

The Impact of the Rural Center of Excellence Designation on Rural Nursing Practice

Janet S. Van Gelder, R.N., D.N.P.(c)

Objectives

- ▶ review challenges with the delivery of rural health care
- ▶ discuss the components of the Rural Center of Excellence (RCE) designation
- ▶ examine the impact of the RCE designation on rural nursing practice
- ▶ identify relevance to DNP practice



Rural healthcare

- ▶ concerns with quality
- ▶ barriers include
 - difficulty recruiting & retaining qualified healthcare professionals
 - limited access to healthcare services
 - older population with chronic conditions
 - resource limitations
 - limited technology
 - financial challenges

(AHA, 2009b; Bushy, 2000; Cox, Mahone, & Merwin, 2008; IOM, 2005; Thornlow, 2008; Wakefield, 2005; Winters & Lee, 2010)



Rural communities

- ▶ **55.4 million people (19.7%) live in rural communities** (Hart, Larson, & Lishner, 2005; Perry & Mackun, 2001)
- ▶ **1,998 rural community hospitals** (AHA, 2009a)
- ▶ **lack of consensus on a standard definition**

(Hart, Larson, & Lishner, 2005; Kulig, et al., 2008; Merwin, 2008; Vanderboom & Madigan, 2007)

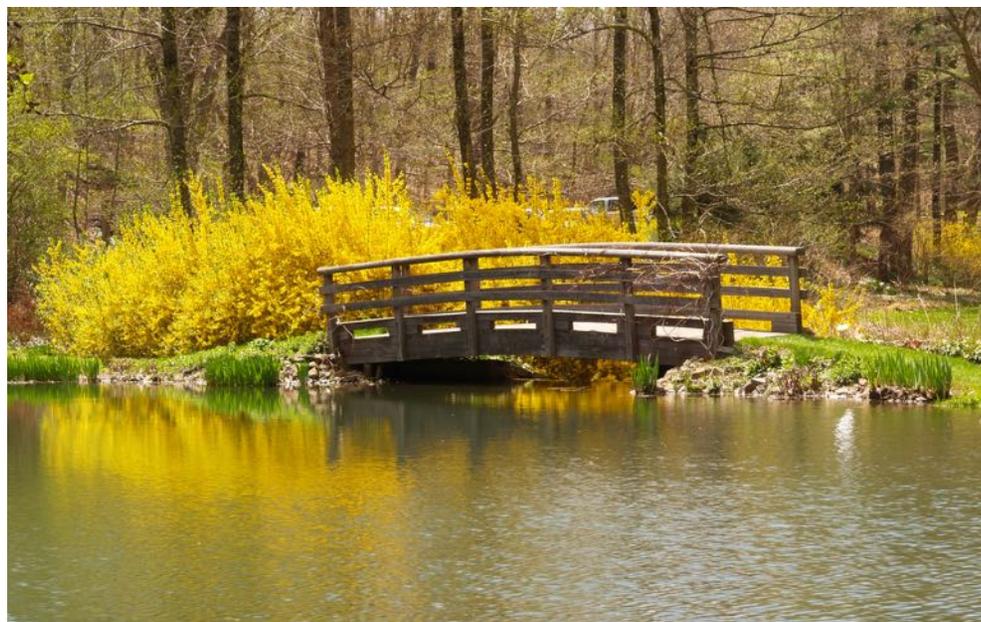
- U.S. Census Bureau
- U.S. Office of Management & Budget
- U.S. Department of Agriculture



Rural R.N. definition

- ▶ character of the community
- ▶ geographical location
- ▶ available resources
- ▶ uniqueness of rural nursing practice

(Kulig, et al., 2008)



Rural Center of Excellence

- ▶ Tahoe Forest Health System was designated as the first University of California, Davis Health System Rural Center of Excellence
- ▶ “rural health care systems that have exhibited excellence in clinical care, research, and education” (T. N. Nesbitt memo, July 13, 2009)



RCE Components

Clinical Care

- Joint Commission or an equivalent accreditation
- comprehensive continuous quality improvement process
- quality designations, such as the Baldrige National Quality Program and the Magnet Recognition Program

