# WARM

Past, Present, & Future



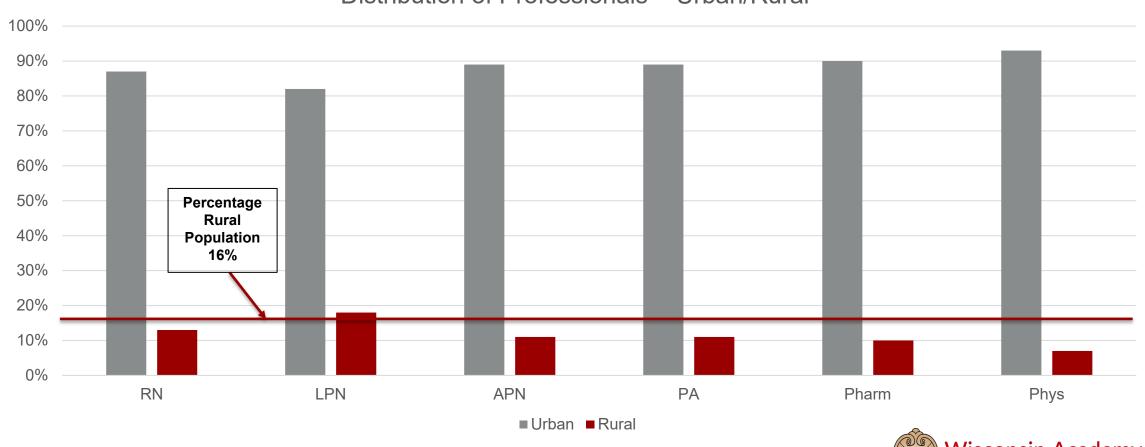
#### Rural Healthcare Disparities Nationally

- Up to 48,000 more primary care doctors are needed nationwide by 2034
- The shortage of all kinds of doctors is expected to reach up to 124,000 by 2034
- National population estimated to grow more than 10% by 2032. Over 65 to increase by 48%
- More than two of five currently active physicians will be 65 or older within the next decade.
- Rural areas have one-fourth fewer doctors per person than urban areas
- 68% of the communities nationally, with federally designated doctor shortages, are rural.



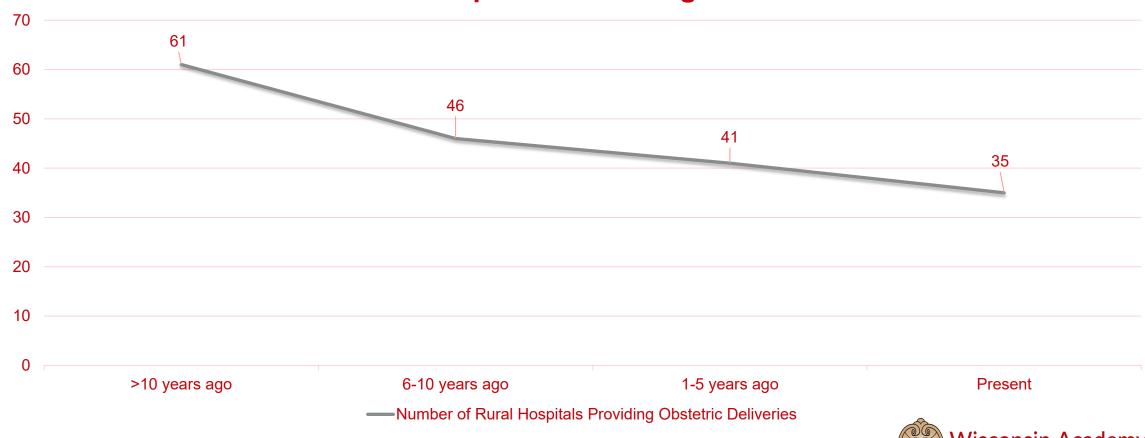
## Rural Health Disparities





#### Rural Health Disparities cont.

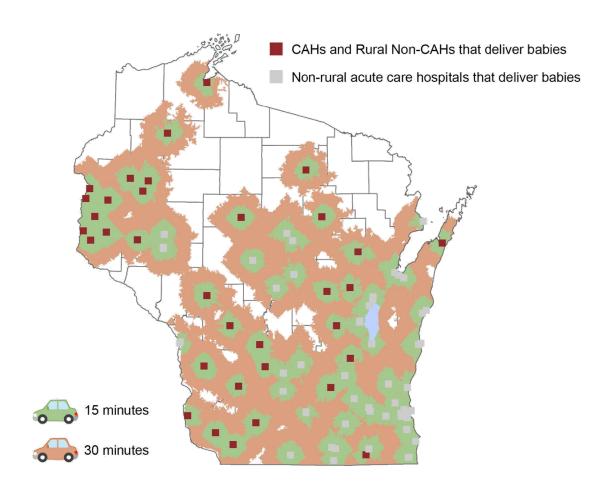
#### **Number of Rural Hospitals\* Providing Obstetric Deliveries**

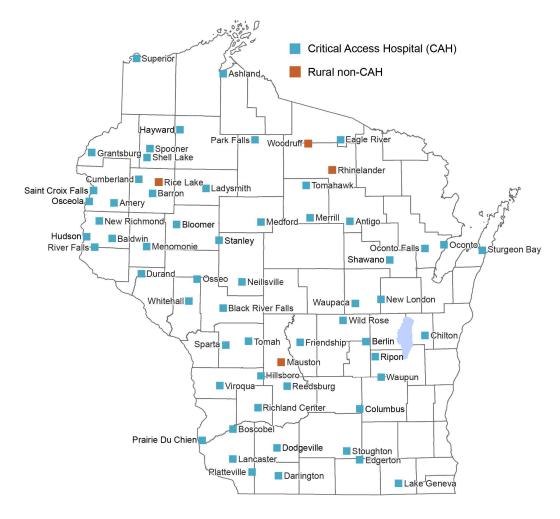


<sup>\* 11</sup> rural hospitals have closed their obstetric units in the past 10 years



#### Rural Health Disparities





# Past

History of the WARM Program



### History of WARM Program

- 2004 statewide call-to-action report, "Who Will Care for Our Patients", recommendations included the creation of a 'school within a school' to address the rural underserved populations of the state
- WARM was created in response, matriculated first students in 2007
- Admission is limited to applicants who are residents of Wisconsin, later to include applicants from bordering states



#### WARM Curriculum – Phase 1

- Phase 1 in Madison (first 3 semesters)
- Follows and enhances UWSMPH's MD curriculum
- WARM and traditional students meet the same metrics and benchmarks
  - Students are assigned a rural preceptor in Phase 1 Preceptor Program
- Phase 1 rural enrichment activities such as the WARM lunch seminar series, Rural Health Interest Group, and the Overview of Rural Health Elective



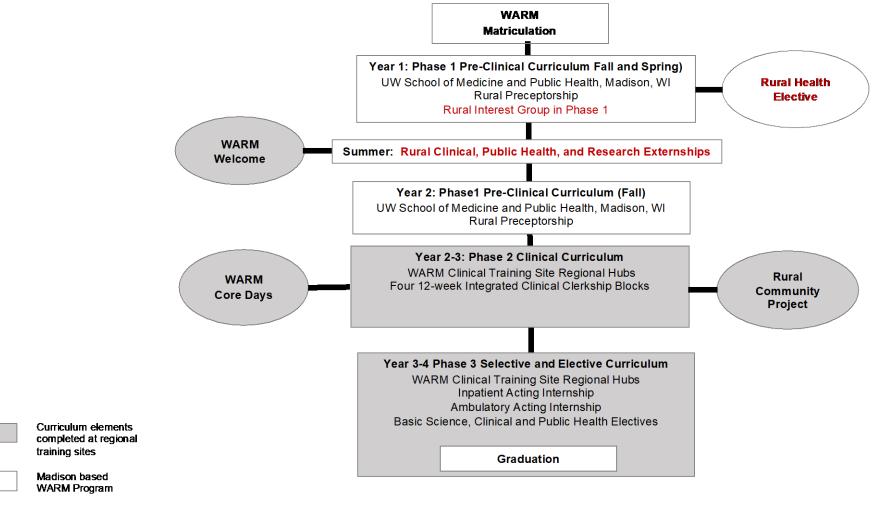
#### WARM Phase 2/3

- Students are assigned to regional campus for Phases 2/3
  - Green Bay Advocate Aurora Health/Eastern Academic Campus
  - La Crosse Gundersen Health System/Western Academic Campus
  - Marshfield Marshfield Clinic Health System/Northern Academic Campus
- Students participate in "WARM Welcome", an immersive week-long orientation to their regional campus, including additional education provided by leaders of marginalized rural cultural groups
- Core Days held both regionally, and statewide
  - Regional Core Days held monthly at each campus
  - Statewide Core Days held 1-2 times per year
- Rural Public Health Project
  - Required in Phase 2, optional continuation in Phase 3



