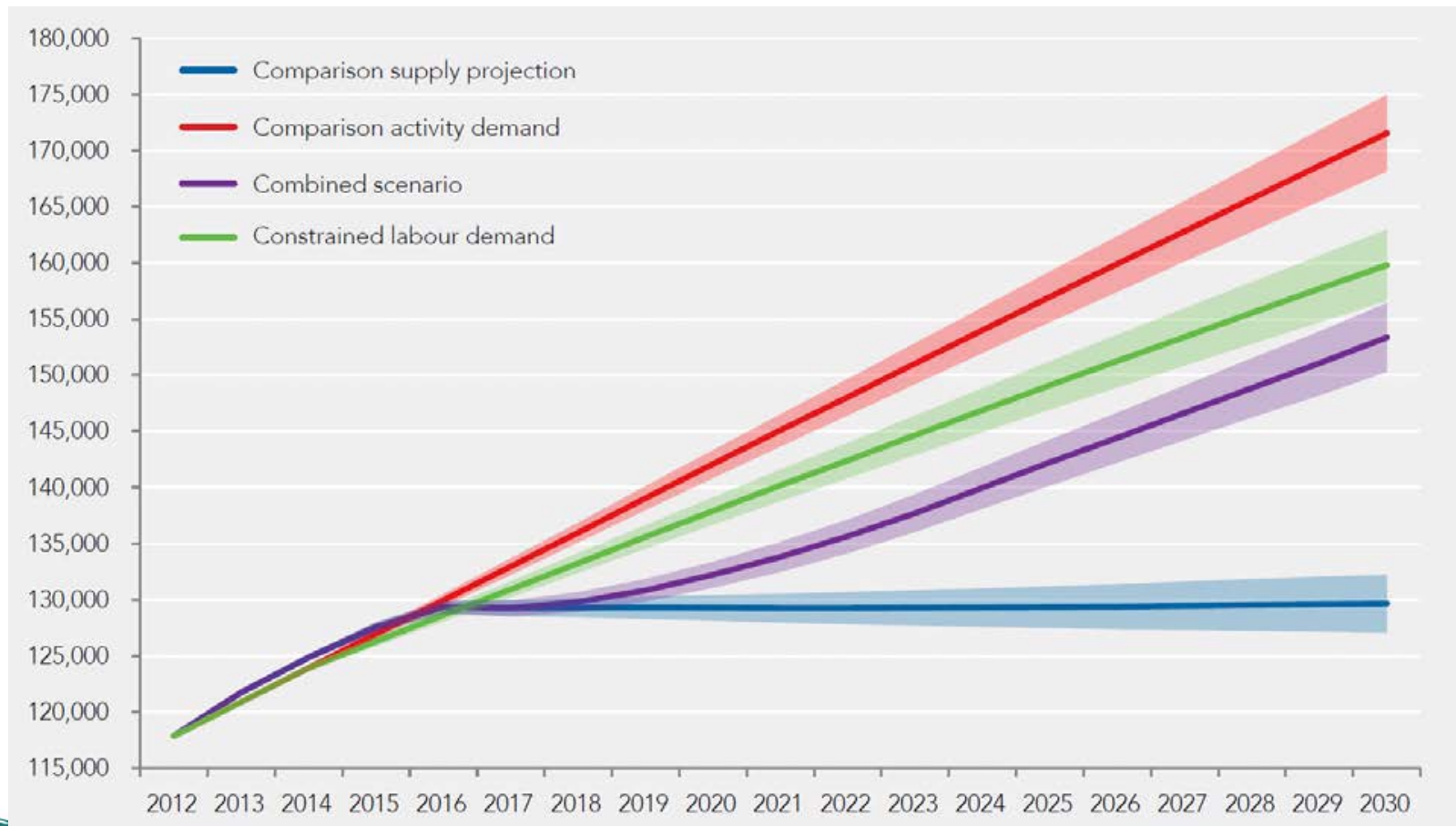
# Aging in U.S.

Population Aged  $\geq 65$  and  $\geq 85$  Years, United States, 1900-2010 and Projected 2020-2050



# Australian Nursing Shortage

**Combined scenario and constrained labour demand scenario, registered and enrolled nurses, acute sector, 2012 to 2030**



# Nursing Shortage in the U.S.

## U.S. to Lack 808,000 Nurses by 2020

The demand for registered nurses is expected to rise 40 percent by 2020, compared with a rise of only 6 percent in the supply. By 2020, the nation will have a shortage of more than 808,000 RNs, according to Department of Health and Human Services projections.

No. of  
Registered Nurses



Source: "Projected Supply, Demand and Shortages of Registered Nurses: 2000-2020," U.S. Department of Health and Human Services, July 2002.