Education & Training

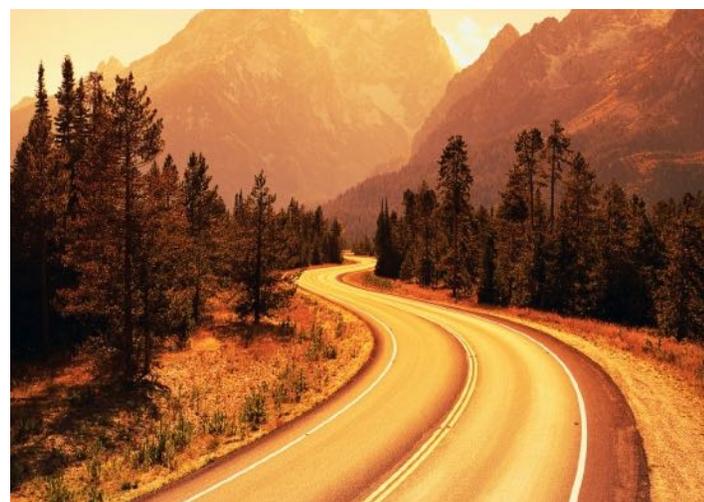
- commitment to continuing education
- promote a learning environment
- training site for medical students, nursing students, and other health care professionals.

Research

- active participation in clinical research by the medical and nursing staff
- participation in rural health research that advances clinical care and system effectiveness in order to improve rural healthcare delivery

Tahoe Forest Hospital

- ▶ 25 bed Critical Access Hospital (CAH) in Truckee, CA.
- ▶ 35 miles from Reno, NV.
- ▶ full time population of 32,000 residents serving North Lake Tahoe
- ▶ ethnicity is primarily Caucasian and Hispanic



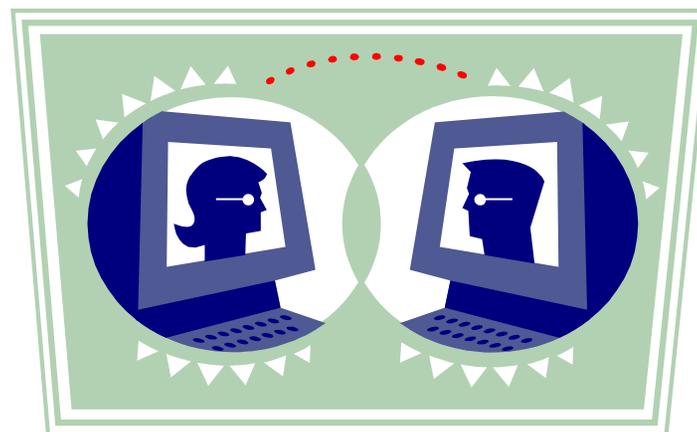
Tahoe Forest Hospital (cont.)

- ▶ rural mountainous terrain with elevations above 6,000 feet
- ▶ average snowfall of 206 inches per year
- ▶ Healthcare professionals
 - 46 Physicians
 - 154 Registered Nurses
 - 4 Nurse Practitioners
 - 3 Physician Assistants



Collaboration with UC Davis

- ▶ UC Davis Cancer Care Network
- ▶ Rural-PRIME (Programs in Medical Education)
- ▶ Betty Moore School of Nursing
- ▶ CME presentations, including Grand Rounds & Virtual Tumor Boards (VTB)
- ▶ Telemedicine program
- ▶ Tahoe Institute for Rural Health Research



Study purpose

- ▶ evaluate the impact of the Rural Center of Excellence (RCE) designation on Registered Nurses practice in the Tahoe Forest Hospital
- ▶ first study to assess the impact of the RCE designation at TFHS since it was awarded in August 2009



