Rural Health Workforce Challenges:  
A State Journey Toward Improvement

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Disclosure Statement

University of Wisconsin - Madison

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No conflict of interest to disclose
Purpose & Objectives

Describe Wisconsin’s journey toward improving the rural health nursing workforce

• Identify strategies for examining rural-urban nursing workforce gaps
• Discuss three improvement strategies
• Leverage key learnings, particularly collaborative partnerships
Background: Rural Health Disparities

Rural populations are older, suffer more chronic illnesses, and face numerous barriers to access care.

Rural subgroups with unique health needs:
- First Nations
- Agricultural
- Forestry
Background: Rural Health Disparities

Health care access challenges

• Socio-cultural knowledge
• Occupational and economic
• Geographic and environmental
• Provider recruitment and retention
Wisconsin Center for Nursing

Mission:
Assure an adequate, well-prepared and diverse nurse workforce to meet the needs of the people of Wisconsin

Strategic Priorities:
• Critically analyze & disseminate nursing workforce data
• Strengthen our capacity to bring together nursing interests into coherent platform & message around workforce issues
• Lead Wisconsin response to the Institute of Medicine (IOM) report, The Future of Nursing
Wisconsin Center for Nursing

- Wisconsin legislative bill in 2009 mandates survey at relicensure every two years
- WCN and Rural Wisconsin Health Cooperative (RWHC)
- designated as Action Coalition partners in 2011
- Robust data used for RWJ-SIP and HRSA grants for improvement opportunities statewide
Rural Wisconsin Health Cooperative

- Founded in 1979
- Non-profit cooperative
- 40 rural hospitals
  - 19 independent
  - 21 affiliated
- 21 critical access hospitals
- Strong nursing leadership council
Tim Size, Executive Director

Nationally-recognized leader and advocate for rural health and rural health policy
Wisconsin Center for Nursing Data Analysis Evolution

- State and regional analysis
- At A Glance reports by region 2014
- County analysis in 2016
  - RN and APRN
- Rural - urban analysis in 2018
Rural - Urban Analysis

Rural and urban classification using AHEC Wisconsin Health Service Areas (Sugden, 2015)

• Geographical “best fit”
  • Zip codes
  • Municipalities
  • Physician services
  • US Census Bureau classification
2018 Wisconsin RN Workforce Survey

- Electronic survey
  - 88,932 completed
  - 79,750 respondents included
- Exclusion criteria
  - Not living or working in Wisconsin
  - Excessive work hours or conflicting employment status
  - RN license before birth, age 16, or degree
  - Working >10 jobs
## 2018 Workforce Survey Findings

### Demographic Characteristics

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Rural n = 14,217</th>
<th>Urban n = 46,138</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age (SD)</td>
<td>46.3 (12.1)</td>
<td>43.9 (12.4)</td>
</tr>
<tr>
<td>Gender Diversity (Females)</td>
<td>93.4%</td>
<td>92.6%</td>
</tr>
<tr>
<td>Diversity (White)</td>
<td>97.3%</td>
<td>93.4%</td>
</tr>
<tr>
<td>Diversity (Hispanic)</td>
<td>1.2%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Number Languages Spoken</td>
<td>1.1</td>
<td>1.1</td>
</tr>
</tbody>
</table>
## 2018 Workforce Survey Findings

<table>
<thead>
<tr>
<th>Employment Characteristics</th>
<th>Rural ( n = 14,217 )</th>
<th>Urban ( n = 46,138 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years Direct Patient Care (SD)</td>
<td>15.1 (11.4)</td>
<td>14.0 (11.3)</td>
</tr>
<tr>
<td>Hours Worked Primary Job (SD)</td>
<td>35.3 (11.0)</td>
<td>35.0 (10.5)</td>
</tr>
<tr>
<td>Number Nursing Jobs</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Total Hours Primary and Secondary Jobs (SD)</td>
<td>36.7 (11.7)</td>
<td>36.1 (11.1)</td>
</tr>
</tbody>
</table>
2018 Workforce Survey Findings

Intent to stay in Direct Care

- Less than 2 years
- 2 – 4 years
- 5 – 9 years
- 10 – 19 years
- 20 – 29 years
- 30 or more years
2018 Workforce Survey Findings

Intent to Stay in Current Employment

- Rural
- Urban

- Less than 2 years
- 2 - 4 years
- 5 - 9 years
- 10 - 19 years
- 20 - 29 years
- 30 or more years
2018 Workforce Survey Findings

