Acknowledgments...It takes a village...

- Project Advisor & Committee Chair – Dr. Brenda Senger
- Academic Advisor & Committee Member – Dr. Jane Tiedt
- The Staff and Faculty at Gonzaga University School of Nursing & Human Physiology – especially Dr. Neva Crogan, Susie Maher, Rachel Young, Dr. Mary McFarland, Jennifer Towers, Assistant Dean, Dr. Lin Murphy, Interim Dean, & Dr. Elaine Rodmer & the IRB Committee at GU
- Dr. Casey Blumenthal, President at MT CAHN, the Leadership Council – and the magnificent participants from across MT CAH

Problem Identification

- Stakeholders in healthcare have struggled to address the gaps and chasms in healthcare delivery.
- Leadership is a cardinal nursing competency necessary to increase quality, access, and value in healthcare.
- A survey from the Montana CAHN (2017), along with several national studies (IOM, 1999; IOM, 2011; McAuley, 2008; RWJF, 2018), conclude there is a need for nursing leadership to improve quality in rural healthcare across the United States.

Problem Significance

Montana was ranked 30th in the nation for healthcare quality (AHRQ, 2016). For persons living in rural settings, the gap in safety and quality in healthcare continues to widen (Robert Wood Johnson Foundation, 2018).
The purpose of this quality improvement scholarly project was to pilot an online nurse leadership education program for nurse managers working in rural critical access hospitals (CAHs) in Montana. The educational leadership program selected was titled Nursing Leadership: Empowering Nurses in Latin America and the Caribbean from the Pan American Health Organization (PAHO) (2017).

The QI potential:

- The PAHO leadership education program holds the potential to enable nurse managers to:
  - Advance their abilities to proficiently function as organizational leaders.
  - Engage in approaches to problem-solve and improve patient safety and quality in CAHs in Montana.

Project Aims:

1. Measure leadership knowledge.
2. Assess and explore demographic data.
3. Measure perceptions of leadership.
4. Evaluate participant satisfaction of the online leadership education program.

Literature Appraisal

Institute of Medicine 1999 – 2015 (NAM ➔ 2030)

1999 To Err is Human...
2003 Keeping Patients Safe...
2004 Transformational Leadership...

2011 & 2015 The Future of Nursing Leading Change
Advancing Health
The public has a right to expect registered nurses to demonstrate competence in professional practice and leadership and believes that leadership competencies can be defined and measured (ANA, 2013). These competencies were used as a benchmark for choosing a leadership training program for this project. Montana Center to Advance Health Nursing (CAHN) sent a leadership survey (MT CAHN 2017 Leadership Rapid Response Survey December) to 137 nurse managers working in various rural hospitals across Montana. Of nurses surveyed, 30.95% reported that they did not believe that they had the necessary leadership skills for their role and 85.71% did not believe nurse leaders working in rural Montana have the leadership skills they need to address the challenges of rural healthcare. n = 42 revealed a gap in leadership knowledge & skills in nurse managers working in rural Montana. Gonzales, Boswell, and Marquez (2018) reported a need for leadership education for rural nurse managers. Riley and Schmidt (2016) continue to call attention to the importance of maintaining standards of patient safety and quality. Rural nurses value online learning - its accessibility and flexibility with asynchronous virtual classrooms. Cost and time are often factors when considering participation in continuing education.
Providing rural nurse managers with a leadership program that meets competencies, while offering affordability and access, will help them to employ leadership strategies to advance safe, high-quality, and effective healthcare: The PAHO course meets these criteria.

Quality assurance and quality improvement in healthcare requires that there be more nurses who are skilled, knowledgeable, and able to competently execute and navigate leadership competencies.

There is a paucity of research on nurse leadership and rurality. The drivers of healthcare, like the RWJF and the IOM, call for nurses to lead in order to advance health in every setting.

If rural nurse managers are to employ leadership strategies to advance safe, high-quality, and effective healthcare, more cost relevant and accessible leadership development programs need to be universally available.

The PAHO nursing leadership program meets these criteria.
Methods - Design

- The design was a pilot quality improvement (QI) education project that used an open source, evidence-based, online nurse leadership course.
- Participant knowledge, learning, perceptions, demographics, and satisfaction were analyzed using mixed-method studies from three surveys.
- The PAHO course was comprised of eight leadership modules with various teaching strategies to enhance and promote learning.

- The course was self-paced and asynchronous, could be completed in any time configuration appropriate for individual participants, and was housed online through the PAHO Virtual Campus of Public Health.
- Email reminders were sent each week and informational videos were posted on a website developed to keep participants actively involved in the program (Riley & Schmidt, 2016).
- The total learner’s time commitment for this program was 40 hours.