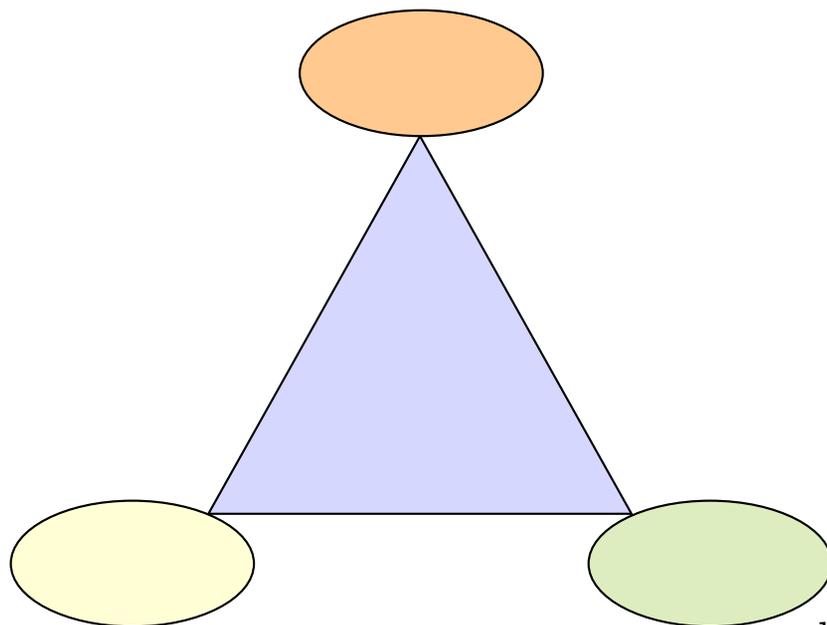
Ethics

- ▶ study approved by the Touro University Nevada College of Health and Human Services Student Research Committee and found to present no risk to human subjects



Methodology

- ▶ descriptive triangulated study
- ▶ confidential self administered questionnaire utilizing a hyperlink via electronic mail
- ▶ pilot survey tool using 6 RNs and 1 NP
- ▶ pilot survey interviews
- ▶ RN survey
- ▶ SPSS analysis



Demographics (46%, n=72)

Characteristics	n (%)
Clinical Specialty	
Medical Surgical Services	10 (14.1%)
Intensive Care Unit	6 (8.5%)
Emergency Services	4 (5.6%)
Surgical Services	17 (23.9%)
Obstetrics Gynecology	11 (15.5%)
Oncology	1 (1.4%)
Nursing Administration	4 (5.6%)
Home Health/Hospice	6 (8.5%)
Health Clinic	1 (1.4%)
Other	11 (15.5%)
Position	
RN	56 (96.5%)
Nurse Practitioner	2 (3.5%)
No Response	14
Gender	
Female	64 (90.1%)
Male	7 (9.9%)

Demographics (cont.)

Characteristics	n (%)
Number of Years in Nursing Practice	
0-5 years	5 (7.0%)
6-10 years	9 (12.7%)
11-15 years	7 (9.9%)
16-20 years	8 (11.3%)
21-29 years	18 (25.4%)
30 or > years	24 (33.8%)
Highest Nursing Degree Earned	
Diploma in Nursing	4 (5.6%)
Associate Degree in Nursing	28 (38.9%)
Baccalaureate of Science Degree in Nursing	31 (43.1%)
Master of Science Degree in Nursing	6 (8.3%)
Other	3 (4.2%)
Age	
21-29 years	2 (2.9%)
30-39 years	12 (17.1%)
40-49 years	20 (28.6%)
50-59 years	29 (41.4%)
60-69 years	7 (10.0%)

Study findings (46%, n=72)

Question	n (%)
Level of Knowledge	
Very knowledgeable	2 (2.8%)
Some knowledge	64 (88.9%)
Never heard of this program	1 (1.4%)
Unsure	5 (6.9%)
RCE Provides	
Medical Student Training	65 (92.9%)
Telemedicine	56 (80.0%)
Continuing education program	46 (65.7%)
Research projects	39 (55.7%)
Improved patient outcomes	39 (55.7%)
Continuous quality improvement	35 (50.0%)
Nursing Excellence	31 (44.3%)
Nursing student training	26 (37.1%)
Other	2
Nursing Practice Changed	
Yes	5 (6.9%)
No	38 (52.8%)
Unsure	29 (40.3%)
Utilization of Evidence Based Research	
Yes	58 (80.6%)
No	3 (4.2%)
Unsure	11 (15.3%)

Study findings (cont.)