#### WARM Curriculum Map

#### **WARM ForWard Curriculum Map**



# WARM Outcomes Paper



#### WARM Outcomes Paper - Purpose

- Assess the efficacy of the Wisconsin Academy of Rural Medicine (WARM) program including WARM graduates' practice locations, specialty outcomes, and what program elements influenced commitment to work with rural populations.
- First outcomes paper from program



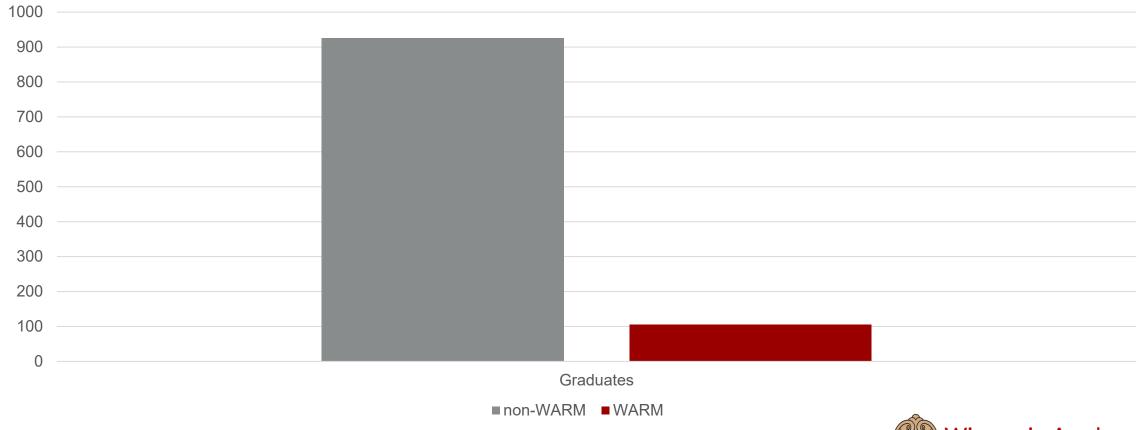
#### WARM Outcomes Paper - Methods

• Data was collected retrospectively from 106 WARM and 925 non-WARM UWSMPH graduates from 2011-2017. Stratified chi-square tests of independence were run to test associations between medical program (WARM or not), practice location, rurality, and specialty. Independent samples T-tests were used to determine differences in response to perceived importance of WARM experiences in influencing selection of practice setting



#### WARM Outcomes Paper - Results

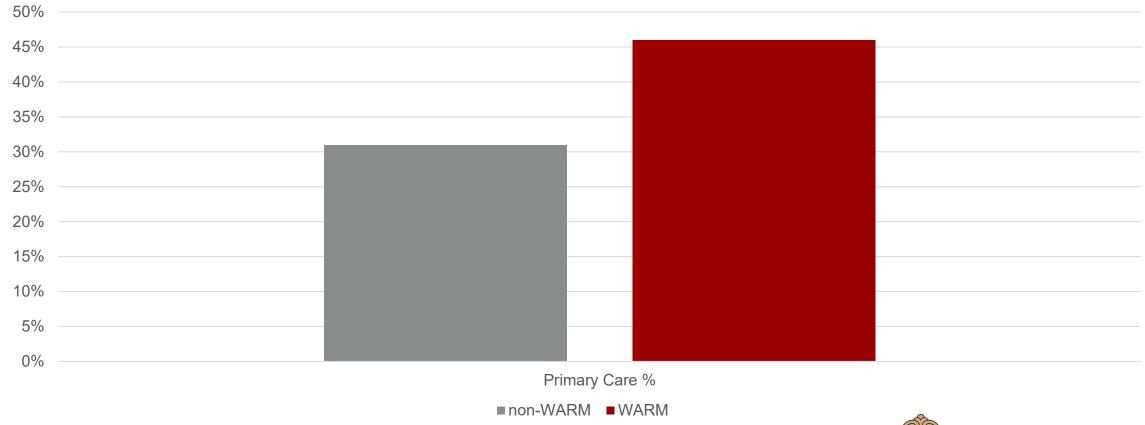






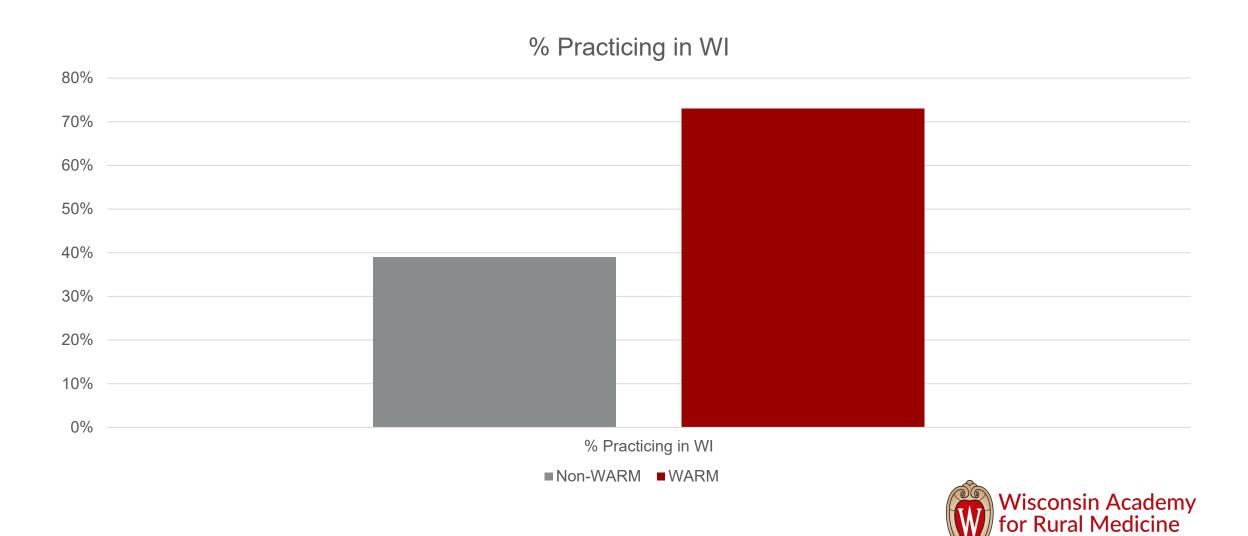
#### WARM Outcomes Paper - Primary Care







### WARM Outcomes Paper – Practicing in WI

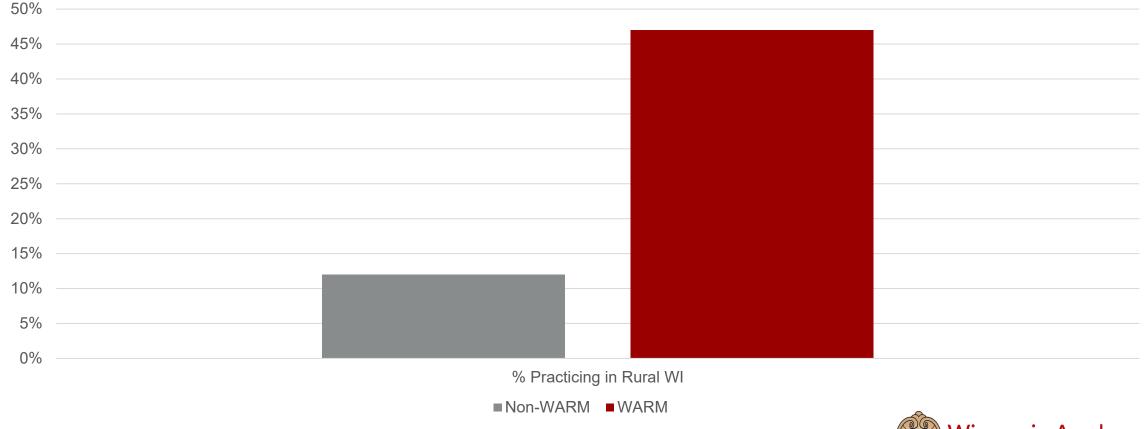


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SCHOOL OF MEDICINE AND PUBLIC HEALTH