# Challenges & Solutions

## Challenges

- Serving as members of a team – individualistic and group dynamics
- Current curriculums promote individual accomplishment vs teamwork
  - Students with varying backgrounds and levels of experience
  - Professional schools often function in a “silo” mentality
- Cultural challenges, hierarchies, and authority/social dominance
- Logistical challenges – schedules and calendars make collaboration difficult

## Solutions

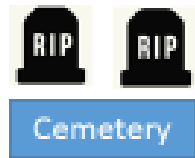
- Didactic content on interprofessional teams & roles
- Professors socially connect across schools
  - Common faculty space
- Identify common competencies & interprofessional educational modules
  - Ethics
- Team based learning
- Interdisciplinary based simulations
- Escape hierarchical structure
  - Sharing & rotating leadership
- Sharing common resources
- Faculty development in IPE



# IPEC Core Competencies

## Interprofessional Collaborative Practice

Values / Ethics  
 Roles / Responsibilities  
 Interprofessional  
 Communication  
 Teams / Teamwork



Cemetery



Table 3  
 Long Term Care



### The Setting

**Participants choose:**

- Name and age over 60
- Residence
- Occupation
- 3 income chips
- 5 self-image cards
- 3 favorite possession cards

Identity Table

Table 2  
 Assisted Living

Table 1  
 Independent Living

# Interprofessional Simulations

Interprofessional healthcare simulation

An older male

Injury

Alcohol Detox

Inpatient rehabilitation

Therapy

Interprofessional team meeting

Care plan meeting

Readiness for discharge



Students learned by participating

Students learned through observation

Debrief interprofessionally with volunteer standardized patients

# Results

**Students' level of empathy significantly improved from pre to post Into Aging simulation**

**Using the Interprofessional Collaboration Competencies Attainment Survey (ICCAS), students rated their level of competence on communication, collaboration, roles and responsibilities, conflict management resolution, and team functioning. Changes from pre to post Interprofessional simulation were significant in all subscale domains.**

***Nursing student, "I liked being able to observe....it allowed me to take it all in without the anxiety of performing. I feel like I learned more this way."***

# Interprofessional Nursing Education to Prepare Baccalaureate Nursing Students for Transition to Practice

Patricia H. White MSN-NE, RNC-NIC, CNE

## Objectives:

1. Understand how to use pre-briefing to have students collaborate prior to interprofessional simulated activity.
2. Learn how to use theoretical frameworks to develop IPE learning experiences.

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# Identified Student Learning Outcomes

1. Demonstrate empathy towards the Standardized Patients.
2. Work collaboratively in “teams” to establish treatment plan for patient and family prior to simulation.
3. Use IPEC core competencies in simulated learning activity.

# Assessment of Student Learning

## Pre-simulation

- Intention prompts
  - What are your expectations regarding IPE in this simulation as well as in your future professional practice?
  - Submission of pre-test RIPLS

## Post-simulation

- Video recorded interprofessional debriefing with SPs & instructors.
- Critical post-reflection prompts:
  - Moving forward, what aspect of interprofessional practice do you want to focus in improving and why? How will you do this?
- Submission of post-test RIPLS

# Purpose, Method, and Sample

## ➤ Purpose

- Use of simulated activity to assess students' perception of interprofessional collaboration.

## ➤ Method

- Four students from Nursing (NUR), Social Work (SW), and Exercise Science (EXS) – all 1<sup>st</sup> semester UG seniors.
  - Total of 4 interprofessional teams
    - All had same case study
- Development of a holistic plan of care with identified professional roles and responsibilities.
- Simulation was audiovisual recorded and utilized in two courses (N= 108 students)
  - NSG 401: Pediatrics and EXS 472: Exercise for Cancer Rehabilitation and Survivorship



# Tools

## ➤ Pretest / Posttest Design:

- Readiness for Interprofessional Learning Scale (RIPLS) Questionnaire (Parsell & Bligh, 1999)
- Examines the attitudes and perceptions of health care students toward IPE. <http://www.ihi.org/education/ihioopenschool/Chapters/Documents/riplsquestionnaire19.pdf>

## ➤ Interprofessional Education Collaborative (IPEC)

- ## ➤ Simulation Design Template – adapted from: *Simulation in nursing education: From conceptualization to evaluation*. (2010). New York: National League for Nursing. Originated by Jeffries.