Highest Nursing Degree

Smaller proportion of rural nurses with Bachelor's Degree
Improvement Strategy

HRSA Grant: STREAM

• Success Through Recruitment/Retention, Engagement, and Mentorship (STREAM) Native Nation students pursuing nursing careers

• 12 Wisconsin tribes (11 federally recognized and one state recognized) are federally-designated Health Professional Shortage Areas

• Aligns to diversity and rural health priorities and includes comprehensive support system
STREAM Partnerships

• GLITC (Great Lakes Intertribal Council)
• NACHP (Native American Center for Health Professions)
• UW-Madison School of Nursing
• UW-Madison Population Health Institute
Financial Support

Academic Support

Mentorship

Holistic Admissions

Rapid Cycle Quality Improvement

Peer Support

STREAM FOR NATIVE NURSING STUDENTS

Financial Support

Academic Support

Mentorship

Holistic Admissions

Rapid Cycle Quality Improvement
We are Healers: Kala Cornelius
STREAM Current Results

• Infrastructure and program established
• 13 STREAM students
• 4 pre-nursing and 6 undergraduate nursing
• 2 DNP and 1 PhD
• 4 Native Nation Nursing Summits
• Plan to expand clinical sites and native nation clinical instructor in 2020
Native Nations UW Leadership Summit

Community-Academic Partnerships:

- Improve health services
- Preserve the environment
- Develop local economies
- Strengthen families
- Expand educational opportunities

UW-Madison & 12 Native Nations of Wisconsin
Faculty Cluster Hire

UW-Madison Native American Environment, Health & Community Faculty Cluster

Researchers housed in:

• Nelson Institute for Environmental Studies
• School of Human Ecology
• School of Nursing
School of Nursing: Rural Engagement

- BSN@Home (RN to BSN program)
- Rural health scholarships
- Summer rural health immersion
- Expansion of mental health certificate program for APRN
Nurse Residency Programs

• WI early national leader

• HRSA – SOAR-RN (2004-2011)

• Support onboarding & retention rural health nurses with Marquette University & RWHC
Documentary: Medicine on Main Street
Current Improvement Strategy
Preparation for Rural Practice

Stakeholder engagement project

• School of nursing
• Rural health cooperative

Purpose

• Identify educational deficiencies among Registered Nurses related to readiness for rural nursing practice
Preparation for Rural Practice

• Qualitative, descriptive design
  • Capture voices and perspectives of rural nurses
  • Convenience sampling
  • Practicing nurses employed by member organizations of rural health cooperative
• Data collected via face to face, semi-structured interviews
• Thematic analysis of transcribed recordings
Preparation for Rural Practice - Results

26 interviews
  • Eight facilities
  • Five nursing roles
  • Seven practice settings

Students not prepared for diversity of patients in rural settings
Findings

Training Needs for Rural Workforce

Two themes

• Reality of rural practice
• Awareness of rural culture
Reality of Rural Practice

- Expert generalist
- Diverse ages and health conditions
- Embedded within community
Awareness of Rural Culture

- Cultural characteristics, values and beliefs
- Social and environmental conditions
- Economic and employment trends
Expanding Capacity Through Strategic Partnerships

Leaders and innovators in rural nursing and rural health for the state of Wisconsin
Key Partnerships - State

- Wisconsin Council on Medical Education and Workforce (WCMEW)
- Center for Interprofessional Practice & Education (CIPE)
- Wisconsin Academy of Rural Medicine (WARM)
- Wisconsin Office of Rural Health (WORH)
- Wisconsin Center for Nursing (WCN)
- UW-Madison School of Pharmacy
Key Partners & Resources - National

- National Rural Health Association (NRHA)
- Health Services Resources and Administration (HRSA)
- Federal Office of Rural Health Policy (FORHP)
- Centers for Disease Control and Prevention (CDC)
- United States Department of Agriculture (USDA)
- National Farm Medicine Center (NFMC)
- AgrAbility and AgriSafe
Key Learnings

• It's all about multi-sector collaboration and partnership
• Data that links to rural health is important
• It takes multiple strategies
• Time to leverage interprofessional educational resources and teams
• Infrastructure is important
Educational Initiatives

• Strengthen didactic and clinical experiences
• Develop electives and certificate programs
• Emphasize interprofessional learning opportunities
• Leverage technology and online learning
• Make rural health a visible strategic priority
Wisconsin’s Journey Continues…

Data  Education  Advocacy  Collaboration
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References


• Native American Center for Health Professionals [NACHP]. (2015). We are healers: Kala Cornelius. Retrieved from https://wearehealers.wisc.edu/doctor/kala-cornelius/


References


