

An Academic–Fire Department Partnership to Address Social Determinants of Health

Claire McKinley Yoder, MS, RN, CNE; and Mary S. Pesch, MSN, MPH, RN, FNP

ABSTRACT

Background: As the link between social factors and health outcomes has been increasingly identified in nursing research, educators are called to provide clinical experiences that allow undergraduate nursing students to grapple with social complexity and barriers in the health care system. Future nurses need community-based experiences to develop care coordination and community partnering skills to lead in this area of health care transformation. **Method:** An innovative interdisciplinary partnership between a school of nursing and a city fire department was developed to provide students with opportunities to partner with clients to address social determinants of health, while limiting emergency medical services use for nonurgent problems. **Results:** The program has multiple benefits to nursing students, faculty, clients, agencies, and community partners. Contextual factors leading to this educational partnership, partner benefits, and challenges are discussed. **Conclusion:** Innovative interdisciplinary partnerships are an effective education tool to provide nursing students with a broader view of health care through the lens of social determinants of health. [*J Nurs Educ.* 2020;59(1):34-37.]

action priority to transform the health care system described in the National Academies of Sciences, Engineering, and Medicine *Vital Directions for Health and Health Care* report is the development of community–health care partnerships to activate communities (Dzau et al., 2017). Nurses are in an ideal position to contribute to health care transformation through community engagement. Working and collaborating in the community can be challenging, as resources are often limited and members of the health care team are not colocated (Agency for Healthcare Research and Quality, 2015; Committee for Assessing Progress on Implementing the Recommendations of the Institute of Medicine Report *The Future of Nursing: Leading Change, Advancing Health*, Institute of Medicine, & National Academies of Sciences, Engineering, and Medicine, 2015). In order to have a sufficient workforce to engage in the nursing roles needed in a transformed health care system, nursing education must change to enable students to gain these skills through authentic learning experiences not available in traditional, individual-focused, acute care clinical experiences (Storjell, Wehtje Winslow, & Saunders, 2017).

Background

Effective nursing care requires a holistic understanding of and approach to the patient situation. In community settings, care coordination and collaboration with health care is broadened to include community stakeholders and advocacy skills for the community, as well as with the individual (Storjell et al., 2017). Further, Barton (2017) asserted that nurses “should be prepared to function in an integrated behavioral health model” in addition to care coordination for patients with multiple comorbidities and social complexity (p. 451). The *National Healthcare Quality and Disparities* report calls on all health care providers to focus “explicit attention to the many settings in which patients receive care” in order to improve care coordination (Agency for Healthcare Research and Quality, 2015, p. 18). Ensuring opportunities exist where students can learn in varied settings to gain care coordination skills and address social determinants of health prepares nurses to participate in a transformed health care system. The National League for Nursing has recommended that nurse educators develop community partnerships to provide experiences for students to address social determinants of health with individuals and populations

Health care is increasingly delivered outside the hospital, yet we are not preparing nurses to provide care in these settings (Fraher, Spetz, & Naylor, 2015). An

Ms. McKinley Yoder is Assistant Professor of Clinical Nursing, Oregon Health and Science University, Portland, Oregon; and Ms. Pesch is Doctoral Student, University of Minnesota, Minneapolis, Minnesota.

The authors thank Sherry Archer, MSN, retired faculty at Oregon Health and Science University School of Nursing, who began the program with Jay Cross, EMS Officer, Gresham, Oregon.

The authors have disclosed no potential conflicts of interest, financial or otherwise.

Address correspondence to Claire McKinley Yoder, MS, RN, CNE, Assistant Professor of Clinical Nursing, Oregon Health and Science University, Mail Code 4-S, 3455 SW US Veterans Hospital Road, Portland, OR 97239; e-mail: mckinley@up.edu.

Received: May 10, 2019; Accepted: September 4, 2019
doi:10.3928/01484834-20191223-08

(National League for Nursing Board of Governors, 2019). This article describes a partnership between nursing academics and a fire department to limit frequent and nonemergency telephone calls to emergency services, incorporate the social determinants of health into nursing education, and improve the health of the community.

Method

A large school of nursing in the Pacific Northwest was built on a neighborhood model for community clinical placements in several courses, including Chronic Illness 2, Population Health, Leadership, and Integrative Practicum (Wros, Mathews, Voss, & Bookman, 2015), to create an innovative program where students can learn the skills needed for a transformed health care system. Contextual factors that led to this educational partnership, as well as the resulting benefits and challenges encountered, will be discussed.

