Applying QSEN Competencies to Systems-Based Learning: Implementation of a Quality Improvement Capstone Project and Virtual Poster Conference Experience

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Overview of NUR 450 Nursing Concepts Capstone I QI Project

- **Week 1**: What is quality improvement in healthcare? Differentiating quality improvement, EBP and research.
- **Week 2**: Introduction to the science of improvement. Collaborate with mentor to identify current issues in their organization and healthcare.
- **Week 3**: Overview of the Model for Improvement
- **Week 4**: Testing and Measuring Changes with PDSA Cycles. Collect and analyze data, propose QI topic and strategy.
- **Week 5**: Setting AIMS and writing a problem statement
- **Week 6**: Forming a Quality Improvement Team
- **Week 7**: Evaluate current evidence related to the strategy.
- **Week 8**: IRM: Section 4 Link Current Evidence Related to Change

Overview of NUR 455 Nursing Concepts Capstone II QI Project

- **Week 1**: IRM: Section 5 Pilot Test the Change Idea
- **Weeks 2-3**: Implement the test on a small scale. Carry out the test, document problems and unexpected observations, begin to analyze the data.
- **Week 4**: Complete analysis of the data, compare the data to predictions, and summarize and reflect on learning.
- **Week 5**: Complete Poster and Upload for Virtual Quality Improvement Conference. (UIU utilizes ThingLink)
- **Week 6**: Participate in Virtual Quality Improvement Conference and complete three peer evaluations.

Introduction

Creating learning and applied experiences related to QI in nursing education programs can be challenging. Students experience the “lived” process of QI by identifying, developing, implementing, and presenting a small-scale project designed to achieve the Quality and Safety Education in Nursing (QSEN) competencies related to QI. The project is then reported electronically in a narrated poster format and concludes with participation in a “virtual poster conference.”

Assignment Goals

1. Use the Model for Improvement to plan and carry out a QI project in a healthcare setting.
2. Utilize an improvement road map (IRM) to guide a clinical QI project.
3. Test changes on a small scale using the Plan-Do-Study-Act (PDSA) cycle.
4. Report findings in a narrated, poster format and participate in a virtual conference with peers.

Student Feedback

- “The final project worked to tie everything together, and to easily view others’ presentations.”
- “Completing the Improvement Road Map was a very effective tool in tracking the progress of the QI project.”
- “This was an area that I had little knowledge about before and am excited about quality improvement projects in the future.”
- “Completing the Improvement Road Map was a very effective tool in tracking the progress of the QI project.”

Lessons Learned

- Early and detailed communication to students on planning requirements.
- Not every project will be implemented perfectly, but more important the student learns the QI process.
- Provide clear instructions on the technology used and technical support.

Conclusion

Including quality improvement processes in nursing curriculum provides students with the baseline knowledge and small scale experience to improve systems and act as a change agent for organizations and patients.

References available upon request