<http://sirc.nln.org>



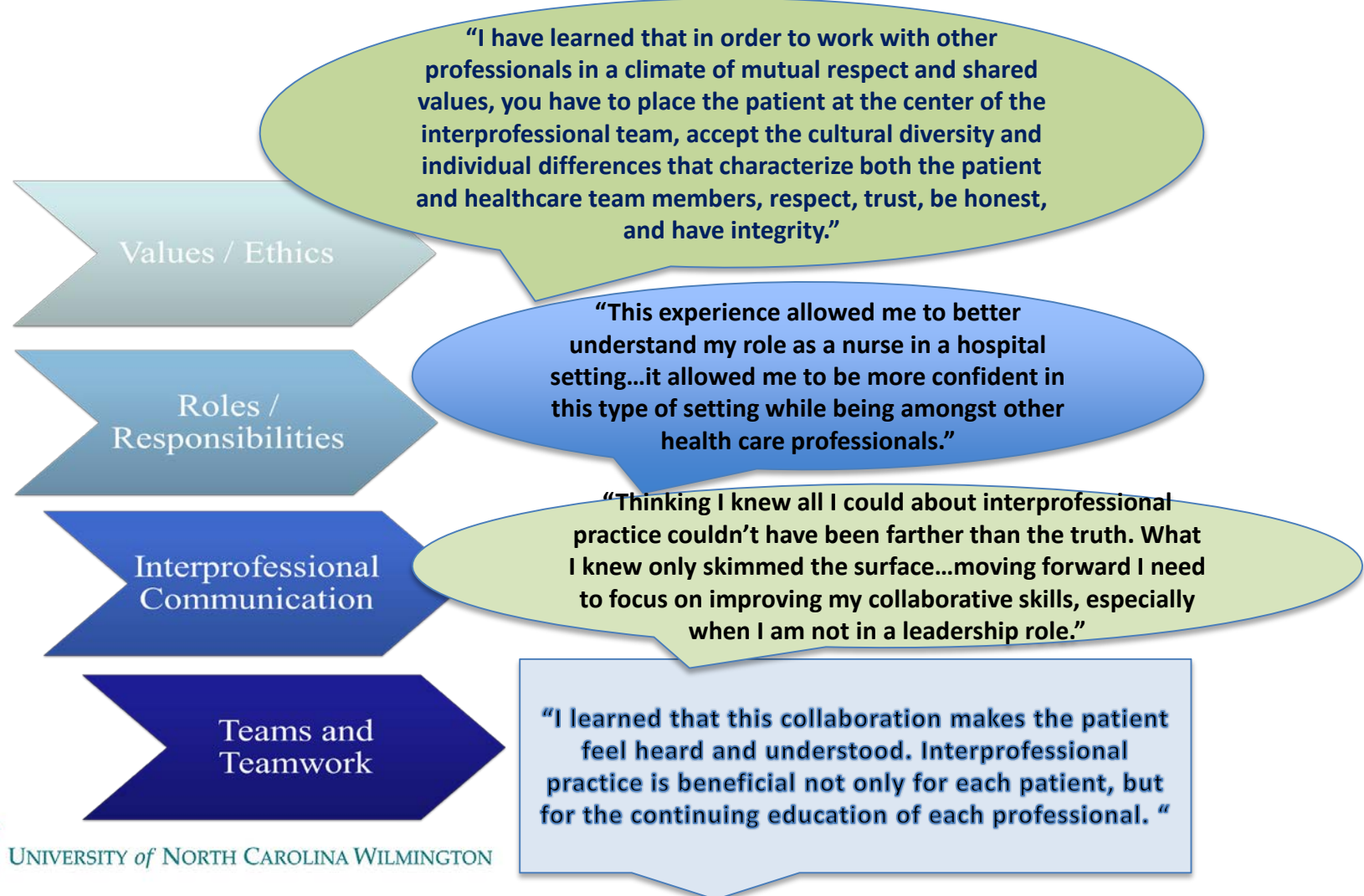
# Results

- Results identified common themes of being engaged in learning, less stressful environment which contributed to learning, enhancement of interdisciplinary teamwork and communication, a more positive learning experience, appreciation for caregiver's role, integration of learning from other courses within the simulated clinical setting, and increased comfort level with skills and self-performance.

# Results

- The RIPLS pre- and post-results demonstrated a definite change in attitudes and perceptions of interprofessional education. This was best seen in both the prelicensure nursing students and the exercise science students that changed from “undecided” to “agree/strongly agree” or disagree/strongly disagree.”
- The smaller number of social work students created a ceiling effect somewhat limiting their variations in rating.
- Another component is that the nursing students are exposed to simulation on a regular basis in their curriculum. This was a new experience for the majority of the social work and exercise science students.

# Interprofessional Competency Domains and Student Reflections



# Implications

Findings overwhelmingly support the in teaching about interprofessional practice in healthcare.

Creation of simulation videos and supplementary materials provides a sustainable way to allow this rich learning experience to permeate the curriculum.