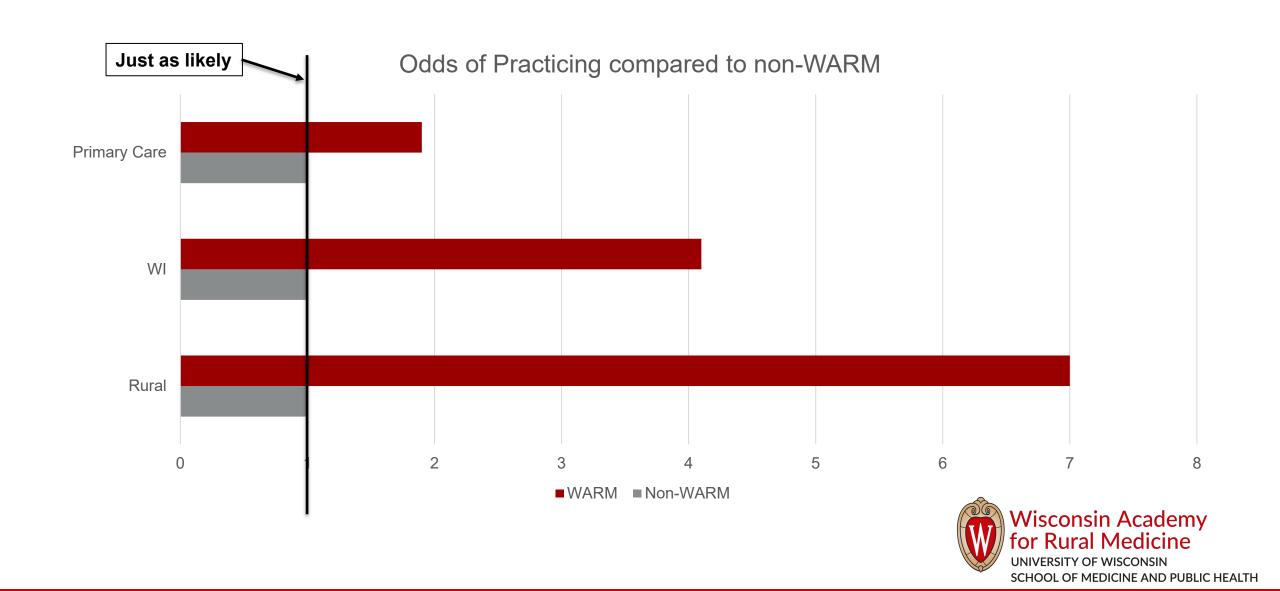
## WARM Outcomes Paper – Practicing in Rural WI



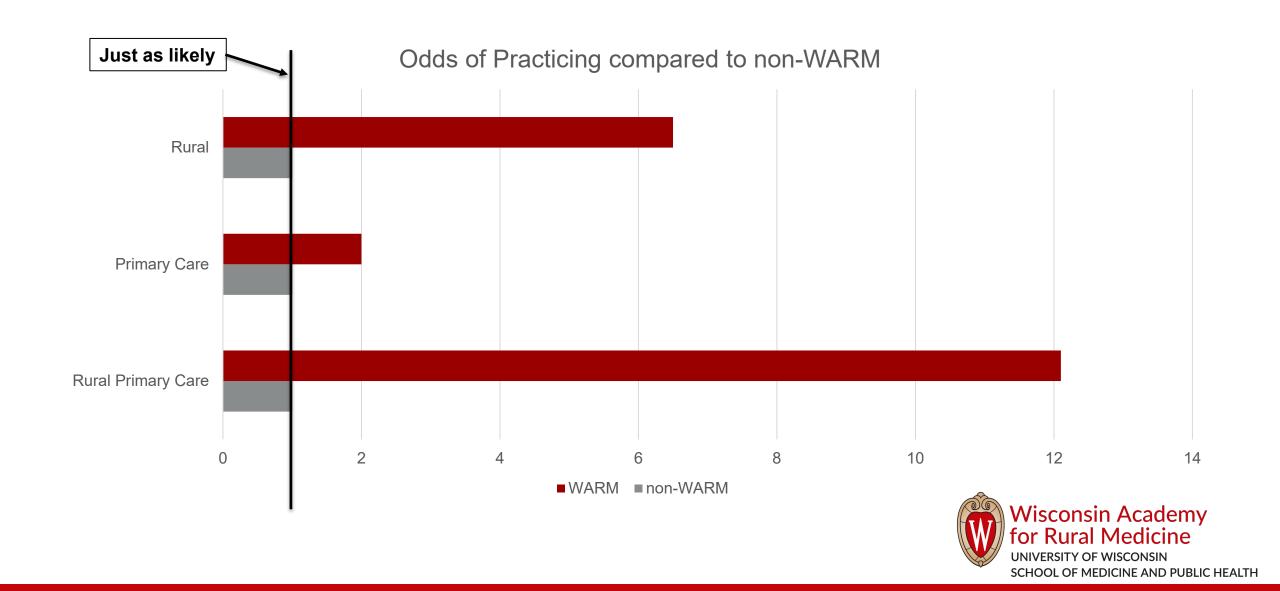




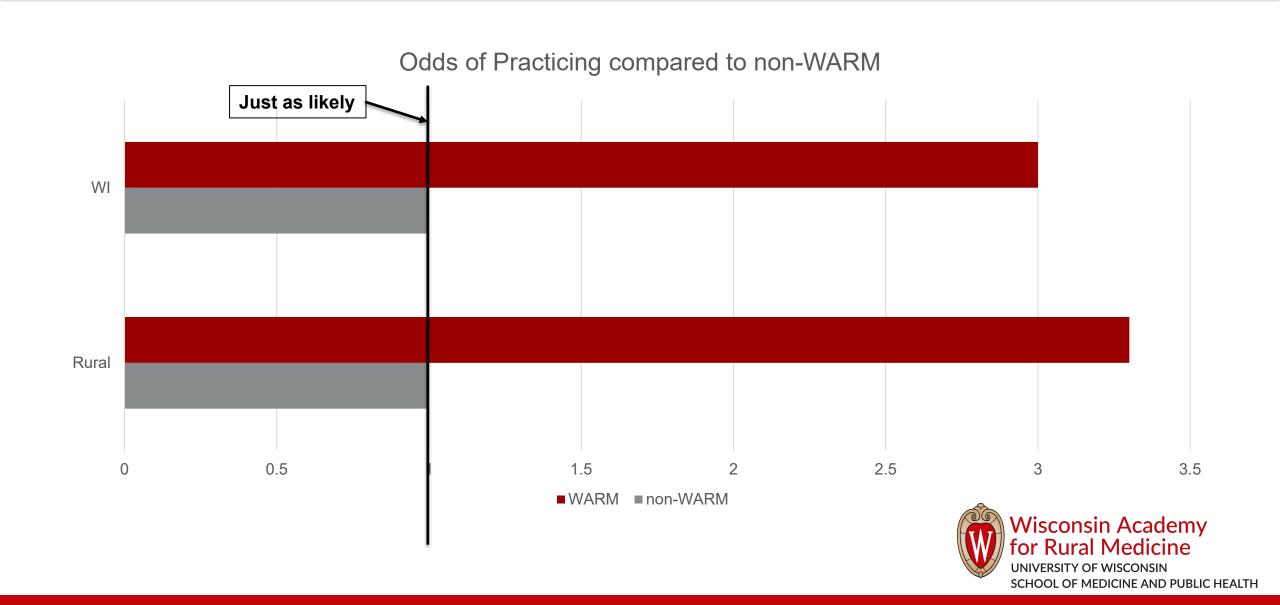
#### Odds of Practicing Type - Nationally



### Odds of Practicing Type - WI specifically



#### Odds of Practice type – Specialty Care in WI



## WARM Graduates in Practice - Practice Type

	Primary Care	*Specialty Care	Practicing in Wisconsin	Practicing in rural Wisconsin
WARM (n= 106)	46%	54%	73%	47%
Non-WARM (n= 925)	31%	69%	39%	12%

#### WARM Grads in Practrice - IM/Peds Rural vs. Urban

Specialty	WARM Total #	WARM WI	WARM Rural WI RUCA 4-10	WARM Urban WI RUCA 1-3	Non-WARM Total #	Non-WARM WI	Non-WARM Rural WI RUCA 4-10	Non-WARM Urban WI RUCA 1-3
IM	14 13.2%	10 13%	4 40%	6 60%	168 18.2%	57 15.7%	3 5.3%	54 94.7%
Peds	4 3.8%	2 2.6%	1 50%	1 50%	104 11.2%	36 9.9%	2 5.6%	34 94.4%

## Key Findings from WARM Outcomes Paper

- WARM graduates choose to practice rurally and in Wisconsin with much higher odds than non-WARM graduates
- Independent of specialty choice, WARM graduates have higher odds of practicing in rural areas and in Wisconsin