Overview of the Partnership Between Academics and Fire Department

Nursing faculty partnered with the local fire department to address the high rate of nonemergency, medical 9-1-1 telephone calls that firefighters respond to. The fire department knew these callers needed more assistance than the brief encounter that highly trained paramedic firefighters provide and desired improved care for their community. In this partnership, firefighters refer clients who called multiple times for nonurgent concerns or clients they identify as not having the resources needed to manage their health. Student pairs meet with these clients to address social determinants of health. Students provide faculty-supervised care coordination to clients, including connecting clients with needed social services and social service agencies, reconciling medication, contacting primary and specialty care providers to clarify the treatment plan, advocating for client needs, and facilitating follow up. Students gain valuable insight about the home environment which they share with health care providers and case managers to improve the plan of care. Students also gain a new appreciation for the variety of life circumstances their clients experience.

Referrals

To begin the process, firefighters refer clients who call for nonurgent needs such as falls without injury, chronic pain, or mental illness. Often, encounters with the Emergency Medical Services (EMS) system stem from transportation issues, difficulty accessing insurance or providers, inability to afford necessary food, or lack of caregiving support. Students learn about the social determinants of health faced by clients, such as poverty, unstable housing, unstable employment, low education, and limited health literacy, which affect their ability to manage their health. The referrals are reviewed by the EMS officer at the fire department for student safety. Referrals with a history of police involvement, known active substance use, or erratic behavior are addressed in other ways than student involvement. Students have space in the fire department to make telephone calls, access the documentation of the EMS response, and document their activities with clients.

Student Role

Prior to the educational term, the students are able to request the program as one of four options for clinical placement in a 150-hour clinical course taken by students in the traditional 3-year baccalaureate and accelerated baccalaureate programs of study. In the placement, students call referred clients offering the opportunity to participate in the program and scheduling the first home visit. For safety reasons, faculty attend the first home visit, which also allows relationship development with the clients and continuity across terms and student teams. Weekly follow-up visits are usually conducted by the students without the faculty unless a need is determined. After each home visit, students and faculty discuss the student team's assessment, the plan of care, and follow up for the client. Several guidelines are in place to limit student risk: students are not allowed to transport clients or family in personal vehicles, perform any point-of-care tests or wound care without faculty present, or handle client money. Although students perform medication reconciliation by reviewing orders and checking pill bottle labels and the number of pills, students do not touch client pills, fill pill boxes, or administer medications. The focus for students is identifying sustainable solutions for the client because the students are only available 2 days per week for a 10-week clinical term.

Faculty Role

In addition to student supervision during the term, faculty provide continuity of care between terms when students are not present, allowing a practice-education role they enjoy. Fostering, nurturing, and maintaining relationships with firefighters, EMS officers, and community partners is also an important role of faculty. Faculty are available by telephone and are present in the neighborhood where students are participating in home visits. Faculty provide student feedback after each home visit, review and discuss students' visit notes, and have frequent contact with student teams. Students are evaluated by faculty through observation of interaction with clients, firefighters, and community members; reading and commenting on visit notes; and discussion of decision making. The faculty position combines nursing education and a faculty practice in population health.

Results

Student Benefits

Students meet weekly with clients experiencing unstable housing, food scarcity, barriers due to language, and mental illness. The students develop trusting relationships with clients, connect them with local resources, and coordinate care. Students apply motivational interviewing skills to identify attainable client goals, participate in medication reconciliation, support clients in making medical and transportation appointments, accompany clients to social service and psychological and medical appointments, and address health literacy needs of clients. At the end of the 10-week period, students learn how to terminate the therapeutic relationship and pass any unresolved goals of the client along to the next group of students through effective documentation and "warm" handoffs if

needed. Students overwhelmingly share their appreciation for participating in this program.

Benefits to the Fire Department and Community

The fire department staff have also realized benefits. Referrals to the student teams decrease distress related to repeatedly responding to telephone calls that could be prevented if clients had their needs met. The fire fighters must be back in service as quickly as possible to respond to emergencies, and they do not necessarily have the time or training to follow up with clients needing additional resources. More than 200 referrals were received, and 75 clients participated in the first 2 years of the program (unpublished data). Furthermore, frustration with larger community issues such as the high fall rates requiring repeated response in certain facilities is addressed through student projects to identify causes of falls and work with assisted living facilities to educate staff about fall prevention. Students have been able to strengthen relationships between the fire department and care facilities through these projects.

School of Nursing and University Benefits

The university benefits when this authentic, service-learning clinical placement is secured. This relationship has led to additional scholarship opportunities, such as an ongoing research study about fall prevention with three assisted living communities, a quantitative evaluation of the program, and regional and national presentations. In addition, the clinical placement is available throughout the year and the faculty has in-depth knowledge of the site, limiting the need for frequent reorienting of faculty to sites.