Methods - Ethical Considerations

- Approved by Gonzaga University’s Institutional Review Board (IRB).
- The PAHO nurse leadership course was free of charge & open to all participants.
- There were no institutional or personal financial commitments from the participants, or conflicts of interest.
- Participants chose a uniquely coded identifier to maintain confidentiality.
- Participants were not obligated to report pre or posttest results.

- Confidentiality and privacy were maintained by the project lead who kept the participant list separate from deidentified names.
- No individual results were/will be published, only aggregate data.
- Participation was voluntary, and participants could withdraw at any time.
- There was no reimbursement for participation or for completing the course and surveys.
- As a reward for program completion, participants received 32 free contact hours through the Montana CAHN.
The Rural CAH Setting

- "Rural" is defined by the U.S. Census Bureau (n.d.) as having < 50,000 persons.
- 47 of Montana’s counties are rural.
- Montana has a total population of 1.05 million people, ranking 44th in the U.S.
- 29 Montana counties (52%) have fewer than 8,000 persons (U.S. Census Bureau, 2010).
- Rurality is a factor in health outcomes.
- Distance.
- Access.
- Quality.
- HPSA (HRSA, n.d.).

Michele Sare, DNP, MSN, RN
2019 MT CAHN Leadership Summit

"Rural" is defined by the U.S. Census Bureau (n.d.) as having < 50,000 persons.

- Montana has a total population of 1.05 million people, ranking 44th in the U.S.
- 29 Montana counties (52%) have fewer than 8,000 persons (U.S. Census Bureau, 2010).

Critical Access Hospitals (CAHs)

- Centers for Medicare and Medicaid Services (CMS) designation.
- CAHs - designated by the CMS - address fiscal limitations of small jurisdictions to serve as a limited service hospital to provide essential healthcare services to rural communities (CMS, 2017).
- The project’s participants come from 20 of Montana’s 56 counties - with an average bed size of 20.16 and representing 48.8% of the state’s rural counties and 42% of Montana’s CAHs.

Michele Sare, DNP, MSN, RN
2019 MT CAHN Leadership Summit

Participants

- A convenience sampling of nurse managers working in Montana CAHs.
- Inclusion criteria:
  - Currently working in a management position - such as Directors of Nursing (DON), Assistant Directors of Nursing (ADON), and/or as charge nurses.
  - Nurse managers included licensed practical nurses (LPNs) with a diploma or certificate or registered nurses (RNs) with either a Graduate (MSN), Bachelor (BSN), or Associate (ADN) degree in nursing.
  - Active unencumbered Montana license.
  - Currently practicing in a Montana CAH.
  - Speak and write English.
  - No exclusion criteria were specified.

Data Collection

- Twenty-nine participants meeting inclusion criteria completed all program requirements (n=29).
- Descriptive statistical methods were used for data analysis.
- Four data tools, that included both quantitative and qualitative responses, were used to collect data to achieve the project’s four aims.
  - 1) The Leadership Survey: Demographics - collected prior to the start of the program.
  - 2) Leadership Survey: Pre-Program - collected prior to the start of the program.
  - 3) Each participant completed the posttests built into the eight modules of the PAHO course and submitted their raw scores.
  - 4) Satisfaction Post-Course Survey – at course completion.
Aim 1 – Measure of Leadership Knowledge

Posttest Scores By Module  \( n = 31 \)

<table>
<thead>
<tr>
<th>Module</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9.25</td>
</tr>
<tr>
<td>2</td>
<td>9.18</td>
</tr>
<tr>
<td>3</td>
<td>9.18</td>
</tr>
<tr>
<td>4</td>
<td>8.61</td>
</tr>
<tr>
<td>5</td>
<td>8.61</td>
</tr>
<tr>
<td>6</td>
<td>9.18</td>
</tr>
<tr>
<td>7</td>
<td>9.18</td>
</tr>
<tr>
<td>8</td>
<td>9.18</td>
</tr>
</tbody>
</table>

Table 3: Posttest Scores of Three Participants Compared to Their Pretest Scores

<table>
<thead>
<tr>
<th>Pretest Score</th>
<th>Posttest Score</th>
<th>Percent Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>65%</td>
<td>91.25%</td>
<td>26.25%</td>
</tr>
<tr>
<td>58%</td>
<td>95.75%</td>
<td>37.75%</td>
</tr>
<tr>
<td>64%</td>
<td>90%</td>
<td>31%</td>
</tr>
</tbody>
</table>

Aim 2 - Assess and Explore Demographic Data

Participants by License:

- 2 = LPN
- 14 = BSN
- 11 = ADN
- 3 = MN

Average age: 47 - spanning from 30 years to 66 years of age
Aim 3 - Measure Perceptions of Leadership Skills

FREQUENCY OF 9 RECURRING THEMES: DEFINITION OF A LEADER
N = 29

- Change
- Decision making
- Influences
- Team/group work
- Vision and strategy
- Planning

Participants’ Definitions of Leadership Related to ANA Definitions

FREQUENCY OF 9 RECURRING THEMES: DEFINITION OF A LEADER
N = 29

- Change
- Decision making
- Influences
- Team/group work
- Vision and strategy
- Planning
Perception that experience is a qualifier for leadership positions.