Question	n (%)	
<p>Continuing Education Attendance</p> <p>TFHS Nursing continuing education programs</p> <p>TFHS Evening CME programs</p> <p>TFHS Tumor Board</p> <p>UC Davis Videoconference Grand Rounds</p> <p>Videoconference Virtual Tumor Board</p> <p>None</p>	<p>51 (70.8%)</p> <p>28 (38.8%)</p> <p>24 (33.3%)</p> <p>6 (8.3%)</p> <p>10 (13.8%)</p> <p>10 (13.8%)</p>	
<p>Reasons for Not Attending CE Programs</p> <p>Work Schedule</p> <p>Personal commitments</p> <p>Time of day</p> <p>Program not pertinent to my practice</p> <p>Day of the week</p> <p>Not interested</p> <p>Length of class</p> <p>Other reason(s):</p>	<p>42 (63.6%)</p> <p>29 (43.9%)</p> <p>25 (37.9%)</p> <p>22 (33.3%)</p> <p>8 (12.1%)</p> <p>3 (4.5%)</p> <p>1 (1.5%)</p> <p>2</p>	
<p>How Helpful are the CE Programs</p> <p>Nursing continuing education programs</p> <p>Evening continuing medical education program</p> <p>Grand Rounds via videoconference</p> <p>Virtual tumor boards via videoconference</p> <p>Monthly Tumor Board programs</p>	<p>Rating Average</p> <p>3.34</p> <p>3.17</p> <p>1.40</p> <p>1.91</p> <p>2.61</p>	<p>Did Not Attend</p> <p>12 (16.9%)</p> <p>30 (45.5%)</p> <p>52 (83.9%)</p> <p>52 (82.5%)</p> <p>47 (72.3%)</p>

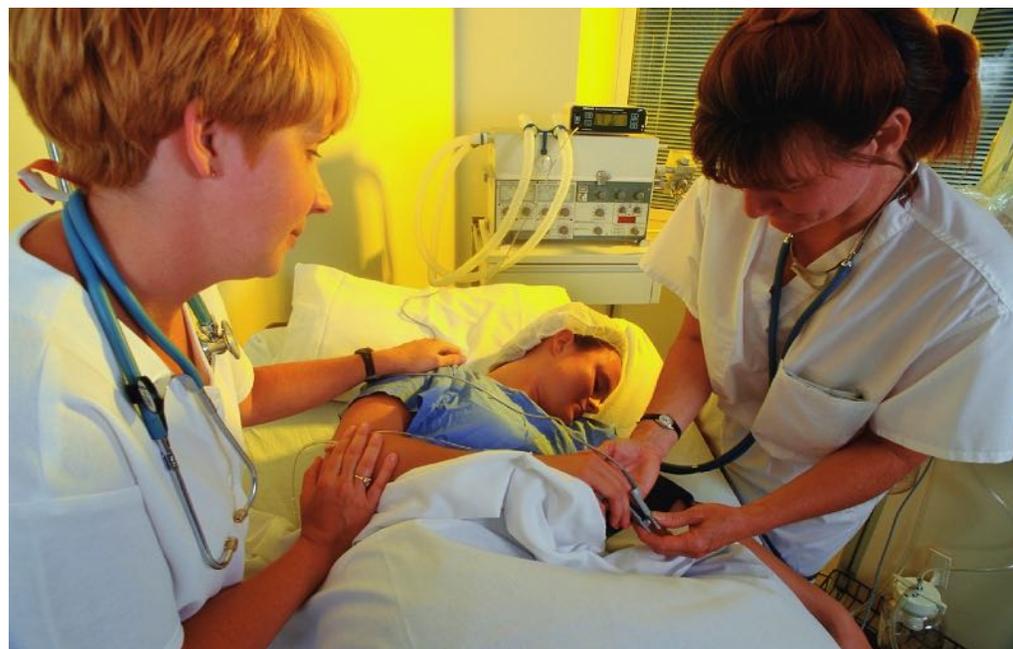
Knowledge of the RCE

- ▶ study identified that there needs to be increased education about the components of the RCE program
- ▶ additional research is necessary to ascertain the optimal method of communication with staff on different shifts, weekends, and holidays



