Addressing Physician Shortages in Underserved Communities: An Immersive Longitudinal Approach

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Individuals in underserved areas experience worse health outcomes and higher rates of hospitalizations for common conditions, especially in rural communities.
Most underserved counties in Wisconsin are rural. Predicted demographic changes and physician shortages will further impact health outcomes in these regions.
At the UW-Madison SMPH we are deeply committed to addressing health disparities and diminishing the growing gap between the number of health care providers and need for providers in underserved rural and urban areas.
Longitudinal Community Immersive Integration Along the UW-Madison SMPH Education and Training Continuum

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- Rural and Urban Scholars in Community Health (RUSCH) pipeline program

**MED SCHOOL**
- Integrated Community Engagement and Public Health Curriculum
- Statewide medical campus
- Unique educational programs in Public Health, Rural Medicine (WARM), and Urban Underserved Medicine (TRIUMPH)

**RESIDENCY**
- Family Medicine Programs throughout state
- Rural Residency Training Sites
- New Preventive Medicine Residency

**PRACTICE**
- Loan Forgiveness Programs
- Office of Rural Health and Hospital Association Physician Recruitment Programs
- Continuing community health education for health care professionals
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Wisconsin Area Health Education Center (WiAHEC) Programs

- Health Career Camp - high school students
- Global Health Institute Training Workshop – high school students
- Wisconsin Express - week-long immersion experience for college students
- Community Health Internship Program (CHIP) – community projects for undergraduate and first year graduate/professional students
- Interprofessional Health Care Case Competition – interprofessional student teams
Rural and Urban Scholars in Community Health (RUSCH) Program

- Two year academic enrichment and community engagement program for pre-medical students interested in rural and urban health
- Public health and clinical internships in own community
- MCAT review support and admissions counseling
- Research and scholarly enrichment internship at SMPH
- Health equity seminars
- Rural and urban field trips
- Career mentoring
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New physicians more likely to practice in state if they have lived and trained in Wisconsin

- Medical school in WI – 37.8 % stay in WI
  (public – 42.8%, private - 33.5 %)
- Residency in WI – 46.8 % stay in WI
- Medical school and residency in WI – 70% stay in WI
- From WI, medical school and residency in WI - 86% stay in WI
Community Engagement and Public Health is Integrated into Curriculum Starting 1st year

• Population Health and Epidemiology
• Integrative Cases: Cross Disciplinary and Interprofessional Experiences (Poverty, Drunk Driving, Health Policy Advocacy, Tuberculosis, Upstream from the ER)
Statewide Communities in Diverse Learning Environments

CLINICAL TRAINING SITES
- Academic campuses
- Family Medicine residencies
- Other sites
- Wisconsin Academy of Rural Medicine (WARM)
M3 and M4 Years Include Statewide Interprofessional Community Immersion and Public Health Curriculum

- M3 - Primary Care Community Projects & Core Clerkship Days
- M4 - Community Health Assessments & Public Health Electives
- Immersion Tracks in Rural (WARM) and Urban Medicine (TRIUMPH)
Public Health/Primary Care Innovations in Medical Education (PRIME) (HRSA funded)
The Training in Urban Medicine and Public Health (TRIUMPH) Program

- First cohort (7) graduated May 2011
- Doubled class size to 16 M3 students in 2014
- TRIUMPH graduates were more likely to select:
  - primary care specialties
  - urban residency programs with underserved populations

**WARM: Wisconsin Academy of Rural Medicine**

- **Interprofessional/Interdisciplinary Rural Health Electives**
  - public health issues, telemedicine, rural/farm zoonosis, rural healthcare policy and economics, agrochemical hazards, physical injury hazards, agricultural environment
- **Summer Externships in Rural Communities**
- **Clinical training in rural clinics**
- **Immersive Community Health Projects**
- **Rural Health Interest Group**
Wisconsin Academy of Rural Medicine (WARM) Timeline

Milestones

- WI Rural Medical Education Planning Committee
- University Committee Approval
- 1st Cohort Admitted n=5
- Marshfield and Rice Lake Clinical Training Sites Open
- La Crosse Clinical Training Sites Open
- Green Bay Clinical Training Sites Open
- PRIME Pathway of Distinction begins
- 1st WARM Graduates Begin Practice
- 8th Cohort Admitted n=26

Funding Streams

- Collaboration Planning Grant
- Strategic Initiatives Grant
- Wisconsin Partnership Grant
- Tuition Support Begins
- HRSA Grant for Pathway of Distinction in Public Health and Primary Care (PRIME)
- State Fund Bolus
University of Wisconsin Affiliated Rural Medicine Pipeline

