A Reality Tour in Rural and Public Health Nursing

Nicole Thill, MPH¹ Laura Pettersen, M.S.² Alana Erickson, MPH³

¹ Executive Director, North Central Wisconsin AHEC, <u>nthill@nahec-wi.org</u>

² Executive Director, Scenic Rivers AHEC, <u>lpettersen@scenicriversahec.org</u>

³ Communication Specialist, Winnebago County Health Department,

aerickson@co.winnebago.wi.us

Abstract

Program Purpose: Rural areas face unique challenges recruiting and retaining registered nurses. Communities and higher education programs must work collaboratively to successfully recruit and retain nurses and other health professionals to rural areas. Students who receive firsthand experiences in rural, underserved areas are more likely to work in these areas upon graduation, when compared to students who are not provided with these opportunities. A rural immersion experience, as part of a nursing program, is one strategy to attract nurses to work in a rural area.

Discussion: Students participate in a daylong tour visiting healthcare sites in a rural area. Students are exposed to the diversity of rural populations and services, and learn about the unique challenges and rewards of working in those settings. Over 700 students have explored a community action agency, county health department, critical access hospital, center for hospice care, and a federally qualified health center through the Rural Reality Tour.

Program Evaluation: Eighty-three percent of participants said the experience had a positive impact on their interest in working in a rural or underserved area. Students are asked to rate each partner session on a scale of 1 to 5, with 1 being no learning and 5 being a great deal of learning. For all sessions combined, partner sessions have averaged 4.27.

Conclusion: This low-cost, high impact program provides an opportunity to further communitybased education and enhance the supply, distribution, diversity, and cultural competence of registered nurses.

Keywords: Nursing education, rural nursing, public health, Area Health Education Center (AHEC), partnerships

A Reality Tour in Rural and Public Health Nursing

Background

The public health system is comprised of "all public, private, and voluntary entities that contribute to the delivery of essential public health services within a jurisdiction" (Centers for Disease Control and Prevention, 2017). Public health is evolving, and while the scope and complexity of public health nursing responsibilities have expanded (Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics, 2013), the United States has seen a steep decline in the number of trained community and public health nurses (Young, Acord, Schuler & Hanson, 2014). The reason for this is multidimensional, and mirrored in the shortage of rural nurses, including: an aging workforce, a poorly funded public health system, inconsistencies in community and public health nursing educational approaches and opportunities, and a shortage of clinical training sites (Young et al., 2014). Given the shortage of registered nurses and a poorly funded public health system, there is a great need for collaboration and pooling

of resources among public health departments, healthcare providers, and other organizations in

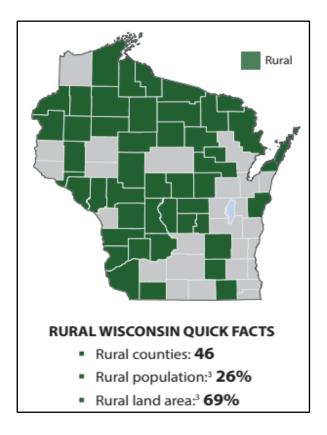


Figure 1. Rural Wisconsin facts.

rural communities in order to improve health outcomes.

The United States Census Bureau defines rural as "all population, housing, and territory not included within an urban area." Urban areas fall into two categories, Urbanized Areas (UAs) of 50,000 or more people, and Urban Clusters, of at least 2,500 and less than 50,000 people (United States Census Bureau, n.d.-a). The supply of registered nurses in rural communities is lower per capita than urban areas (U.S. Department of Health and Human Services,

Health Resources Services and Administration, National Center for Health Workforce Analysis, 2013). The gap in supply and demand for nursing, as well as other healthcare professionals, is also higher in rural areas. Rural areas typically have higher proportions of elderly and higher rates of chronic illness, both of which create an increase in demand for healthcare professionals (Rural Health Information Hub, n.d.a.). For example, 46 of Wisconsin's 72 counties are classified as rural (see figure 1) (Wisconsin office of Rural Health, 2017). Wisconsin's 65 and older population slightly exceeds the national average of 15.6%, totaling 16.5% of the state population (United States Census Bureau, n.d.b).

Rural communities experience significant health disparities and are more likely to be impacted by social factors impacting health (Rural Health Information Hub, n.d.b.). From access to direct medical services, to public health resources like fluoridated water, rural residents are impacted.

