



Research Article

Preparing Baccalaureate Nursing Students to Care for Patients in the Primary Care Setting

Blanca Miller^{1*}, Norma Martinez Rogers²

¹Methodist College. Department of Nursing, Peoria, Illinois, United States

²University of Texas Health, School of Nursing San Antonio, Texas, United States

*Corresponding author: Blanca Miller, Methodist College, 7600 N. Academic Dr. Peoria, IL. 61615, USA

Citation: Miller B and Rogers NM (2023) Preparing Baccalaureate Nursing Students to Care for Patients in the Primary Care Setting. Int J Nurs Health Care Res 6:1440. DOI: <https://doi.org/10.29011/2688-9501.101440>

Received Date: 22 June, 2023; **Accepted Date:** 03 July, 2023; **Published Date:** 13 July, 2023

Abstract

Nursing education must consider different models that incorporate techniques to enhance skills of partnership for nursing graduates' working with varied healthcare professionals in a multifaceted healthcare system. Methodist College, in partnership with Unity Point Health, recruited, prepared, and educated nursing students to deliver community-based primary care in the areas of chronic disease prevention, mental health, and substance abuse through Nurse Education, Practice, Quality, and Retention (NEPQR)-RNs in Primary Care Project. This project provided continuing education modules designed to enhance and expand on concepts of wellness, patient-centered care, care coordination, data analytics, quality improvement, and COVID-19 in relationship to population and community-based health and established educational and organizational opportunities for registered nurses working in community-based primary care. The registered nurses served as preceptors for students participating in the project. The project prepared prelicensure nursing students for delivering community-based primary care and enhanced the role of the registered nurse in primary care and public health settings.

Keywords: Baccalaureate nursing; Primary care; Rural communities; Interprofessional collaboration

Introduction

Registered nurses (RNs) are the largest healthcare professional workforces that spend the most time providing health care to patients. In the past years, approximately 63% of RNs practiced in hospitals in comparison to ambulatory care [1]. The Affordable Care Act has made significant changes in how health care is provided. One of the major changes is that there is a higher emphasis on providing health care in primary care settings. The emphasis is on providing preventative services to promote positive health outcomes for the United States (U.S.) population. The Institute of Medicine [2] identifies primary care as the delivery of comprehensive, accessible healthcare services that address patients' personal healthcare needs, maintain a continuous

relationship with them, and is able to meet their social determinants of health. Social determinants of health are the conditions under which people are born, grow, live, work, and age [3]. The factors that strongly influence health outcomes include a person's:

- Healthcare access to primary care and the quality provided
- Education access including early childhood education and development, educational attainment, and encouragement to graduate from high school
- Social and community context, for example, cohesion in the community, lack of discrimination, safe work environments
- Economic stability
- Neighbourhood and quality environment, such as housing support, and resources provided throughout the lifespan

Many Americans face diverse health issues and difficulty in accessing quality health care because healthcare providers may not be readily available to them. These Americans may experience health inequities due to a shortage of healthcare providers in their geographical area or having to drive long distances to access preventative, primary healthcare. In the U. S., there is a critical need to increase the number of high-quality primary health care providers, particularly baccalaureate-prepared RNs, in community-based primary care settings to improve the health and health outcomes of all Americans [2].

Background

Baccalaureate RNs are positioned to provide high-quality primary care. They play significant roles in providing health care in many areas, from hospitals to community health centers, school nursing, nursing homes, and public health services. They are at the core of being able to meet the essential components of primary care as defined by the IOM [2]. They can develop and maintain a comprehensive continuum of collaborative, well-coordinated care, sustaining relationships, and assisting in accessing and navigating health services. Registered nurses are the leading members of interprofessional care teams because they have skills in leadership, management, clinical practice, judgment, and reasoning that can

enhance primary healthcare teams. It is known that nursing is considered the most trusted profession in the U.S., thus RNs are in a key position to expand the nursing practice to the full scope of their license. The IOM [2] emphasized that academic institutions are well positioned to facilitate the integration of primary care and public health to promote the equitable acquisition of health care for those facing the social determinants of health.