Nursing practice changed

- ▶ study identified the need for staff education about the criteria and services provided as a part of this designation
- ▶ the number of years in nursing practice, the highest nursing degree, and age of the nurse had no impact



Continuing education

- ▶ study identified the need for greater promotion of the programs
- ▶ educate the staff about the availability of Grand Rounds programs retrospectively
- ▶ the number of years in nursing practice, the highest nursing degree, and age of the nurse had no impact on attendance



Reasons for not attending

- ▶ work schedule (64%) may be reflective of the long hours that nurse's work resulting in them feeling tired and decreasing their motivation for learning
- ▶ personal commitments (44%) and day of the week (12%) reflect the impact of families and their desire to spend time with them or their preference to participate in extracurricular activities



Reasons (cont.)

- ▶ time of day (38%) and the length of the class (2%) may be because the majority of the programs are offered for 1 to 2 hours in the morning, mid day, or early evening
- ▶ lack of relevance to their nursing practice (33%) or lack of interest (5%) may be indicative of the lack of time or support to apply the new knowledge to their practice



Evidence based practice

- ▶ 81% reported utilizing evidence based research in their nursing practice
- ▶ study did not define evidence based practice
- ▶ 4.2% reported not utilizing EBP and 15.3% were unsure may need further education
- ▶ the number of years in nursing practice, the highest nursing degree, and age of the nurse had no impact



Fall rate

- ▶ reported area of concern with a high of 6.32% in comparison to a national average of 2.79% (Newland, 2010)
- ▶ identified as one of the largest problem for nurses in rural hospitals (Casey, et al., 2006)
- ▶ suggestions for improvement included hourly rounding, compliance with the fall program and nursing care plan, patient and staff education, and increased staffing



Discussion

- ▶ continued participation in the RCE program may have a greater impact on nursing practice
- ▶ additional studies are necessary
- ▶ achieved through greater staff education about the criteria and services provided as a part of this designation



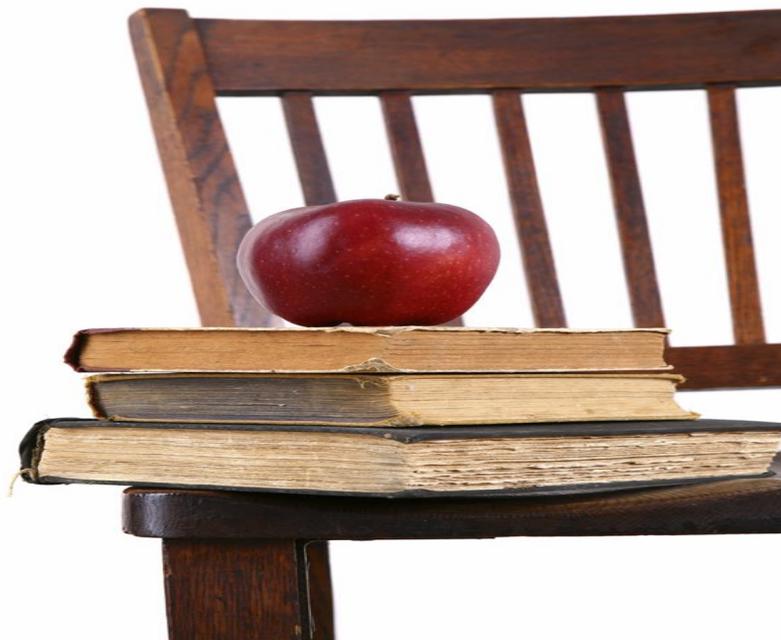
Discussion (cont.)

- ▶ barriers and facilitators to attending educational programs must be addressed
- ▶ support of nursing leadership, the promotion of a culture based on evidence, and continued education on the utilization of evidence in practice
- ▶ compliance with the fall prevention policy
- ▶ continued collaboration with UCDHS



Nursing implications

- ▶ goal of the RCE designation and the Essentials of Doctoral Education is to provide the necessary competencies to improve the delivery of healthcare



Nursing implications (cont.)