• Graduates rated 'Interacting with physicians & staff in rural areas' as the most important activity in increasing commitment to and readiness for being a rural physician (M=2.58, p<.001)



### Limitations of Study

- RUCA codes used to determine rurality are an imperfect tool
  - E.g. Cuba City
- Rural outreach not captured in study
  - E.g. specialist spending one day a week at rural satellite clinic



## For future study

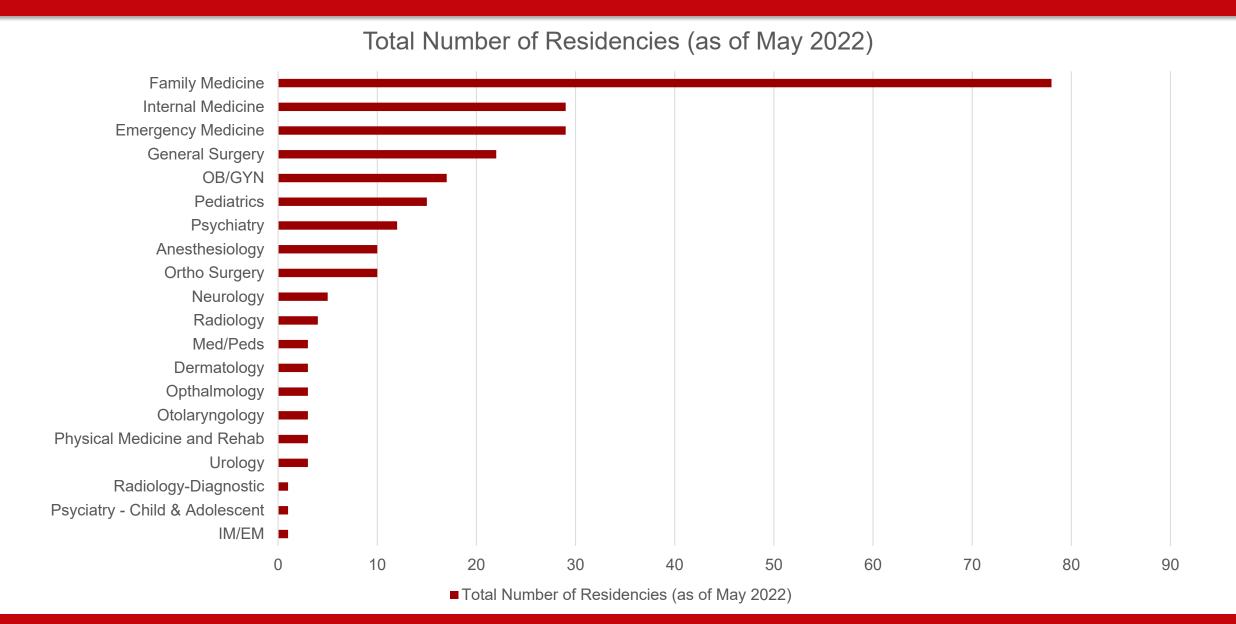
- Examine if differences exist between WARM graduates that primarily practice in urban settings and non-WARM graduates that practice in urban settings in serving the needs of rural populations (rural outreach)
- Determine if the longevity of a physician's clinical practice within a rural community, or stick rate in a rural community, is longer for WARM graduates than those physicians working in a rural community who did not have dedicated rural medical education.



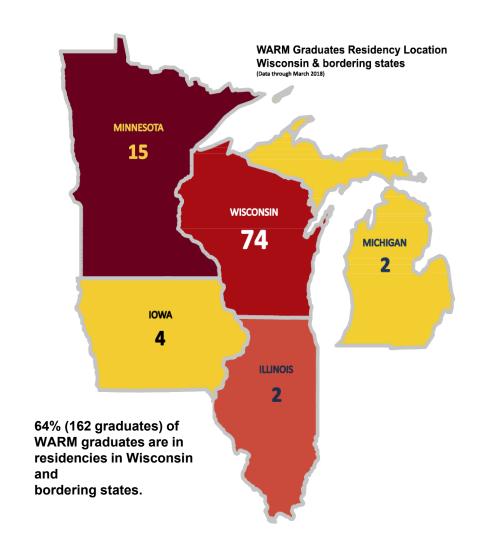
# Overall Outcomes to 2022



#### WARM Graduate Residencies by Specialty



## **Residency Locations of WARM Graduates**



#### 252 WARM graduates to date (2022)

#### 45% in WI residencies

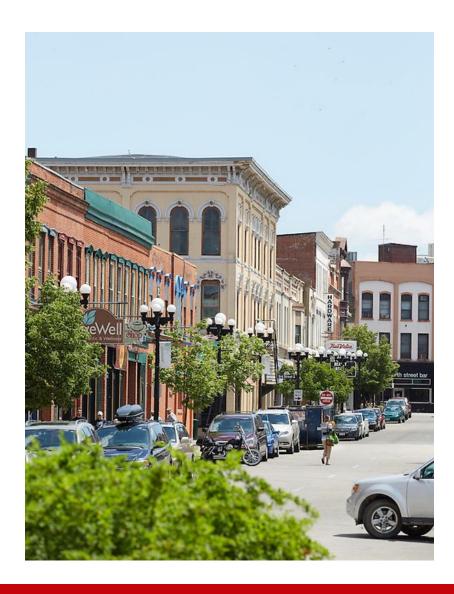
#### 56% in primary care

family medicine, internal medicine, pediatrics, internal medicine/pediatrics, ob/gyn

#### 44% in other fields

(e.g., emergency medicine psychiatry, general surgery, radiology, orthopedics, and others)

## WARM Graduates in Practice Post Residency



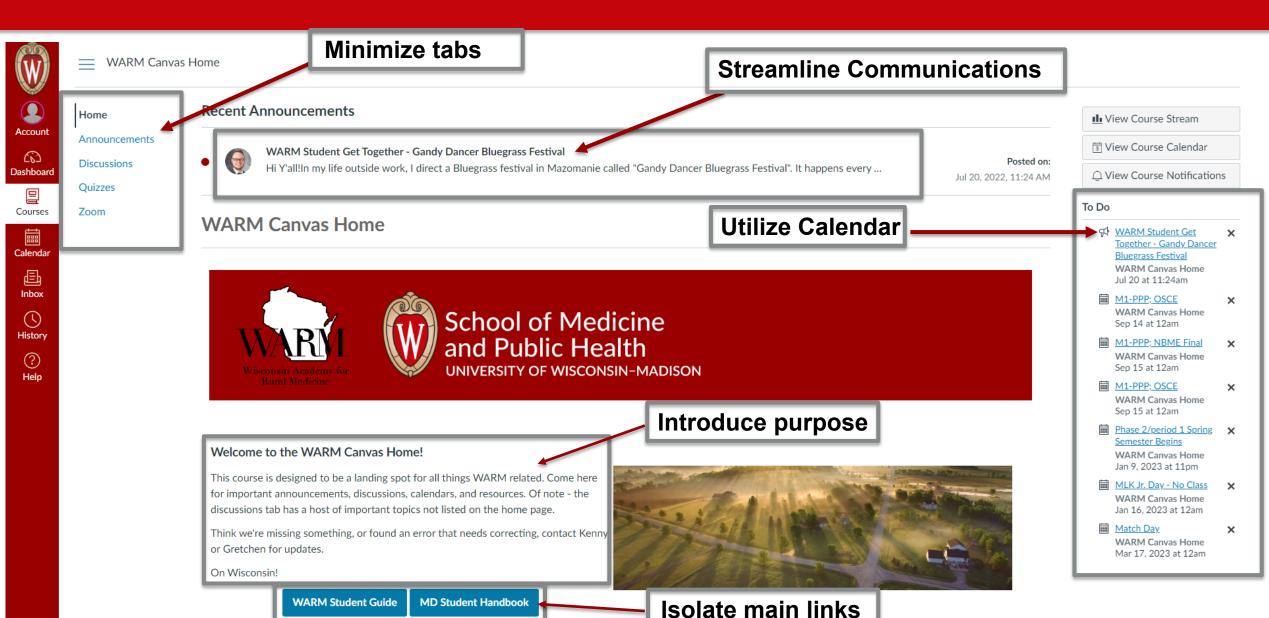
- 82% are practicing in Wisconsin
- 49% are serving rural
   Wisconsin
- **32**% have returned to their hometowns