Nurse Education, Practice, Quality, and Retention (NEPQR)-RN in Primary Care Project

Methodist College, in partnership with Unity Point Health (UPH), submitted a proposal to help answer the call to prepare and retain RNs to serve on community-based primary care teams to assure access to, and delivery of, primary care in the areas of chronic diseases prevention, mental health, and substance abuse. The focus was to integrate workforce models that included the primary care team learning from Effective Ambulatory Practices (LEAP) competencies, the American Academy of Ambulatory Care Nursing (AAACN), and the Council on Linkages between Academia and Public Health. Methodist College faculty incorporated these guidelines using longstanding health promotion models, such as the Pender Model of Health Promotion and the Leavell and Clark Model [4,5] (Table 1).

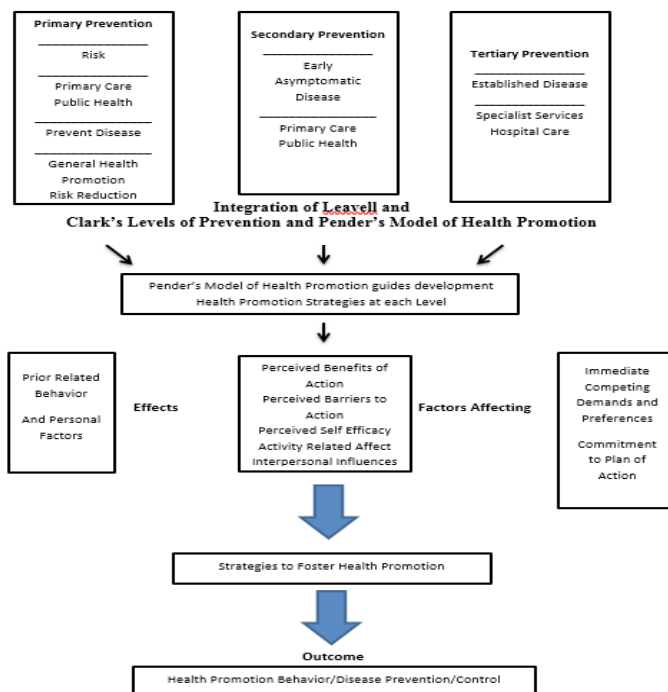


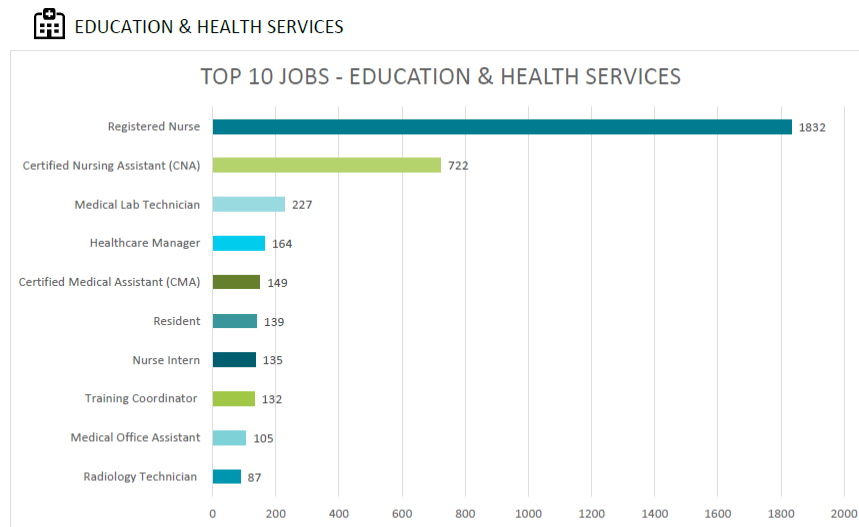
Table 1: The Leavell and Clark Model.

