OUTCOMES FOLLOWING INTRODUCTION OF AN INTERPROFESSIONAL DEDICATED EDUCATION UNIT WITH NURSING, MEDICINE, AND PHARMACY

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Deborah Ulrich, PhD, RN
### FACULTY DISCLOSURE

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Rosalie O. Mainous, PhD, APRN, NNP-BC, FAANP</th>
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</thead>
<tbody>
<tr>
<td>Conflicts of Interest</td>
<td>None</td>
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<tr>
<td>Employer</td>
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<td>Sponsorship</td>
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<table>
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<tr>
<th>Investigator Name</th>
<th>Cheryl Waker, PhD, RN</th>
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GOALS AND OBJECTIVES

• Session Goal
  • Using Evidence to Further Nursing Education
• Session Objectives
  • Objective 1: To Describe the integration of two concepts, Interprofessional Education and the Dedicated Education Unit
  • Objective 2: To Analyze findings related to student satisfaction and perceptions of interprofessional education in one IDEU
ESTABLISHING AN ACADEMIC-PRACTICE PARTNERSHIP

Wright State University College of Nursing and Health and Kettering Medical Center
BLENDING TWO PARADIGMS

• Interprofessional Education (IPE)
• Dedicated Education Units
RESEARCH DESIGN

- Mixed Methods
- Comparative
- Repeated Measures
- Correlational

Phenomenological Approach for Qualitative Data
Treatment Group n=11
- 6 Nursing students
- 2 Medical students
- 3 Pharmacy students

Control Group n=9
- Nursing students
- Medical students
- Pharmacy Students
MEASURES

• Modified Interdisciplinary Education Perception Scale (pre and post)
• Student Satisfaction Survey (investigator prepared)
• Focus Groups and Interviews
• Identified Trauma Unit as site for IDEU
• Brought all partners to the table (Kettering, Medicine, Nursing, Pharmacy)
• Surgical Trauma Elective developed
• Developed an IPE curriculum
• Trained Nurse Preceptors—Clinician Educators in 4 hour blocks
• Nursing students had 14 week rotations, medicine and pharmacy had 4 week rotations
• Faculty in all 3 disciplines trained by the PI in IPE
• Established an Advisory Board to resolve conflict
Faculty Role

TYPICAL DAY FOR AN IDEU STUDENT
QUANTITATIVE FINDINGS
Paired t-test

<table>
<thead>
<tr>
<th>Treatment Group</th>
<th>Pre-test Score</th>
<th>Post-Test Score</th>
<th>t-value</th>
<th>p-value</th>
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<tbody>
<tr>
<td>Treatment Group</td>
<td>4.93</td>
<td>5.18</td>
<td>t=-2.25</td>
<td>p=0.026</td>
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<tr>
<td>Control Group</td>
<td>5.08</td>
<td>5.32</td>
<td>t=-2.42</td>
<td>p=0.02</td>
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</table>

When the three groups of students were separated, there was no statistical significance, likely due to the extremely small n.
## 2 Sample t-test

<table>
<thead>
<tr>
<th>Treatment Group compared to Control Group</th>
<th>Pre-test</th>
<th>Post-test</th>
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<tbody>
<tr>
<td></td>
<td>$t = -0.439, p = 0.67$</td>
<td>$t = -0.76, p = 0.773$</td>
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Stepwise Regression—Linear Model for Demographic Factors

Final Model: Score = Intercept + Pre + Age + Gender

<table>
<thead>
<tr>
<th>Regression Analysis</th>
<th>β</th>
<th>p</th>
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<tbody>
<tr>
<td>Pre-post effect</td>
<td>-0.24</td>
<td>0.053</td>
</tr>
<tr>
<td>Age</td>
<td>-0.033</td>
<td>0.019</td>
</tr>
<tr>
<td>Gender</td>
<td>0.351</td>
<td>0.007</td>
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STUDENT SATISFACTION
BARRIERS AND FACILITATORS

- Staff nurses disagree with students attending rounds; do not see it as ‘part of clinical’
- Working in system that has its own nursing school
- Integration issues into WSU Capstone course—making sure we meet CONH course objectives as well as IPE objectives
- 2 schools/colleges from WSU and 1 school external to WSU
- Introduced concept to media at reception; interview on local TV
- Written up in College Magazine
Limitations

• Extremely small sample size
• Investigator prepared Student Satisfactory Survey
• Unknown if the data follows a normal distribution
• Baseline scores very high—question the sensitivity of the instrument with this sample

Implications

• Increase interprofessional activities
• Allow Qualitative Findings to inform Quantitative Analysis
• Evaluate instruments for future use
• Add Social Work, identify additional disciplines
The model was used to support renewal of trauma designation by Kettering Medical Center.

Met requirement of IPE and current research protocols.

The model was translated to a primary care setting and written into a PACER grant application: WSU has been named one of 9 in the country using this model.
QUESTIONS?

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