Addressing social determinants of health in curriculum and providing training opportunities in rural and underserved communities provides students with the skills needed to practice in these communities and refer patients to appropriate public and social service resources. It takes a multifaceted approach from multiple sectors to change systems and factors that impact health (Advisory Committee on Training in Primary Care Medicine and Dentistry, 2016).

It is imperative that communities and higher education programs work collaboratively to successfully recruit and retain health professionals to rural areas. Higher education programs can offer, or even require educational training experiences in rural areas. Research has shown nurses are more likely to work in a small, rural community if they were provided opportunities to experience a rural environment, and often employers use these experiences as a recruitment tool (Hendrickx, Mennenga, & Johansen, 2013).

The Rural Health Tour discussed here does just that, bringing students to rural facilities to hear from practicing professionals and witness the unique structures of rural healthcare systems. A rural immersion experience, as part of an undergraduate nursing program, is one strategy to attract nurses to work in a rural area. A study conducted by Coyle and Narsavage (2012) evaluated the impact of a senior-level rural rotation on nursing student interest in rural health, changes in beliefs and perceptions related to rural health, and intent to practice in a rural state. Of the 248

participants who completed a pre and post survey, 53% of students reported an increased interest in rural healthcare.

Providing opportunities that excite students about public health is important to convey the value of public health nursing (Larsen, Reif, & Frauendienst, 2012). Nursing rotations among undergraduate students have expanded from recent norms. Non-traditional sites, such as schools, homeless shelters, non-profit agencies, churches, etc., are being used more to reflect diversifying communities and unique social support interaction. This strategy not only benefits students by providing them a well-rounded clinical rotation experience, but combats the shortage issue of traditional clinical nursing sites as well. Additionally, the more exposure students get to these non-traditional sites, the more likely they will choose to work in those settings upon graduation (Pijl-Zieber & Grant Kalischuk, 2011).

Along with exposure in undergraduate clinical experiences, healthcare facilities and organizations must have strong recruitment strategies in place to attract students to work in public health and rural areas. Daniels, VanLeit, Skipper, Sanders and Rhyne (2007) sent a survey to health professional program graduates and found that those who first practiced in rural areas found the following factors important in their decision: community need, financial aid, community size, returning to hometown, and rural training program participation.

Purpose

The goal of the Rural Health Tour is to expose students and teaching staff to the diversity of rural populations and services and create awareness of the unique challenges and rewards of working in those settings. The driving force behind the development of the Rural Health Tour was the desire of the nursing faculty at Viterbo University for students to explore rural public health service agencies firsthand and expose them to the communities and resources in the region. This complemented the ongoing need for a well-prepared future workforce in rural communities as expressed by community partners. Students of this program attend school in a county designated in the 2010 census as 16.8% rural. This experience brings participants to three communities in two neighboring counties, one at 57.7% and the other 85.7% rural.

The Rural Health Tour is a daylong program that exposes nursing students to the populations and resources in the communities surrounding their higher education institution, the benefits and challenges of working in rural healthcare, and the professional opportunities available. To keep the program manageable and sustainable for all partners involved, the daylong tour runs a full and tight schedule (see figure 2).

Students load the bus at 8:00 a.m. and travel over 100 miles throughout the day to visit partner locations. Program presenters include: a community action agency, a county health department, a critical access hospital, a center for hospice care, and a federally qualified health center. Each site is given the opportunity to present an introduction to their services and their role as part of the public health system, discuss the communities they serve, highlight the benefits and challenges of rural healthcare, and offer a tour. Partners highlight their work with unique populations including: Spanish-speaking farm workers, Amish factions, low-income patients, and many under or uninsured patients that may prolong seeking preventive healthcare services. Students are encouraged to ask questions and participate in discussion. Question prompts are provided to the students to help them connect the dots, and often students are enthusiastic to inquire from their own perspective.