# Present

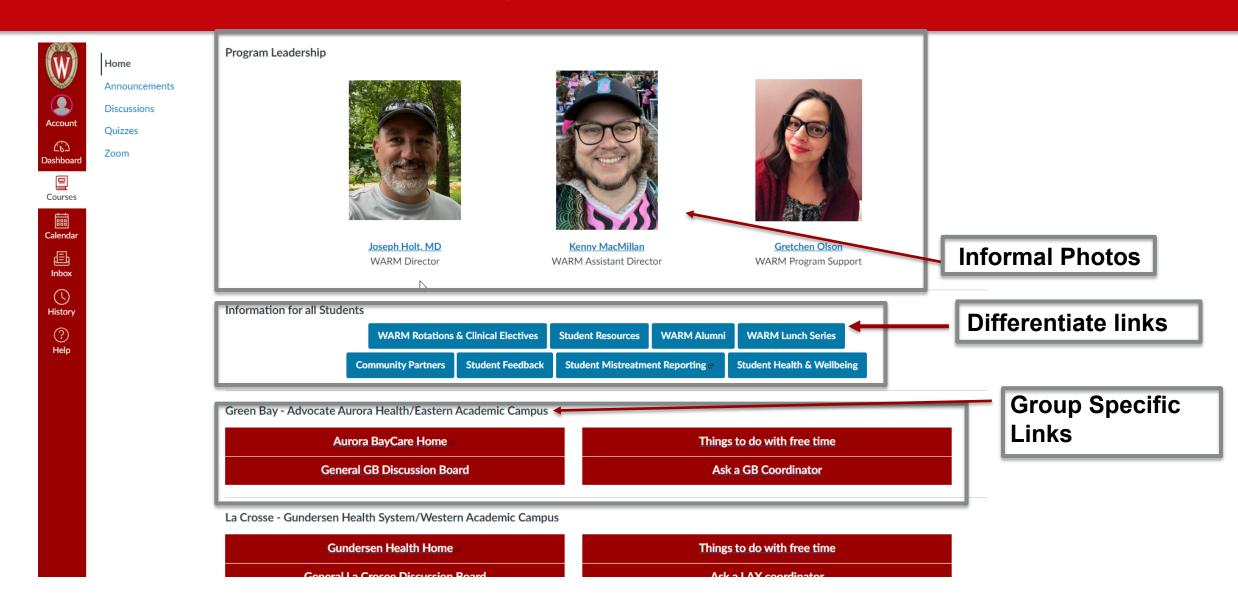
Building a Digital Home



## WARM Canvas Home Page, pt. 1



#### WARM Canvas Home Page, pt. 2



### Developing clinical opportunities for Medical Students pt. 1



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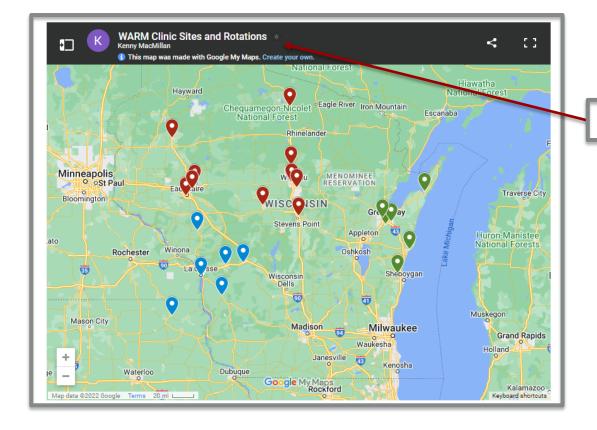




#### WARM Rotations and Clinical Locations

#### WARM Electives and Clinical Locations

Each of the three WARM regional campuses have worked to develop a wealth of clinical rotations for WARM students. Elective capacity is prioritized to students assigned to that campus - to inquire about capacity, contact the respective regional coordinators (see WARM student guide for contact information).



**Utilize Custom Google Maps** 

### Developing clinical opportunities for Medical Students pt. 2



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②



Specialties	Clinical Teaching Site:	Health System	Rotation Length (weeks)	Elective/Req
AAI - Emergency Medicine	Tomah	Gundersen Healt	4	Required
AAI - Family Medicine	Lake Hallie	Marshfield Clinic	4	Required
AAI - Family Medicine	Rice Lake	Marshfield Clinic	4	Required
AAI - Family Medicine	Stevens Point	Marshfield Clinic	4	Required
AAI - IM/FM	Decorah	Gundersen Healt	4	Required
AAI - IM/FM	Sparta	Gundersen Healt	4	Required
AAI - IM/FM	Tomah	Gundersen Healt	4	Required
AAI - IM/FM	Viroqua	Gundersen Healt	4	Required
AAI - IM/FM	Whitehall	Gundersen Healt	4	Required
AAI - Internal Medicine	Eau Claire	Marshfield Clinic	4	Required
AAI - Internal Medicine	Marshfield	Marshfield Clinic	4	Required
AAI - Internal Medicine	Minocqua	Marshfield Clinic	4	Required
AAI - Pediatrics	Tomah	Gundersen Healt	4	Required
AAI - Surgery	Eau Claire	Marshfield Clinic	4	Required
AAI - Surgery	Marshfield	Marshfield Clinic	4	Required
IAI - Cardiology	La Crosse	Gundersen Healt	4	Required
IAI - Critical Care - Medical ICU	La Crosse	Gundersen Healt	4	Required
IAI - IM	Green Bay	Aurora BayCare	4	Required
IAI - Internal Medicine	La Crosse	Gundersen Healt	4	Required
IAI - Medicine	Marshfield	Marshfield Clinic	4	Required
Allergy	La Crosse	Gundersen Healt	2/4	Elective
Anesthesia	La Crosse	Gundersen Healt	2/4	Elective
Anesthesiology	Eau Claire	Marshfield Clinic	2/4	Elective
* 0 1 1 1			011	

Offer information in multiple **formats** 

### Using Alumni for inspiration















■ WARM Canvas Home > Pages > WARM Alumni

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#### WARM Alumni

WARM Alumni - Where are they now?

The map below highlights where you can currently find WARM Alumni. Note - this map is a combination of residents, fellows, and practicing physicians. Below the map you'll find the data used to populate the map (separated by Residents/Fellows/Practicing Physicians)

Map Key:

Multiple Specialties - Light Gray

Anesthesiology - Dark Green

Dermatology - Dark Blue

Diagnostic Radiology - Burnt Orange

EM - Maroon

FM - Light Blue

General surgery - Black

IM - Light Green

Neuro - Purple

OB/GYN - Yellow

Ophthalmology - Deep Blue

Ortho Surgery - Gold

Otolaryngology - Olive Green

Pathology - Magenta

Pediatrics - Peach

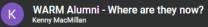
Physical Medicine and Rehab - Brown

Psychiatry - Orange

Urology - Dark Brown

Help students envision their path









### WARM Alumni – Where are they now?



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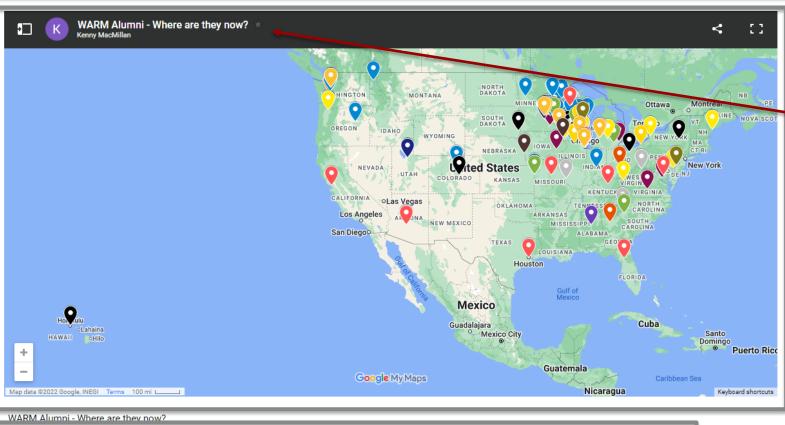
Dashboard









