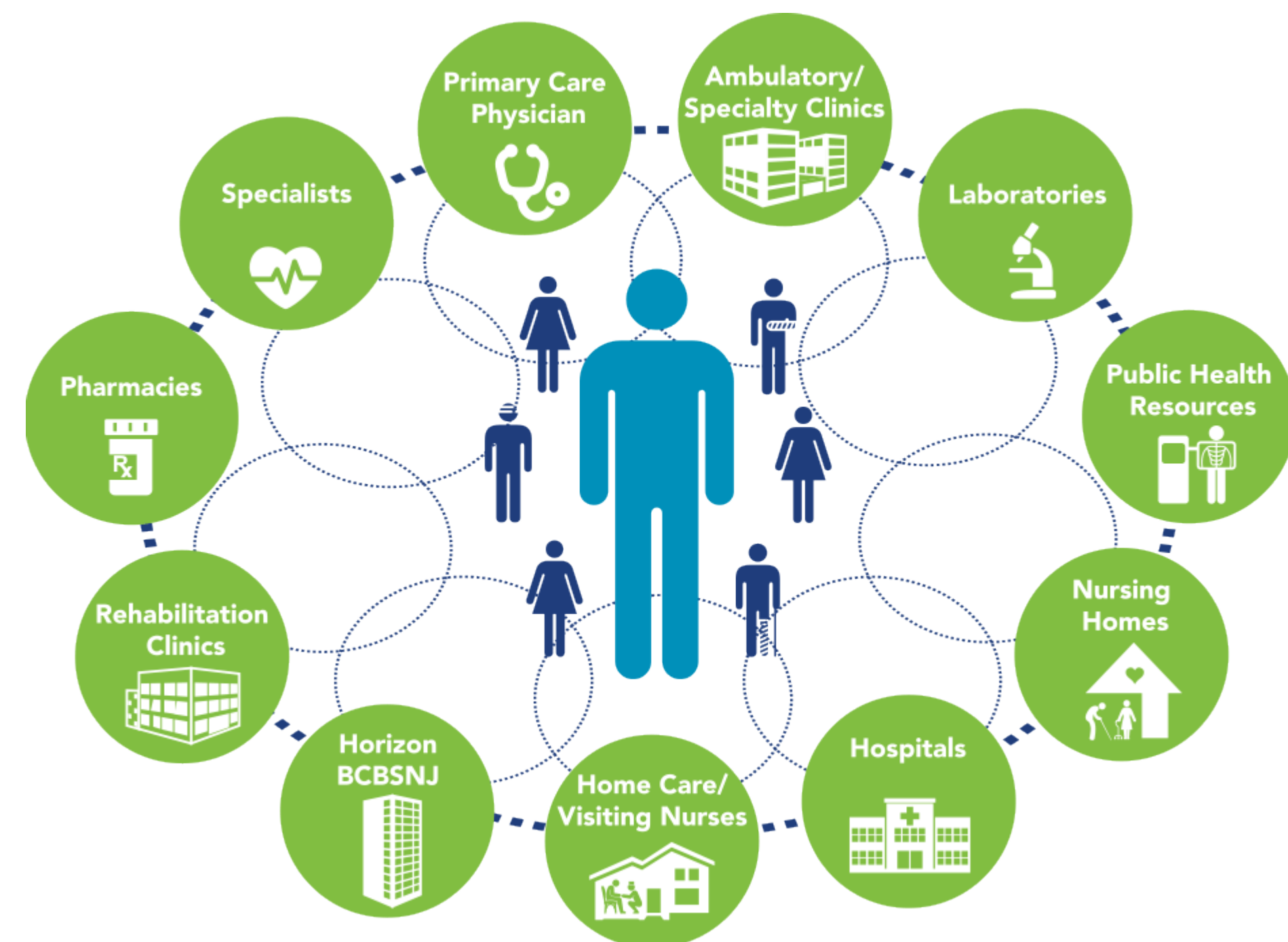


# Advancing Population Health in the BSN Program through Interprofessional Simulation: Creating Curriculum to Create Change

**Katie Hooven, PhD, RN, MBA, CNE**  
The College of New Jersey

## Introduction

At issue is that the provision of population based health care requires additional knowledge and a set of skills not typically addressed in BSN curricula sufficient for students to develop competency. It also requires that nurses (a) understand the broader issues involved in determining health, (b) be able to approach solutions or interventions from that broader perspective as well as existing research evidence or best practices and (c) be able to mobilize existing community resources in the service of better health outcomes



## Aim

The focus of this project was on an integrative framework incorporating nursing, public health, and other disciplines to break down the silos that affect patient outcomes. The American Association of Colleges of Nursing (AACN) 2103 Essentials document for baccalaureate education titled Public Health: Recommended Baccalaureate Competencies and Curricular Guidelines for Public Health Nursing served as a guide for introducing population health into the curriculum. The small liberal arts college which is primarily an undergraduate and residential college with targeted graduate programs served as the setting. Along with curricular change, the poverty simulation was implemented and analyzed for effectiveness.