	Rural Public Health Overview Agenda
8:00 am	Meet at University – School of Nursing
8:15 am	Load bus and depart for Cashton
9:00 am	Arrive at Scenic Bluffs Community Health Center
	Director of Planning at CouleeCap Presentation on Poverty and Healthcare – an overview of how poverty affects families and individuals in the Coulee region and the services provided Couleecap, Inc. and other CAP agencies in the state. In what ways does socio-economic status affect access to healthcare? How is individual health affected by socio-economic situations? How does socio-economic status affect communities, individuals, and healthcare?
10:05 am	Tour, Presentation on Federally Qualified Health Centers (FQHCs) & Amish Healthcare, Executive Director How does a FQHC operate differently than a "traditional" health system? What benefit is that to a community/region? In what ways does a FQHC engage in public health differently than a "traditional" health system? Where are intersections between socio-economic status, public health, rural health systems, end of life care, and FQHCs? How is nursing role impacted?
11:00 am	Presentation by Monroe County Health Dept. Public Health Nurse Depart by 11:40 am What are some connects and disconnects between the work of the health department and health system (hospital/clinic) settings? What do you see as public health's role within the community and with individuals? How are these roles intertwined, if at all?
12:15 pm	Arrive at Vernon Memorial Hospital Lunch and presentations by Vernon Memorial Hospital Depart by 1:30 pm How does a rural health system deliver quality care to its patients? What are some advantages to working in a rural health system? What are some disadvantages? What are some examples of care or resources a patient has access to in a rural health system that may not be available in a larger/more urban/corporate system?
1:45 pm	Arrive Bland Bekkendal Center for Hospice Care Presentation by Director, Tour Depart by 2:45pm How does a Hospice Center impact public/community health? What are the benefits to this type of care, specifically in a rural community? In what way could socio-economic status impact access to hospice care?
3:30 pm	Arrive back at University

Figure 2. Rural Health Tour schedule used from 2016-2018.

The regional area health education center (AHEC) is a logical convener of this program because their goal is to improve access to healthcare by improving the number, distribution, and diversity of healthcare providers in the region they serve. For each tour, the regional area health education center coordinates partners (who provide in-kind donation of their time), provides funding for lunch (\$10.00 per person) and transportation (\$350 for school bus rental), and prepares informational folders for the students (\$45 for folders and printed copies). Folders include an agenda and contact information for sites, information on other AHEC programs, health careers websites, rural loan repayment programs, and other items as appropriate for the time and audience participating.

The local community action agency sets the stage by discussing poverty in the region and social determinants of health. The presentation provides facts and examples of the struggles local families living in poverty face. Health care issues, dental health concerns, housing, homelessness, transportation, and food insecurity are all discussed. Students are given information about the services available to low-income individuals and families. This session helps students recognize, "how important it is for me, the nurse, to know these resources [in order to] advocate for my patients."

The next stop on the tour is a visit with public health nurses at the county health department. Students learn about the myriad of services provided by the health department and the role of a public health nurse. A participant shared: "It was nice to learn about all the opportunities as a nurse in public health; many roles I didn't even know existed. It definitely changed my views on public health nursing."

The critical access hospital provides a panel of professionals consisting of registered nurses from various departments, supervisors, and human resource staff. Students listen to various perspectives on what it is like to work in a small, rural hospital. The human resource staff provide students resume/interviewing tips and information on the benefits and challenges of working at a critical access hospital in a rural area. One student stated: "Before this trip I didn't know what rural hospitals and healthcare facilities had to offer, and now I think that it might be a better fit for me than a big hospital."

Students meet with the director of a hospice care center where they learn about what it is like providing end of life care, specifically in a rural setting. The role of the interdisciplinary team and engagement of patients and families is highlighted. This discussion on the history of how and why this facility came to the community exemplifies "how the community [pulls] together to create programs to support people struggling in the community, and the community's ability to come together to finance" needed resources.

The last stop on the tour is a visit to a federally qualified health center (FQHC). Exposure to the FQHC helps students see a valuable community-based resource in the region. Students learn about the funding sources for FQHC's, the unique populations served, the services provided, what it is like working in that setting and more. "I especially liked the last stop and Scenic Bluffs [Community Health Center]. I always wondered what sort of job opportunities there are besides a hospital and I would love to work at a place like that," is a sentiment shared by many program participants.

All Bachelor of Science in Nursing students at Viterbo University are required to go on the Rural Health Tour as part of their senior year Public Health Nursing: Concepts & Clinical Applications course. Students go on the tour the second day of class, and refer back to the things they learned on the tour throughout the semester and during classroom time and clinical experiences. Three of the tour's sites regularly host students for clinical experiences.

The Rural Health Tour benefits students and partner sites alike. For many students the facilities within the tour offer a new perspective of providing healthcare. Students gain a greater awareness of the social aid available and how to advocate for underserved patients. Many students consider working in a rural setting, including a public health agency after this experience. The benefit for community partners is the opportunity to recruit future healthcare workers and promote the services they provide.