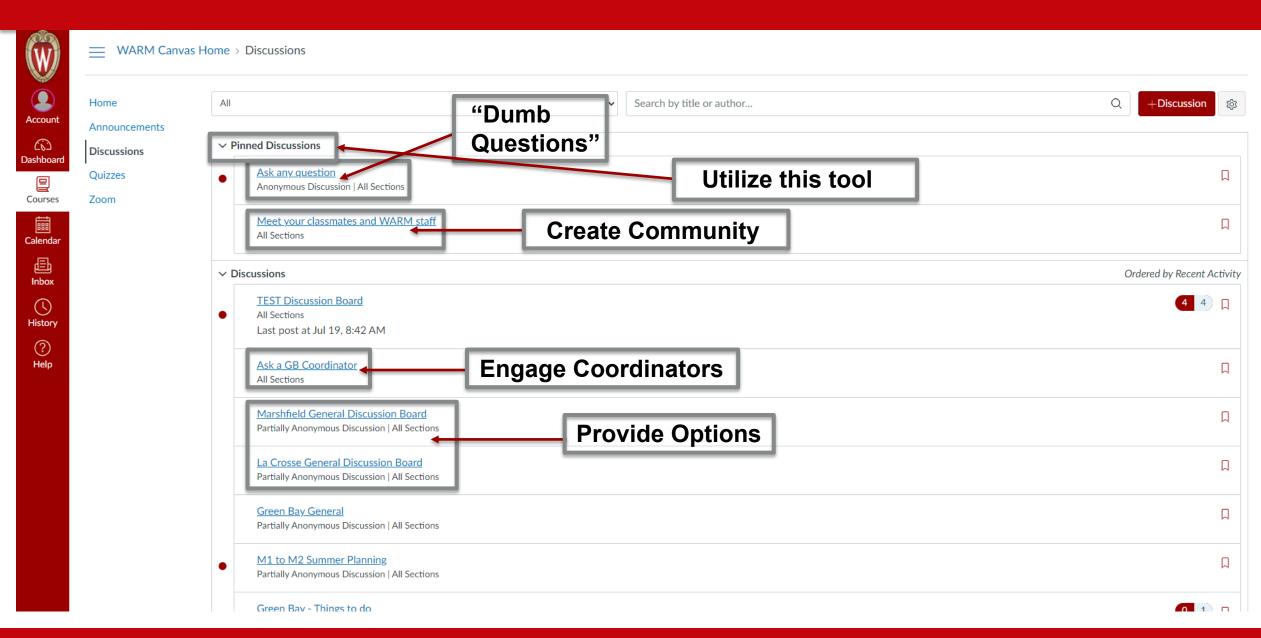


Custom Google Maps for the win!

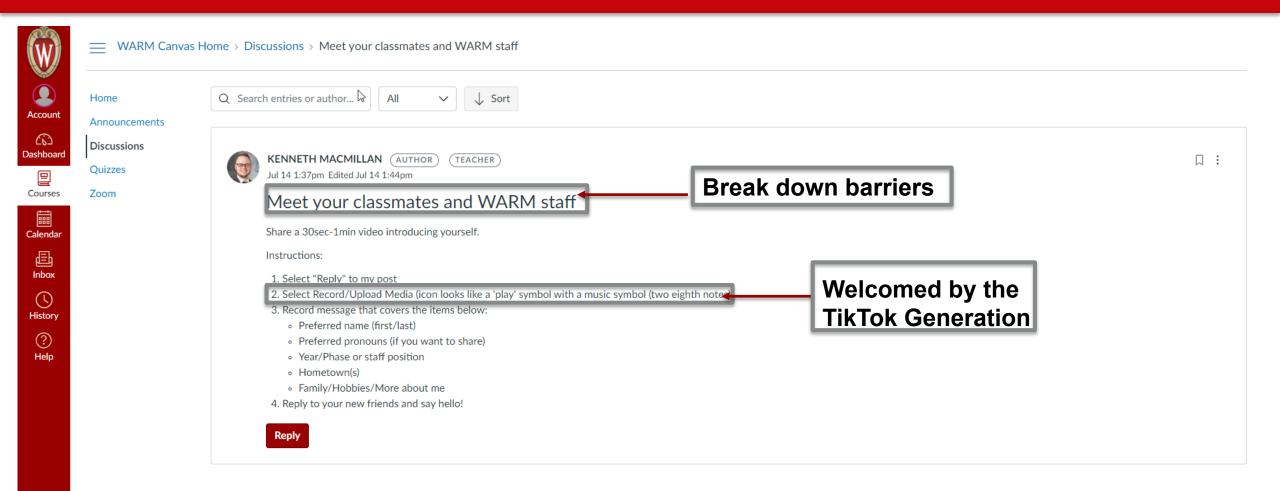
WARM Alumni - Where are they now?					
Residency Area	Current Status	Current Employer Job Title	Current Employer Name		
Anesthesiology	Practicing Physicia	Anesthesiologist	Central Wisconsin Anesthesiology SC		
Anesthesiology	Practicing Physicia	Anesthesiologist	Essentia Health		
Anesthesiology	Practicing Physicia	Anesthesiologist	Mayo Clinic Health System		
Anesthesiology	Practicing Physicia	Anesthesiologist	PeaceHealth		
Anesthesiology	Practicing Physicia	Anesthesiologist	Rocky Mountain State Anesthesia Providers LLC		
Anesthesiology	Resident	Post Grad Trainee 2	UW Health		
Anesthesiology	Resident	Post Grad Trainee 2	UW Health		
Anesthesiology	Resident	Post Grad Trainee 4	UW Health		
Anesthesiology	Resident	Resident/Anesthesiology	Mayo Clinic Health System		
Anesthesiology	Resident	Resident/Anesthesiology	University of Illinois Hospital & Health Sciences Syste		
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Same info, multiple formats

## Utilizing Discussion Boards, pt. 1



## Utilizing Discussion Boards, pt. 2



## Supplemental Curricular Activities



















WARM Canvas Home > Pages > WARM Lunch Series

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Be

**Flexible** 

#### WARM Lunch Series



#### WARM Lunch Series

WARM lunches are an opportunity for connecting, collaborating, and enhancing the traditional MD curriculum with expert speakers sharing their knowledge on rural health care issues. Ideally held monthly (day of the week changes), the sessions will have varying formats, with some sessions targeted toward a specific phase of medical school. Attendance at WARM lunches isn't required but is strongly encouraged.

Students play a large role in determining what is covered at these sessions - to share your ideas, please complete this survey: click here to share topics/ideas for WARM lunches &

Sessions are offered both virtually and in-person (room varies). To join virtually, find the Zoom link via the WARM Canvas Home Zoom tab.

The fall semester is primarily dedicated to highlighting rural physicians in a variety of specialties.

Fall 2022 Speakers: (exact dates/rooms are still being confirmed, but will be added to this page once settled)

- · Deanna Benish, MD FM w/OB. Reedsburg Area Medical Center
- · Gregory Dodge, MD General Surgery. Aspirus Antigo
- · Aaron Dunn, MD FM. Free Community Clinics. SSM Health & Dodgeville Community Connections Free Clinic
- Ameen Taleb, MD EM/FM Fellowship. SSM Health Monroe Clinics
- · Elizabeth Homen, MD Behavioral Health. Ashland Memorial Medical Center
- Anna Svircev, DO, MPH FM with LGBTQ patient populations. Platteville Southwest Health

**Student Input** 

## Provide Opportunities for Self-directed learning



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Career Advising, Journals, Articles, and More



Career Advising within the Academic & Career Advising Program (ACAP) begins in M1 Fall with completion of the Careers in Medicine assessment. This is one of seven mandatory "touchpoints" all students have with Career Advising at SMPH. The comprehensive Career Advising Canvas Course is the definitive source for career advising information, and WARM students are encouraged to develop, and maintain, connections with their ACAP house mentor throughout the curriculum. In April of the M3 year, students complete a Match competitiveness survey and career advising session in Madison to guide the residency application/interview process.

Students are encouraged to proactively contact Brian C Núñez (bnunez@wisc.edu), Director of Career Advising, with questions. Additionally, students are welcome to contact any WARM leadership (Dr. Holt, Kenny MacMillan, Associate Directors, Regional Directors), as well as ACAP house mentors, department chairs, or residency directors at regional campuses and in Madison, if they would like to chat about career planning.

#### Journals, Articles, and Other Resources

The Ebling Library & is a wealth of information, but finding pertinent journals and articles can be challenging. For an introduction on how to use the online Ebling Library resources, try their orientation guide; click here &

Below are a handful of resources available through Ebling that we think you'd enjoy. If you have additional resources you feel should be included, tell Kenny or Dr. Holt so they can be added.