Challenges

Although numerous benefits have been realized, there have been challenges in implementing this role. Firefighter/paramedics may have, appropriately, different priorities than community health nurse educators. Faculty must balance the needs of the fire department and student learning to maximize both. Nursing faculty may also have students in other agencies in the neighborhood, dividing their time between these different clinical sites. In addition, as the number and complexity of clients cared for in the program increases, the breaks in student contact between educational terms is challenging for only one faculty member to manage.

Another barrier has been the willingness of referred clients to engage in care with faculty and student teams. Approximately 40% of the clients referred choose to participate. Client resistance to participating has included concerns about loss of independence and cost, although the program is free. Many older adults were referred for frequent falls requiring EMS assistance but were not concerned about frequent falling and perceived falls to be a part of aging. A continuing challenge is identifying an evaluation plan to demonstrate the efficacy of the program. The feedback from the firefighters, students, city leaders, and faculty agree that the program is valuable and they want it to continue.

Future Directions

This partnership has led to discussions with the city police's behavioral health unit about referrals to undergraduate students

and students in the Psychiatric/Mental Health Nurse Practitioner program. Partnerships between the university and other local fire departments are currently being explored to provide more learning experiences to students and further benefit the community. Future research opportunities include further fall prevention research with older adults and program evaluation of health outcomes such as EMS use, hospitalization, and engagement with primary care.

Conclusion

This partnership between academics and a fire department provides the clinical learning experiences recommended by the National League for Nursing (National League for Nursing Board of Governors, 2019), with students learning first hand about the social determinants of health and gaining skills to mitigate them. They develop consistent relationships with clients in new settings, obtain a window into clients' lives and living circumstances, and are able to apply essential nursing skills such as motivational interviewing. The fire department benefits from assistance with some of their most frequent, nonurgent callers, which is beneficial to the community. Faculty appreciate the ability to practice, and research opportunities are realized. This program could be implemented in other communities as underserved populations are nationally higher users of EMS services (Wang et al., 2013), and this type of program targets those with less access to health resources. In addition, this program could result in a reduction of frequent EMS telephone calls while providing invaluable learning for nursing students. Innovative interdisciplinary partnerships are an effective education tool to provide nursing students a broader view of health and health care through the lens of social determinants of health.

References

- Agency for Healthcare Research and Quality. (2015). *2015 national healthcare quality & disparities reports*. Retrieved from <http://www.ahrq.gov/research/findings/nhqrdtr/index.html>
- Barton, A.J. (2017). The nursing workforce and health reform: Implications for nursing education. *Journal of Nursing Education*, 56, 451-452.
- Committee for Assessing Progress on Implementing the Recommendations of the Institute of Medicine Report *The Future of Nursing*. (2015). In S.H. Altman, A.S. Butler, & L. Shern (Eds.), *Assessing progress on the institute of medicine report the future of nursing*.
- Dzau, V.J., McClellan, M., Burke, S., Coye, M.J., Frist, W.H., Daschle, T.A., . . . Zerhouni, E. (2017). *Vital directions for health and health care: Priorities from a national academy of medicine initiative*. Retrieved from <https://nam.edu/wp-content/uploads/2017/03/Vital-Directions-for-Health-and-Health-Care-Priorities-from-a-National-Academy-of-Medicine-Initiative.pdf>
- Fraher, E., Spetz, J., & Naylor, M. (2015). *Nursing in a transformed health care system: New roles, new rules*. Retrieved from <http://ldi.upenn.edu/brief/nursing-transformed-health-care-system-new-roles-new-rules>
- National League for Nursing Board of Governors. (2019). *A vision for integration of social determinants of health into nursing education curricula*. Retrieved from <http://www.nln.org/docs/default-source/default-document-library/social-determinants-of-health.pdf?sfvrsn=0>
- Storffjell, J.L., Wehtje Winslow, B., & Saunders, J.S.D. (2017). *Catalysts for change: Harnessing the power of nurses to build population health in the 21st century*. Retrieved from <https://www.rwjf.org/en/library/research/2017/09/catalysts-for-change--harnessing-the-power-of-nurses-to-build-population-health.html>
- Wang, H.E., Mann, N.C., Jacobson, K.E., Ms, M.D., Mears, G., Smyr-

ski, K., & Yealy, D.M. (2013). National characteristics of emergency medical services responses in the United States. *Prehospital Emergency Care*, 17, 8-14.

Wros, P., Mathews, L., Voss, H., & Bookman, N. (2015). An academic-practice model to improve the health of underserved neighborhoods. *Family & Community Health*, 38, 195-203.