- ▶ **Clinical care**
 - advocate continuous quality improvement through patient safety initiatives and transforming the work environment to improve the delivery of care
- ▶ **Education**
 - identify the motivation for rural nurses to attend continuing education programs and eliminate identified barriers
- ▶ **Research**
 - create a culture of care based on evidence and eliminate the identified barriers to utilizing evidence based practice

Limitations

- ▶ convenience sample from one CAH
- ▶ short timeframe of measurement since implementation of the RCE in July 2009
- ▶ data collection mid June – August 2010
- ▶ every rural hospital has unique characteristics



Conclusions

- ▶ provide a systematic approach to improve rural healthcare delivery
- ▶ assist in achieving the IOM ⁽²⁰⁰⁵⁾ goals
- ▶ decrease the urban to rural healthcare delivery gap
- ▶ additional research is necessary



Questions



References

- ▶ American Association of Colleges of Nursing (2006). *The Essentials of Doctoral Education for Advanced Nursing Practice*. Retrieved March 13, 2009 from <http://www.aacn.nche.edu/DNP/pdf/Essentials.pdf>
- ▶ American Hospital Association (2009a). Fast facts on U.S. hospitals. Retrieved January 30, 2010 from <http://www.aha.org/aha/resource-center/Statistics-andStudies/fast-facts.html>
- ▶ American Hospital Association (2009b). Rural health care. Retrieved January 30, 2010 from http://www.aha.org/aha_app/issues/Rural-Health-care/index.jsp

References (cont.)

- ▶ Bushy, A. (2000). *Orientation to Nursing in the Rural Community*. Thousand Oaks, CA.: Sage Publications, Inc.
- ▶ Cox, K., Mahone, I., & Merwin, E. (2008). Improving the quality of rural nursing care. *Annual Review of Nursing Research*, 26, 175–194.
- ▶ Hart, L.G., Larson, E.H., & Lishner, D.M. (2005). Rural definitions for health policy and research. *American Journal of Public Health*, 95(7), 1149–1155.

References (cont.)

- ▶ Health Resources and Service Administration (2010). The Registered Nurse population: Findings from the 2008 national sample survey of Registered Nurses. Retrieved September 23, 2010 from <http://bhpr.hrsa.gov/healthworkforce/rnsurvey/2008/nssrn2008.pdf>
- ▶ Institute of Medicine (2005). *Quality through collaboration: The future of rural health*. Retrieved November 6, 2009 from http://books.nap.edu/openbook.php?record_id=11140&page=3
- ▶ Kulig, J.C., Andrews, M.E., Stewart, N.L., Pitblado, R., MacLeod, M.L.P., Bentham, D., D'Arcy, C., Morgan, D., Forbes, D., Remus, G., & Smith, B. (2008). How do registered nurses define rurality? *Australian Journal of Rural Health, 16*, 28–32.

References (cont.)

- ▶ Nesbitt, T.N. (2009). Designation of UC Davis Rural Centers of Excellence. Memorandum to Claire Pomeroy, MD, MBA, Executive Vice Chancellor & Dean, July 13, 2009.
- ▶ Newland, J. (2010). *Tahoe Forest Health System Quality Improvement Report: 2006–2009*. Received March 10, 2010.
- ▶ Perry, M.J., & Mackun, P.J. (2001). Census 2000 brief: Population change and distribution. Retrieved January 29, 2009 from <http://www.census.gov/prod/2001pubs/c2kbr01-2.pdf>
- ▶ Thornlow, D.K. (2008). Nursing patient safety research in rural health care settings. *Annual Review of Nursing Research*, 26, 195–218.

References (cont.)

- ▶ Vanderboom, C.P., & Madigan, E.A. (2007). Federal definitions of rurality and the impact on nursing research. *Research in Nursing & Health*, 30, 175–184.
- ▶ Wakefield, M.K. (2005). Health care quality in rural America: What's in it for nurses? *Nursing Economics*, 23(1), 36–38.
- ▶ Winters, C.A., & Lee, H.J. (2010). *Rural Nursing: Concepts, Theory, and Practice* (3rd ed.). New York, NY: Springer Publishing Company, LLC.