The objectives of the project were to:

- Design an academic certificate for pre-licensure and RN/BSN Community-Based Primary Care (CBPC) Externs who will receive substantial tuition, fee, and residential housing support.
- Design a continuing education CBPC certificate for RNs to be funded through the grant.
- Advance the preparation of 50 new BSN CBPC Externs.
- Advance the preparation of 25 new RN CBPC Experts.
- Retain BSN CBPC Externs and RN CBPC Experts through the development of a Community-Based Primary Care Transforming Care Consortium with an annual conference.
- Re-design the position descriptions for Office RNs and RN Navigators in the UPH clinics to assure RNs practice to the full scope of their license in community-based primary care teams.

- Disseminate findings of the project through presentation and publication.

There is a deficit in healthcare workers, specifically RNs, across the U. S. The projected deficit between 2014-2025 was over one million nurses. This deficit indicates a gap in the current healthcare delivery system. Locally, the Greater Peoria Economic Development Council conducted an annual Greater Peoria Talent Forecast 2017-2018 labor projection survey. These survey results were used to guide workforce development initiatives throughout Greater Peoria. This year, in 2017, 43 employers participated in the survey. Collectively, these employers were planning to hire over 9,000 people in 2017 and 2018 to meet their workforce needs. Large majorities of the opportunities were concentrated in the healthcare sector (Table 2) [6]. By preparing future nurses and existing nurses to provide population and community-based primary care, these individuals will have the knowledge, skills, and attitudes needed for the expansion of current nursing roles, varied and new job opportunities, and the potential for job and career advancement.



Source: Greater Peoria Talent Forecast 2017-2018

Greater Peoria EDC

GP Talent Forecast | 2017-2018

8

Table 2: The healthcare sector.

Rationale

A compelling need to support RN workforce readiness for practice, recruitment, and retention in the community-based primary care teams was demonstrated in the statistical data described in the Greater Peoria areas. As evidenced by the following demographics of Peoria and surrounding counties and health needs assessment, significant health status indicators and strategies were identified. Some of them were:

- Utilizing health in an emergency department was chosen by 19% of the at-risk population versus using a primary care clinic.
- Over 9% of the at-risk population does not seek medical attention when needed.
- Access to health services was impeded by the inability to afford co-payments or deductibles, no insurance, too long to wait for an appointment, and the inability to get to a provider.
- Sixty-four percent of the people in the county are overweight.
- Chlamydia and gonorrhea are on the rise.
- Fifty percent of 12th graders are using alcohol and opioid use has seen dramatic increases.

To help eliminate these disparities, an RN workforce and educational model that enhances the core competencies and training of future and existing nurses to deliver primary health care in population and community-focused settings are critical. There are indications that one of the four challenges facing the nursing workforce is the need for RNs to have expertise in concepts of public health, care coordination, and community partnerships. This need is driven by existing RNs of services and in care management and coordination of roles. This preparation may be self-limiting and related to the parameters of existing practices in preparing our nursing workforce [7].

Methodology

Prior to enrolling students in the project, Methodist College faculty completed several tasks:

- Developed a pre-licensure and BSN CBPC academic certificate (PL/BSN CBPC). This certificate consisted of courses currently embedded in the BSN curriculum with the addition of two additional courses that were used to complete the program requirements. Courses included:
 - Concepts of Health and Health Care, Enhancements
 - Population Health in Nursing, Enhancements
 - Public Health: Epidemiology
 - Service Learning

Baccalaureate School of Nursing (BSN) students were recruited for the BSN CBPC certificates based on interest in providing care in medically underserved areas in primary care settings. The students recruited for this program were given the title of, Community-Based Care Externs, and received a stipend for tuition, fees, books, and residential housing.

- Developed a module-based Registered Nurse Community-Based Primary Care Certificate (RN CBPC) that provided foundational concepts related to epidemiology, health promotion, and prevention, and focused the learners to address specific health care disparities identified as critical to the community of interest health care needs.

Registered nurses were recruited from the Unity Point Health clinics, public health departments, and at large from the community. Nurses selected received funding to cover the continuing education certificate costs and were known as RN Community Based Specialists.