Leadership positions were not valued as independent from nursing practice.
Leadership Education is Not a Requirement to Become a ADON or DON in Montana’s CAHs

- 74% reported having the leadership knowledge needed for their role.
- Yet, 44.8% had never received leadership education.
- The demographic findings revealed that experience, or years in nursing practice, was a stronger indicator for becoming a nurse leader than leadership education.
- Interestingly, 93% expressed having significant challenges to their leadership practice.

Aim 4 - Evaluate Participant Satisfaction

Deming’s P-D-S-A Wheel (Moen, n.d.) served as the Theoretical Framework for this QI Project

- Plan: Based on findings from QI pilot project, make recommendations to MT CAHN
- Do: Implement and refine nurse leadership curriculum and strategies
- Study: Measure and analyze findings from surveys and posttests
Project Limitations

- Project did not ask if participants had access to other leadership education.
- This project is limited to Montana nurses working in CAHs in management positions.
- As a QI pilot project, there are no comparisons available and there is no evidence-based work with which to compare these findings.
- Unable to compare pre and posttest data.

Evaluation of Outcomes

- This QI study affirms the findings from the Montana CAHN 2017 Leadership Rapid Response Survey, December 2017; there is a gap in leadership education for nurse managers working in rural CAHs across Montana.
- Definitions of leadership among this nursing cohort are diverse and unspecified.
- The PAHO course – aligned with the ANA competencies - is a readily available, enduring, no-cost program to help Montana’s nurses learn leadership competencies.

Outcomes Linked to the Purpose & Aims

- Aim 1 – Measure Leadership Knowledge:
  - The data demonstrates that the majority of nurse managers achieved mastery of the PAHO course content.
- Aim 2 – Explore Demographic Data:
  - The demographic findings revealed that experience, or years in nursing practice, was a stronger indicator for becoming a nurse leader than leadership education or level of nursing degree.

Outcomes - Purpose & Aims...

- Aim 3 – Measure Leadership Perceptions:
  - Participants value leadership, but do not recognize the differences between leadership and management – and none discussed leadership in relationship to quality patient outcomes.
- Aim 4 – Satisfaction with PAHO Course:
  - The mean response for all five questions was 4.327 (5 = extremely satisfied/excellent) – demonstrating a high level of satisfaction with the PAHO course.
Looking to the Future Recommendations

- A future QI study would benefit from improved standardization for how data are reported.
- A computer literacy prerequisite course would enable greater ease of course access and navigation.
- Recommend access to appropriate technology and upgrades for Montana’s rural healthcare settings.

Michele Sare, DNP, MSN, RN - 2019 MT CAHN Leadership Summit

Recommendations 2

- Recommend a standardized system for security applications for CAHs – perhaps a software program that is cost-appropriate and has 24/7 tech support.
- Recommend the course include a dedicated contact person.
- These barriers are external to the PAHO program.
- The program itself is easy to access and complete.

Michele Sare, DNP, MSN, RN - 2019 MT CAHN Leadership Summit

Looking to the Future Research

- A future duplicated QI study could include more participants (& include pre and posttests + statistical analysis).
- A future study to assess access to leadership continuing education, why courses are/are not accessed.
- A future study to assess why leadership education is not viewed in the context of a professional development requirement.
- An empirical study that assesses the link between nurse leadership education, leadership competencies, and patient outcomes.

Michele Sare, DNP, MSN, RN - 2019 MT CAHN Leadership Summit
Research 2

- A QI study to assess why leadership competency is not a criterion for holding leadership positions in Montana’s CAHs.
- A study to understand why leadership models & theories (e.g., ANA model) are/are not employed.
- A study to assess what leadership competencies are being taught in schools of nursing and by those providing continuing education.

Michele Sare, DNP, MSN, RN
- 2019 MT CAHN Leadership Summit

Sharing the Work

- Dissemination Plan:
  - RNO Journal Submission – Fall 2019
  - MT Leadership Summit June 2019 (abstract submitted/accepted)
  - Montana CAHN Leadership Council – project summary
  - Dr. Cassiani, PAHO – project paper

References


Thank you…

Questions & Comments please…
References