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<thead>
<tr>
<th>Elementary and high school</th>
<th>College</th>
<th>Medical school</th>
<th>Residency program</th>
<th>Rural practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepare students in basic sciences and expose them to health care systems and providers</td>
<td>Enhance pre-medical experiences and strengthen medical school application portfolio</td>
<td>Recruit students with rural backgrounds and career goals</td>
<td>Enhance traditional curriculum with relevant rural medicine content</td>
<td>Locate education and training programs within rural communities in Wisconsin</td>
</tr>
<tr>
<td><strong>Ideal Student</strong></td>
<td><strong>Ideal Preparation</strong></td>
<td><strong>Ideal Environment</strong></td>
<td></td>
<td></td>
</tr>
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**WiAHEC** Wisconsin Area Health Education Centers  
**RUSCH** Rural and Urban Scholars in Community Health pipeline program  
**WARM** Wisconsin Academy of Rural Medicine  
**WRPRAP** Wisconsin Rural Physician Residency Assistance Program  
**WiORH** Wisconsin Office of Rural Health

All of the above offices report to the SMPH Associate Dean for Rural and Community Health, Dr. Byron Crouse
WARM and TRIUMPH Outcomes through 2014

<table>
<thead>
<tr>
<th>Residency Location/ Specialty</th>
<th>Degree Program</th>
<th>WARM</th>
<th>TRIUMPH</th>
<th>Other MD, MD/PhD</th>
</tr>
</thead>
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<tr>
<td>Wisconsin</td>
<td></td>
<td>33(62.3%)*</td>
<td>13(28.9%)</td>
<td>185(27.3%)</td>
</tr>
<tr>
<td>Primary Care</td>
<td></td>
<td>23(43.4%)</td>
<td>9(20.0%)</td>
<td>92(13.6%)</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>10(18.9%)</td>
<td>4(8.9%)</td>
<td>93(13.9%)</td>
</tr>
<tr>
<td>Outside Wisconsin</td>
<td></td>
<td>20(37.7%)</td>
<td>32(71.1%)</td>
<td>492(72.6%)</td>
</tr>
<tr>
<td>Primary Care</td>
<td></td>
<td>10(18.9%)</td>
<td>19(42.2%)</td>
<td>189(27.9%)</td>
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<tr>
<td>Other</td>
<td></td>
<td>10(18.9%)</td>
<td>13(28.9%)</td>
<td>303(44.7%)</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td>53(100%)</td>
<td>45(100%)</td>
<td>677(100%)</td>
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2015: 86% TRIUMPH and 48% WARM students matched into Primary Care compared to 37% of other students
Practicing WARM graduates
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Wisconsin Rural Physician Residency Assistance Program (WRPRAP)

- **Wisconsin Act 190** – July 1, 2010

- **Grant funding** to launch rural programs in family medicine, internal medicine, obstetrics/gynecology, general surgery, psychiatry

- **Technical assistance** to grantees and organizations through funding of the Wisconsin Collaborative for Rural GME of the Rural Wisconsin Health Cooperative

- **Outreach to** a broader spectrum of medical specialties

- **Collaboration with GME stakeholders** (i.e. Wisconsin Council on Medical Education and Workforce, Wisconsin Hospital Association, Wisconsin Department of Health Services)
Growth of WI Collaborative for Rural GME Rotations
7/1/2010 – 6/30/2014
Growing number of rural residency positions funded in past fiscal year under Act 190

- **Monroe Clinic RTT:**
  - 2 Brodhead family medicine
  - 12 Rural Surgery
  - 4 Emergency Medicine
  - 1 hospitalist

- **Divine Savior Hospital, Portage:**
  - 5 Emergency Medicine rotations for UW Family Medicine residents
  - 12 General Surgery rotations for UW Surgery residents

- **UW Department of Pediatrics:**
  - 3 Pediatric rotations in Beaver Dam, Baraboo and Sauk City

- **Marshfield Clinic:**
  - 2 Internal Medicine rotations in Rice Lake, Minocqua, and/or Park Falls

- **UW-Fox Valley:**
  - 1 Family Medicine rotation in Waupaca
Preventive Medicine Residency

Program Overview

The University of Wisconsin Preventive Residency Program trains physicians in the practice of public health and population medicine. The program consists of three experiential modes of training: didactic, clinical and practicum.

- Didactic
- Preventive Medicine Practicum
- Clinical

- Accredited March 2014
- First 2 residents began July 2014
- Seeking HRSA funds May 2015
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Provider Jobs

Experienced, unbiased consultation to help you find the perfect job fit in Wisconsin.

Loan Repayment

Find out more about the State Loan Repayment program.
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Challenges and Opportunities

• Increase Residency Training Capacity
  – Adjust caps
  – Create incentives for programs that address shortages
  – Develop partnerships with community hospitals and academic institutions
  – Increase flexibility in training requirements
  – Build technology infrastructure

• Recruit and Retain Physicians to Address Shortages
  – Increase supply
  – Provide incentives
  – Invest in health system partnerships
  – Build technology infrastructure
  – Create interprofessional cross coverage options
QUESTIONS AND DISCUSSION