- Methodist College continued collaboration with Unity Point Health and the college's Health Professions Advisory Committee. This collaboration helped in the evaluation performance of the health science degree programs.
- A new Greater Peoria Community-Based Nursing Consortium was developed to include individuals with pivotal roles and key stakeholders, such as the Human Service Center and the Public Health Department. This consortium participated in the development of a conference on community-based healthcare social determinants of health.

Student Recruitment Plan

We proposed to prepare 50 BSN Community-Based Externs, which is equivalent to approximately 10% of the BSN student population at our college. The recruitment plan began with an email containing information about the grant program. The email included frequently asked questions, the date when the application to apply for the grant program, and the link to the application. It was sent to all qualified students two weeks before the start of the fall, spring, and summer semesters. Two weeks after the email was sent, the grant coordinator scheduled classroom visits to discuss the program and answer student questions. The program was advertised throughout campus via fliers and televisions. The grant team reviewed all the applications. Students chosen to participate in the program were emailed a letter outlining the grant program requirements. The grant coordinator met with each student to review the letter. The student and grant coordinator then signed the letter, which was the contract for adhering to the grant requirements.

Program Activities

Students had the opportunity to engage in hands-on community-based primary healthcare with the Mobile Outreach Learning Lab for Integrative Education (MOLLIE). Our college had received a grant that allowed the purchase of a mobile van that

was retrofitted to provide community-based educational services to Medically Underserved Communities (MUCs) and Medically Underserved Populations (MUPs). The MOLLIE underwent the following enhancements: a redesigned interior, a generator for a continuous power source, Wi-Fi capabilities, three laptops for documentation, a printer, and supplies appropriate for use by nursing students. The specific purposes of this grant aligned seamlessly with the NEPQR-RNPC grant.

The MOLLIE initiative was used to promote a higher-performing public health system that strived for more equitable healthcare access, particularly focused on the most vulnerable members of our population. Innovative programming and resourcing collaborative work within the college and with community stakeholders was vital to delivering these mobile healthcare services. The collective efforts between the college and the community better connected the traditional healthcare sector in a teaching environment with supportive services that assisted in delivering critical services to the targeted population. MOLLIE provided educational opportunities and hands-on experience to nursing students. It also included interprofessional educational services on the mobile unit that incorporated students from other college disciplines, including social work and health and human services. With the MOLLIE initiative, students were able to fulfill their 150 clinical hours in primary care.

One of the benefits the students attained was that they became more engaged and gained a stronger connection with the community and participated in public health events, such as immunization clinics. This experience also promoted the learning of effective communication and the ability to disseminate targeted health information to diverse audiences. The students were able to conduct educational programs, such as on the importance of handwashing and education on diabetes. Emergency response plans were added to the environment module and included in the Population Health in Nursing Course. High-risk behaviors or developmental risk factors were highlighted, and students learned the appropriate Erickson's stages of Development for each age range. Evaluation of this knowledge occurred through course exams.

Our college collaborated with a health system that has multiple clinics that are HPSA and/or rural designated clinics. Most of them are in MUAs. The students worked at the clinics where the nurse navigator was able to teach them how to:

- Oversee a caseload of patients across the care continuum to include pre and post-treatment management in collaboration with the care team
- Facilitate communication between the provider and the interprofessional team

- Facilitate a quality treatment experience and outcome for the patient
- Work collaboratively with (a specialty) service staff to ensure ongoing program development and improvement with outcomes and satisfaction.
- Work collaboratively with (a specialty) service staff to ensure ongoing program development and improvement with outcomes and satisfaction.

The students were provided opportunities to engage with the client(s) and their families and/or caregivers. They engaged with the community to safely perform culturally sensitive and inclusive, patient-aligned care focused on health promotion and prevention.

Evaluation

The project evaluator conducted focus groups and the students kept journals. In their journals, the students did reflections on why they joined the program. One said the following:

- I believe community-based primary care is essential and makes a large difference in the health of a community. I believe it is an important field in nursing because when we see trends and needs in a community, we are able to advocate for our communities. They may not feel like they have a voice, or they can change anything, but we are able to empower them and give them a voice. We assess for common illnesses or health alterations, and we identify needs to meet within the community to improve the overall health of the populations we serve. Having community health nursing also reaches a population that may not otherwise seek or receive health care, and I think that is a very important aspect of nursing.