	:		th Tour Evaluation Tursing 452	on	
Was the orientation	on in Vernon	County a	valuable learning	experience? (O	Circle your
answer)	Yes		No		
Please rate your 1 of learning. (Circ			g sessions with 1	= no learning t	o 5 = great amount
CouleeCap	1	2	3	4	5
Public Health Department	1	2	3	4	5
Vernon Memorial Hospital	1	2	3	4	5
VMH staff nurses/managers	1	2	3	4	5
VMH director of home care/ hospice	1	2	3	4	5
VMH Human Resources	1	2	3	4	5
Scenic Bluffs Community Health Center	1	2	3	4	5
Has this clinical e employed as a nu			ed part of the cou		_

Figure 3. Rural & Health Tour Program Evaluation used from 2013-2017.

Discussion

All students who participate in the Rural Health Tour are given an opportunity to evaluate their experience to examine whether the program is effectively meeting the goal of exposing students to the diversity of rural populations and services and creating awareness of the unique challenges and rewards of working in those settings. To ensure a high response rate, surveys (see figure 3) are administered in the classroom shortly following the Rural Health Tour experience. Data has been collected from 458 nursing student participants. Student testimony assures that this program not only serves as a great educational experience, but often a career inspiration as well.

Students are asked, "*Has this clinical experience in any way affected your consideration of becoming employed as a nurse in a rural underserved part of the country*?" 83.34% of participants responded *yes* and 16.66% of participants responded *no*. Students are asked to rate each partner session on a scale of 1 to 5, with 1 being no learning and 5 being a great deal of learning. For all sessions combined, partner sessions have averaged 4.27.

Students also have the opportunity to provide written feedback about their experience. Feedback has always been very positive. One student said: "It was a great day that not only oriented us to public health, but it opened my eyes to rural health as well. Something I had previously not ever thought about as a nurse." The impact of this program is apparent as expressed by one student: "I have always considered rural nursing... I feel more comfortable with the decision after this experience...I feel as though I could really make a difference in rural nursing." To date, at least 12 students have been hired as a registered nurse at a site they visited on the Rural Health Tour upon graduating with a Bachelor of Science in Nursing degree.

Conclusion

In an effort to support academic and workplace partners alike, the Rural Health Tour program continues to expand by adding additional health profession program tours and sites. The tour began with 14 students per tour, and each year there has been a steady increase in the number of students as a result of class enrollment increases. Currently the tour runs three times per year, with the number of students on each tour in the low 50's, along with two nurse faculty and one Scenic Rivers AHEC staff. Since the program started in 2010, there have been over 20 tours, involving 15 community partners, and directly impacting over 500 nursing students.

Further research may involve a longitudinal study to investigate the number of participants who work in rural or public health shortly following graduation, as well as those participants who are still working in rural or public health years later. Although 83% of participants reported this experience has affected their consideration of becoming employed in a rural underserved part of the country, it's unclear whether this tour is reinforcing pre-existing intentions. Further research could measure the impact of the tour on students' interest in working at a rural health facility through a pre and post evaluation.

The survey has high completion rates, in that completing the Rural Health Tour evaluation is a requirement for the nursing students. The same evaluation was used from 2009-2013 evaluating self-reported student learning at each of the organizations visited. In 2013 the question *"Has this clinical experience in any way affected your consideration of becoming employed as a nurse in a rural underserved part of the country?"* was added (see figure 3). In 2018, the survey was moved online to a Qualtrics survey focusing on the outcomes and goals of the Public Health Nursing: Concepts & Clinical Applications course (see figure 4). The evaluation still relies on student self-reported learning, but aligns with specific nursing concepts. In order to address the issue of unknown pre-existing intentions, students are asked a before and after question regarding intention to work in a rural setting and intention to work in public health.

	5	ning, 1 = 4	3	2	1	N/A
The impact of social determinants of health on patients (socio-economic status, education, physical environment, employment, social support networks, access to healthcare)	0	0	0	0	0	0
Community resources for patients/clients	0	0	\bigcirc	0	\bigcirc	\bigcirc
The role and responsibilities of public health nursing	0	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
Coordination of services in meeting the health needs of a community	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\circ
Nursing practice in rural settings	0	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
Services and resources offered at a Federally Qualified Health Center (FQCHC)	0	\bigcirc	0	0	\bigcirc	0
Services and resources offered at a Critical Access Hospital	0	\bigcirc	\bigcirc	0	\bigcirc	\circ
Hospice Care services and resources	0	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
2 I had considered working in a rural setti Yes No	ng upon gra	aduation I	pefore this	s experier	100.	
3 Following this experience I am consider Yes No	ing working	in a rura	l setting.			
4 I had considered working in public healt Yes No	h upon gra	duation b	efore this	experien	ce	
5 Following this experience I am consider	ing working	in public	health.			