When visiting the Ebling Libary website (click here to jump there &), search for journals via Browzine (use journals tab). We recommend these journals:

- Australian Journal of Rural Health ≥
- Rural and Remote Health (Australia) ₽

### **Compile relevant journals**

#### Recent news articles:

- 7/15/22 Nurse Midwives Step Up to Provide Prenatal Care After Two Rural Hospitals Shutter Birthing Centers &
- 7/12/22 DispatchHealth and Marshfield Clinic Health System Announce Partnership to Bring In-Home Acute Care to Wisconsin &

#### Other Rural Health Resources:

- Rural Health Information Hub a
- Rural Health Research Gateway ₽

## Connecting w/Community Partners

















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Community Partners

#### WARM Community Partners

Rural Health Care in Wisconsin is made possible through close collaboration with many statewide partners. Explore our partner websites to look for opportunities (for either during or after medical school)

NACHP - UWSMPH Native American Center for Health Professions &

RHET - UWDFMCH Rural Health Equity Track 2

WRPRAP - UWDFMCH Wisconsin Rural Physician Residency Assistance Program &

RWHC - Rural Wisconsin Health Collaborative 2

WORH - Wisconsin Office of Rural Health @

WINC GME Consortium - Wisconsin Northern & Central Graduate Medical Education Consortium &

WCRGME - Wisconsin Collaborative for Rural GME ₽

WI AHEC - Area Health Education Centers 2

WAFP - WISCONSIN ACADEMY OF FAMILY PHYSICIANS &

WHA - Wisconsin Hospital Association 2

## Allow space for feedback













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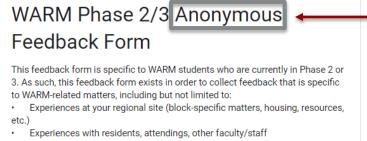
Zoom

Feedback to WARM

Student voices and opinions are critical to improving WARM for current and future students.

To provide feedback directly to Dr. Holt:
Office: 608-512-2880
Cell: 608-512-2880
jpholt@medicine.wisc.edu

To provide anonymous feedback to MSA reps (must be logged in to Google 'G Suite' with @wisc.edu address to access form)



- Core days
- WARM Welcome
- WARM lunches, guest speakers, other meetings
- Any questions you may have

Please note that we are looking for all types of feedback, both positive and negative. It is equally important than we know what is working well and what should be further analyzed for improvement.

**Utilize Student Leadership** 

## Supporting Student Wellness



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#### Student Health & Wellbeing

In order to take excellent care of patients, you need to take care of yourself first. On this page you'll find various resources for healthcare, insurance, and general wellbeing, If you think there is something else we need to include, please contact Kenny to have it added to the page.

- University Health Services (UHS) https://www.uhs.wisc.edu/ -:
- · Family Support
- □ MOMS

  ≥
- Insurance:
  - o It may be beneficial to establish a care provider at your regional campus. To look for providers covered by SHIP, visit this page: The Alliance Network &
  - BadgerCare Plus is Wisconsin's health care program for low income individuals in Wisconsin. To learn more about eligibility and to apply, visit: BadgerCare Plus r.
- Mental Health
  - "Let's Talk" UHS sessions with mental health professionals: https://www.uhs.wisc.edu/wellness/lets-talk/ g
    - no-cost, informal, confidential consultations around campus (frequently visits HSLC) and virtually.
  - Self-help resources available through SilverCloud using your Wisc ID found here: https://www.uhs.wisc.edu/mental-health/silvercloud/ex
  - 24 Hour Crisis services: 608.265.5600 (select option 9 for crisis services)
- LGBTQ+ Student Support.
  - UW Madison Gender and Sexuality Campus Center et
  - Fair Wisconsin ±
  - OutReach Madison LGBTQ+ Community Center a
  - UWSP Gender-Sexuality Alliance at
- · Under Represented Populations Student Support
  - La Crosse area;
    - UW La Crosse Student Groups: <a href="https://www.uwlax.edu/diversity-inclusion/get-involved/student-organizations/">https://www.uwlax.edu/diversity-inclusion/get-involved/student-organizations/</a>

# Present

Connecting and networking WARM graduates and current students, creating a WARM alumni association



## Connecting Alumni to develop opportunities

- BrightCrowd "new" tool designed to connect alumni
- "BrightCrowd digital books are used by all of the lvy+ schools, over 90% of the top 25 schools and the majority of the top 100 schools. We serve undergrads, as well as business, law, medical, and prep schools."

## BrightCrowd Intro, pt. 1





## BrightCrowd Intro, pt. 2



### **Inclusive and Engaging**

Bring dispersed communities together to participate both virtually and in real life.



#### **Simple and Easy**

No software to download or install and no IT review required. Books are launched in minutes and require minimal ongoing management.



#### **Private and Secure**

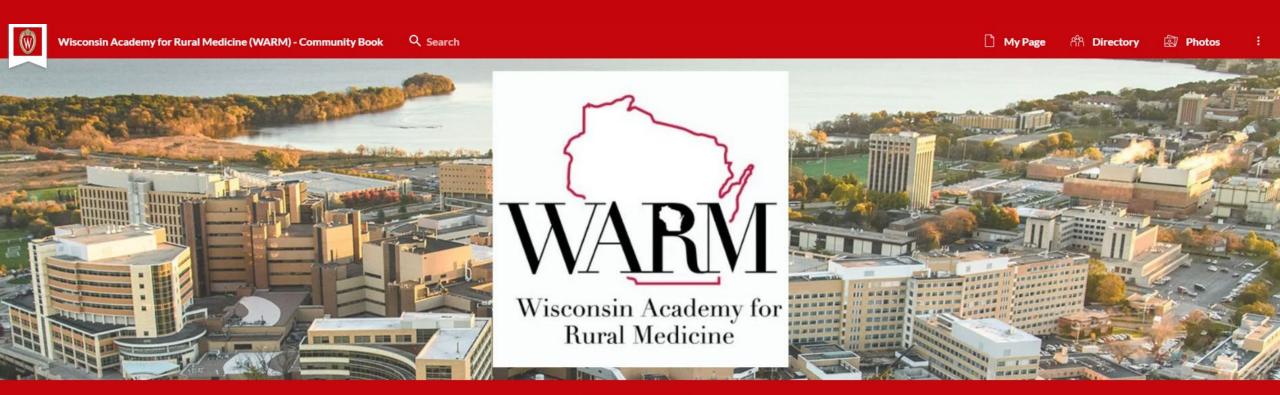
Each book is private to just a designated audience, so members can feel comfortable that their information isn't seen or shared on the web.



#### **Insights and Understanding**

Organizations gather rich insights about their members and a better understanding of how to cultivate deeper engagement.