Students also described their experiences in the program and one stated:

- I have worked in a primary care physician's office for over three years as a medical assistant now and it took me so long to catch on. Once I started to get the hang of my job, I realized how much I enjoy caring for patients and that is what led me to want to become a nurse. Now that I have been a nursing student and a medical assistant, I have gotten to piece together so much more than I ever thought. I believe the education I have gained through school has helped me become an outstanding leader and mentor.

Findings

The themes that developed were those vulnerable populations, particularly those who live in rural communities, need to have access to community-based primary care clinics, and these clinics need to have baccalaureate nurses advocate for the vulnerable populations in their care. Another theme was that

students recognize their commitment to quality patient care and the need to involve the family or support system of the patient. The students acknowledged the necessity and importance of their professional growth in primary care.

Implications

This NEPQR project is well developed to be able to promote primary care in rural communities. Rural integrated primary care practice requires specific training, expertise, and adjustments to service delivery and intervention to best meet the needs of rural and underserved communities and this project has established this for future nurses. This project will prepare future nurses and existing nurses to provide population and community-based primary care with the knowledge to be culturally inclusive, advocate for social justice, and expand their role as professional nurses.

Conclusions

Methodist College is committed to promoting community-based primary care, especially in the rural communities that lack this focus of care. We are committed to developing and enhancing educational practices related to community and population-focused health care that increase the abilities of future and existing RNs to provide the highest quality of care in their expanded role as professional nurses. The enhancements in identified program-specific curricular practices, both pre-licensure and RN to BSN, provision of a Population Health Certificate, and continuing education for community health care providers will positively impact the delivery of health and primary care services. Community/population-focused healthcare educational programs that promote cultural inclusivity and advocacy of social justice will expand the roles of healthcare providers, particularly RNs, and their core competencies in the health and primary care of the U. S. population.

Disclosure

Author Contributions

Project data, B.M., N.M.R.; References, B.M.; writing-original draft preparation, N.M.R., B.M.; writing-review and editing, N.M.R, B.M.

Acknowledgments

“This project was supported by the Health Resources and Human Services (HRSA) of the U.S. Department of Health and

Human Services (HHS) under the Nurse, Education, Practice, Quality and Retention Registered Nurses in Primary Care. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS, or the U.S. Government.”

Ethical Guidelines

This project was approved by the Institutional Review Board at Methodist College. Informed consent was obtained from all project participants for data reporting, presentations, and publications.

References

1. Budden JS, Zhong EH, Moulton P, Cimiotti JP (2013) Highlights of the national workforce survey of registered nurses. *Journal of Nursing Regulation*. 4: 5-14.
2. (2012) Institute of Medicine. *Primary Care and Public Health: Exploring Integration to Improve Population Health*. Washington, DC: The National Academies Press.
3. Center for Disease Control and Prevention. (n.d.) Social determinants of health: know what affects health.
4. Khoshnood Z, Rayyani M, Tirgari B (2020) Theory analysis for Pender's health promotion model (HPM) by Barnum's criteria: a critical perspective. *Int J Adolesc Med Health* 32: 1-9.
5. Leavell H, Clark EG (n.d.).
6. Greater Peoria Economic Development Council (2017) *Greater Peoria Talent Forecast 2017-2018*.
7. Buerhaus PI, Skinner LE, Auerbach DI, Staiger DO (2017) Four challenges facing the nursing workforce in the United States. *Journal of Nursing Regulation*. 8: 40-46
8. Council on Linkages Between Academia and Public Health Practice. (2014) *Core Competencies for Public Health Professionals*.
9. Public Health Foundation (n.d.). Council on Linkages Between Academia and Public Health Practice.
10. American Academy of Ambulatory Care Nursing (2017) *Ambulatory Care Nurses Defining Characteristics*.
11. American Academy of Ambulatory Care Nursing (n.d.). What is ambulatory care nursing?.