## Methods

The school of nursing received an RWJ/NJNI grant titled on Redesigning Nursing Education to Address the Challenges and Opportunities of Population Health. In that grant the curriculum team identified the major strengths and resources already in place at the college and in the nursing curriculum to prepare nursing students to engage successfully in providing population based health care. As might be expected there were strengths in some competencies and weaknesses in others. Population health as a concept is commonly defined as the health outcomes of a group of individuals, including the distribution of such outcomes within the group.

IRB approval was granted through the college and although the participating students were required to complete the poverty simulation as part of a class, they had the option to not answer the pretest, posttest or both. The poverty simulations were held twice in November 2016 and twice in March 2017. Data was collected using the online Qualtrix system from all students who participated in the poverty simulation. The students included 349 mixed majors enrolled in courses from the Nursing, Health and Exercise Science, Public Health, Sociology, and Education departments. Although one of the objectives was to expose nursing students to more interprofessional learning experiences, especially related to population health management, for purposes of this analysis only nursing student's information will be discussed. The questionnaire that was distributed was 16 questions and came from the CAPS program. Some sample questions are listed in Table 1. The pre and post tests were matched based on an anonymous identification number that the students entered before completing both tests. The pretest was done within one to three weeks prior to the simulation, and the posttests were completed within two weeks after they had participated. Qualitative data was also collected to be sure to accurately describe the participant's thoughts and feelings.

## Results

### Demographics

	Frequency	Percent
MSN/NP	17	8.9
NUR 440 Caring in Community	70	36.5
NUR220 Health and Wellness	74	38.5
RN/BSN program	28	14.6
SOC 365: Poverty and Welfare in the US	3	1.6
Total	192	100.0

### Paired Samples Test- SPSS output

		Mean	Std. Deviation	Df	Sig. (2-tailed)
Pair 1	Q1PRE - Q1POST	.301	1.320	132	.010*
Pair 2	Q2PRE - Q2POST	.321	1.304	139	.004*
Pair 3	Q3PRE - Q3POST	.374	1.139	130	.000*
Pair 4	Q4PRE - Q4POST	.328	1.213	133	.002*
Pair 5	Q5PRE - Q5POST	.273	1.089	138	.004*
Pair 6	Q6PRE - Q6POST	.569	1.099	129	.000*
Pair 8	Q8PRE - Q8POST	-.265	1.679	135	.068
Pair 9	Q9PRE - Q9POST	.233	1.059	102	.028*
Pair 10	Q10PRE - Q10POST	.210	1.128	123	.041*
Pair 12	Q12PRE - Q12POST	.115	.885	103	.186
Pair 13	Q13PRE - Q13POST	.361	1.110	118	.001*
Pair 15	Q15PRE - Q15POST	.173	.918	126	.035*
Pair 16	Q16PRE - Q16POST	-.210	1.115	104	.057

### Qualitative

#### Understanding

The first overarching theme related to students having a better "understanding" of the struggles of poverty.

#### Action

Students recognized the need for connecting people with community services and how most of these services are not as easy to utilize as they had previously thought. A sentiment under the action theme was the need to have a better understanding of your patients' needs and what to educate them on. "Additionally, patient teaching must go beyond the surface and address the bigger issues and nurses must be able to understand how the environment and circumstances affect a patient's health", this quote succinctly summarizes the connection between this simulation and population health

## Conclusions

Although simulation cannot fully replace actual clinical experiences, it serves to connect theory to practice. One cannot expect traditional baccalaureate degree nursing students or nurses who have focused all their clinical years being acute care RN's to be able to practice interprofessionally and understand the social determinants that effect many patient's healthcare choices without giving them a practical understanding. Giving the nursing students the opportunity to participate in this endeavor has created a professional precedent and insight into their future as nurses.



### Acknowledgments

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