Figure 4. Updated Rural Health Tour evaluation used 2018 -present.

The adaptation of this survey demonstrates the quality improvement mindset of this program; continuing to provide a meaningful experience for the students and measure the success of intentions.

The Rural Health Tour is a low-cost, high impact program that provides an opportunity to further community-based health profession education and enhance the supply, distribution, diversity, and cultural competence of healthcare professionals in rural and underserved areas. The Rural Health Tour is an effective way to provide nursing students with rural and public healthcare experiences and promote opportunities beyond the traditional clinical setting. This inexpensive program is replicable in other health profession programs in a variety of communities.

References

- Advisory Committee on Training in Primary Care Medicine and Dentistry. (2016). *Addressing* social determinants of health: The role of health professions education. Retrieved from https://www.hrsa.gov/advisorycommittees/bhpradvisory/actpcmd/actpcmd_13th_report_sd h_final.pdf
- Centers for Disease Control and Prevention. (2017). *The public health system & the 10 essential public health services*. Retrieved from <u>https://www.cdc.gov/publichealthgateway/publiche</u>
- Coyle, S.B., & Narsavage, G.L. (2012). Effects of an interprofessional rural rotation on nursing student interest, perceptions, and intent. Online Journal of Rural Nursing & Health Care, 12(1), 40-48.

- Daniels, Z., VanLeit, B., Skipper, B., Sanders, M., & Rhyne, R. (2007). Factors in recruiting and retaining health professionals for rural practice. *Journal of Rural Health*, 23(1), 62-71. <u>https://doi.org/10.1111/j.1748-0361.2006.00069.x</u>
- Hendrickx, L., Mennenga, H., & Johansen, L. (2013). The use of rural hospitals for clinical placements in nursing education. In C.A. Winters (Ed.). Rural nursing: Concepts, theory and practice. (pp. 293-301). New York: Springer. <u>https://doi.org/10.1891/9780826170866.0019</u>
- Larsen, R., Reif, L., & Frauendienst, R. (2012). Baccalaureate nursing students' intention to choose a public health career. *Public Health Nursing*, *29*, 424-432. <u>https://doi.org/10.1111/j.1525-1446.2012.01031.x</u>
- Pijl-Zieber, E. M., & Grant Kalischuk, R. (2011). Community health nursing practice education:
 Preparing the next generation. *International Journal of Nursing Education Scholarship*, 8(1), 2250.
- Rural Health Information Hub. (n.d.a.). *Rural healthcare workforce*. Retrieved from: https://www.ruralhealthinfo.org/topics/health-care-workforce#workforce
- Rural Health Information Hub. (n.d.b.). *Social determinants of health for rural people*. Retrieved from <u>https://www.ruralhealthinfo.org/topics/social-determinants-of-health</u>
- United States Census Bureau. (n.d.-a). *Geography: Urban and rural*. Retrieved from https://www.census.gov/geo/reference/urban-rural.html
- United States Census Bureau. (n.d.-b). *Quickfacts: Selected: Wisconsin; UNITED STATES.* Retrieved from https://www.census.gov/quickfacts/fact/table/wi,US/AGE775217
- U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. (2013). *The U.S. nursing workforce: Trends*

in supply and education. Retrieved from: <u>https://bhw.hrsa.gov/sites/default/files/bhw/</u>nchwa/projections/nursingworkforcetrendsoct2013.pdf

- Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics.
 (2013). Wisconsin public and community health registered nurse workforce report (P-00450). Retrieved from: https://www.dhs.wisconsin.gov/publications/p0/p00450.pdf
- Wisconsin Office of Rural Health. (2017). Rural Wisconsin fact sheet. Retrieved from: http://worh.org/sites/default/files/Rural%20WI%20Health%202017_0.pdf
- Young, S., Acord, L., Schuler, S., & Hansen, J. (2014). Addressing the community/public health nursing shortage through a multifaceted regional approach. *Public Health Nursing*, *31*, 566-573.