Additional research is needed to evaluate best practices focused on the use of simulations and standardized patients in teaching interprofessional practice.



# Testing the Dementia and Driving Decision Aid (DDDA) in a U.S. Sample

Dr. Diane K. Pastor & Dr. Victoria Traynor

## Objectives:

1. State the process of adapting the DDDA to a U.S. audience.
2. Recognize the global impact of dementia worldwide.

# Introduction: Our Collaboration

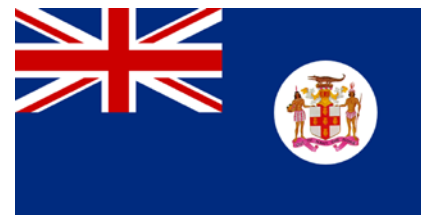
- Visiting Professor from UW to UNCW in 2015 (Glenn Mitchell)
- Invitation to connect using social media
- Familiarize with partner's work
- Shared programs of research and questions
- Focus on IP research and education
- Global Challenges Seed Grant and project team



**Dementia science**



**Interprofessional team science**



# Interdisciplinary Team Across Academic and Industry Partners

1. Dementia Advocacy, Caring Kind, Alzheimer's Society, New York City
2. Nursing @ UNCW and UOW
3. Law @ Griffith University, Queensland, Australia
4. Occupational therapy @ Australian Catholic University, New South Wales, Australia
5. Psychology @ UOW
6. Public Health @ UOW
7. Road Safety @ Road Maritime Services, New South Wales, Australia

# Dementia and Driving Science

- Dementia affects almost 50 million people worldwide
- 1/10 individuals is affected
- All persons with dementia will need to stop driving but no gold standards exist for exactly when each person should stop
- For persons with mild dementia, assessing fitness to drive is subjective and difficult
- Depression, isolation and early entry to care homes result when older adults with dementia stop driving
- Australian DDDA facilitates discussions on driving retirement to plan for alternate mobility options early in the disease
- Goal of this study: adapt DDDA for relevance to U.S. audience





# Driving Retirement

- Dementia affects almost 50 million people worldwide
- 1/10 individuals is affected
- All persons with dementia will need to stop driving but no gold standards exist for exactly when each person should stop
- For persons with mild dementia, assessing fitness to drive is subjective and difficult
- Risky driving behaviors
- Depression, isolation and early entry to care homes result when older adults with dementia stop driving
- Australian DDDA facilitates discussions on driving retirement to plan for alternate mobility options early in the disease

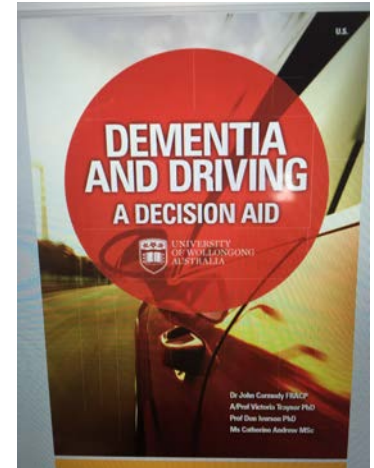


# Development of the DDDA

- Adoption of the Ottawa Decisional Framework to develop the DDDA
- Booklet developed to enable individuals living with a dementia to make decisions
- Empirical studies to develop the DDDA (Australian version)
- Focus groups to develop the draft content of the booklet
- Pilot study to finalize the content of the booklet
- RCT to test the effects of using the booklet on decisional conflict

# Driving and Dementia Decision Aid

- Self-administered, 35-item online survey
- Developed by UOW team
- Decision aid to enhance shared decision making
- Developed inductively using evidence
- Pilot tested in Australia
- Aim of this project: develop a culturally relevant DDDA useful for global impact of dementia



# U.S. Recruitment

- Purposive sampling strategy over 11 months
- Inclusion criteria
- Key informants
- Snowballing
- Email recruitment
- Unique: inclusive of persons with dementia in early stages



# Results and Contributions to Science

- 145 adults completed the survey
- Purposive sampling strategy
- Snowball sampling
- Outcomes: usefulness and feasibility of using booklet to initiate conversations with drivers with dementia
- Positive feedback with three themes
  - Easy of use
  - Easy format to follow
  - Client-centered
  - GOAL: Learn about drivers' values and concerns early in disease trajectory



# Challenges and Lessons Learned

- Recruitment challenges
- US grammar changes
- Caregiver input
- Technical language
- Length of booklet
- Telecommunication across continents



# Future Work

- Promote the 'Driving and Dementia' online education module
- Developing a UK version with a psychologist in England
- Developing a Taiwanese version with medical colleagues
- Current research with the addition of Human Geography to the research team
- Consider a generic 'older person' driving retirement resource

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