## Customizable Home Page



Start Browsing













# BrightCrowd Homepage Continued



Wisconsin Academy for Rural Medicine (WARM) - Community Book











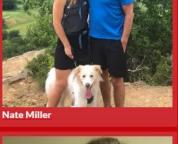


























**Zach Droeszler** 



Kara Kamps-Schmitt















Sasha Ulrich



Katherine Satori





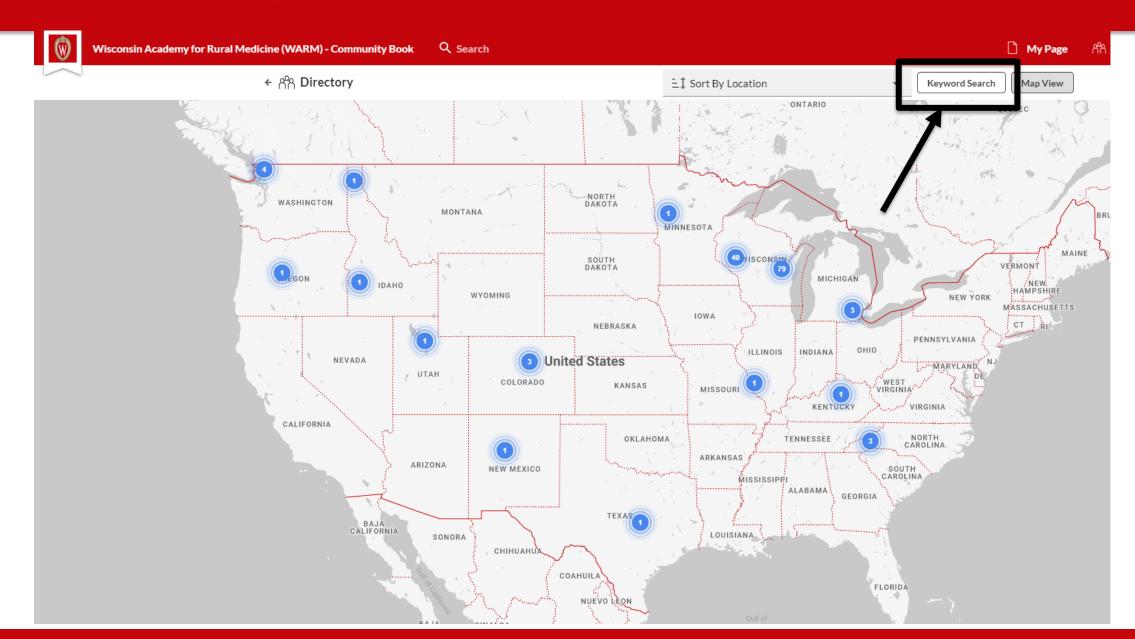
Lindsey Boyke-Lohmann



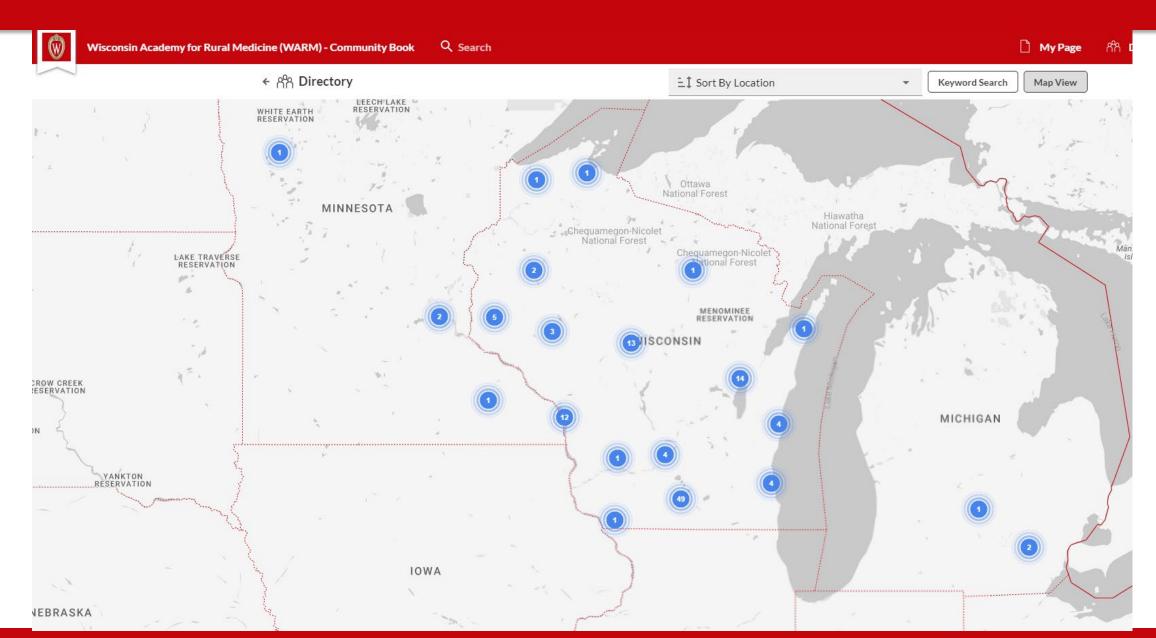


View Everyone

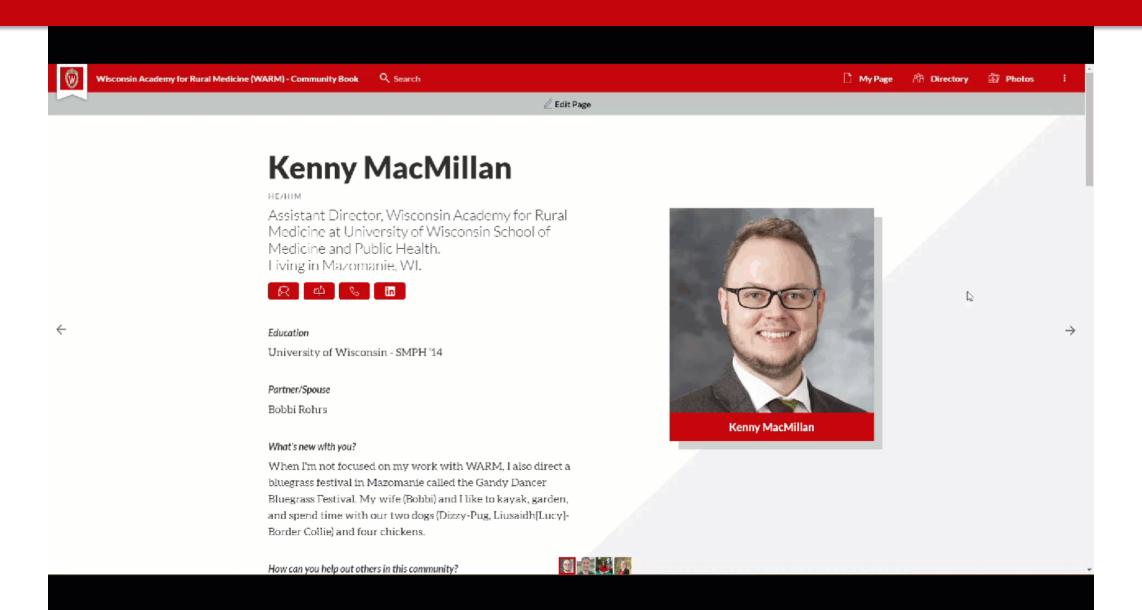
## Map Directory



## Map Directory cont.



## **Profile Preview**



# Future

Focus on pathways to rural healthcare



# Pathways to Rural Healthcare in WI, recent WARM student projects

- Intro to Healthcare Careers class for Hillsboro High School students
  - Created by WARM graduate 2023 (Spencer Treu)
  - Full semester curriculum
  - Ongoing annually
  - Future intention is to expand into other rural high schools



## Pathways to Rural Healthcare in WI

- Pathways to rural medicine, an informational video/presentation on healthcare needs and career options in rural northern WI
  - Created by current WARM M2, Hunter Bay
  - Rolled out in select high schools in Ashland and Bayfield Counties
  - Goal is to reach as many high school students as possible
  - Presentation highlighted the various careers and pathways into those roles
  - Incorporated as part of early high school health course
  - Intent is to have future students record their own version of presentation, and distribute to their hometown regions



# **Future**

WARM's 3-year UME/GME accelerated pathway, WARMeRR



## WARMeRR – 3-year Accelerated Pathway

- Wisconsin Academy for Rural Medicine excellence in Rural Residencies
- 3-year accelerated UME track within the WARM program
- Longitudinal immersion with GME partner program
- Direct progression into GME partner's residency program at graduation from WARM



### WARMeRR

- Residency Program Partners
  - Family Medicine: Gundersen Health System
  - Internal Medicine: Marshfield Clinic Health System
  - UW-Madison Rural General Surgery Residency Track
- Students meet same benchmarks as traditional pathway
- First student started WARMeRR UW rural general surgery pathway May 2023

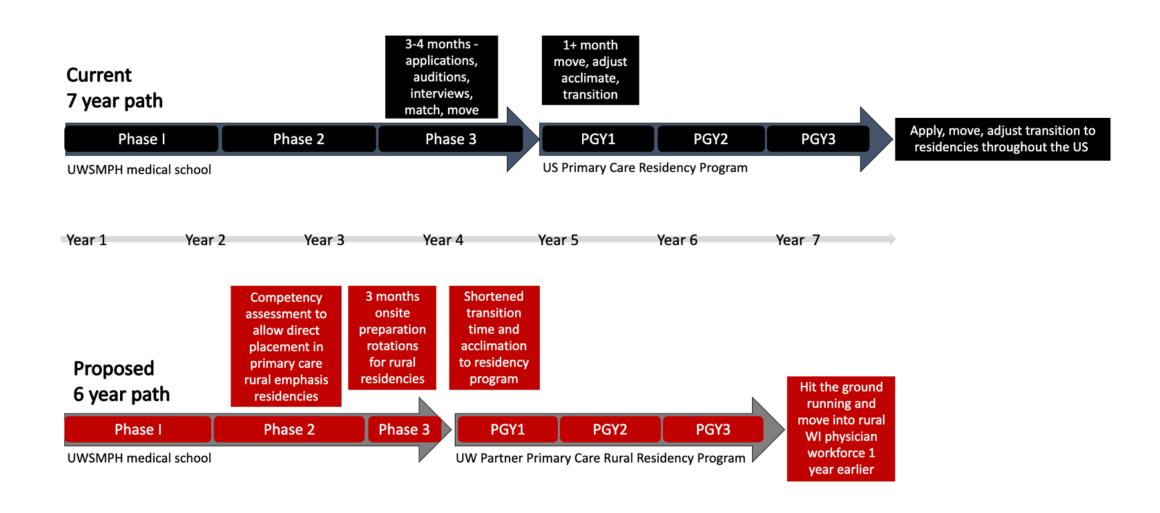


### WARMeRR – other considerations

- Several off-ramps are available to both student and GME partner, with no detriment to the student if they transition back to 4-year WARM pathway.
- GME partners are involved from start to finish with students in the program
- Hope to expand to additional programs, specialties



### WARMeRR



# Thank you for joining us today!

Joe Holt, MD – jpholt@medicine.wisc.edu Kenny MacMillan – kmacmillan@wisc.edu

