

School of Medicine and Public Health

UNIVERSITY OF WISCONSIN-MADISON

Biennial Report to the Wisconsin State Legislature

Fiscal Years 2021 and 2022

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UWSMPH REPORTING REQUIREMENTS

Reported by the University of Wisconsin School of Medicine and Public Health

Introduction

Established in 1907, the University of Wisconsin School of Medicine and Public Health (UWSMPH) remains fully committed to improving the health of the citizens of Wisconsin and beyond through education, research, and service. Accomplishments over the past two academic years include consistently matriculating MD classes with one-third of students being members of underrepresented in medicine populations, and successfully maintaining students' progress toward degrees during the pandemic.

UWSMPH is committed to addressing society's evolving health care needs by offering programs specifically aimed at **reducing disparities** among underserved populations. Continuing to build an inclusive environment and equity across UWSMPH is a top priority. The **COVID-19 pandemic has continuing impact** across the UWSMPH and for our students. On the positive side, the development of robust technology and high-quality virtual teaching skills demanded during shutdown periods enables UWSMPH to continue flexibility that benefits students. The financial impact, however, bears continued vigilance as the School experienced reductions in state budget allocations and UW Health has experienced pressure on margins that continues with the current high rate of inflation.

As outlined in Wisconsin Statute 13.106, the UWSMPH meets reporting requirements for the 2020-2021 (FY21) and 2021-2022 (FY22) Academic Years in this biennial report, providing information for the following areas:

- Financial Summary
- Minority Student Recruitment
- Enrollment of Wisconsin Residents
- Average Faculty Salaries at the UWSMPH Compared to National Averages
- Cooperative Educational Programs
- Placement of Graduates of Doctor of Medicine and Residency Training Programs
- Financial Status of Family Practice Residency Sites
- Family Practice Residents in Medically Underserved Areas Upon Graduation
- Graduates Entering Family Practice as a Career.
- Number of Students Enrolled in Rural or Underserved Urban Medicine Programs
- Medical Specialties and Residency Locations of Students in Rural or Underserved Urban Medicine Programs
- Initial Post-residency Practice Locations for Graduates of Rural or Underserved Urban Medicine Programs

Financial Summary

Figure 1. UWSMPH Expenditures by Source of Funds, FY21 & FY22

(Includes Operating and Capital Expenditures)

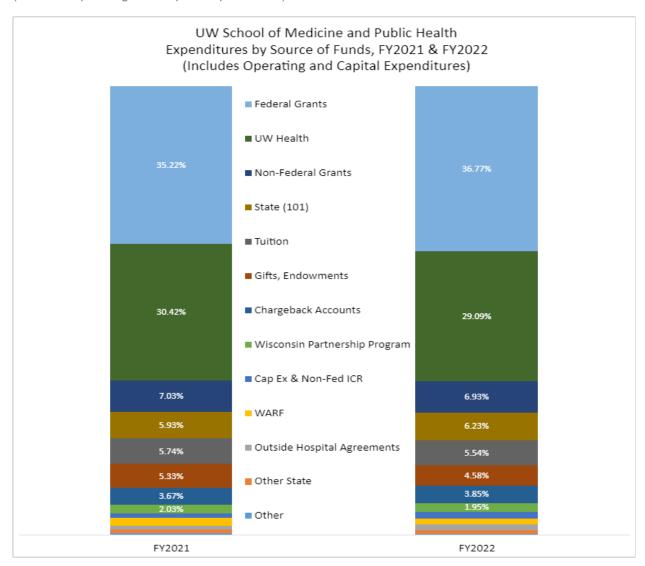


Table 1. UWSMPH FY21 and FY22 Expenses by Type

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	FY2021	FY2022
Salary and Fringe Benefits	\$475,818,509	\$507,914,512
Supplies and Services	\$162,546,696	\$192,103,969
Travel	\$2,246,088	\$6,627,207
Capital & Equipment	\$16,219,411	\$13,730,606
Indirect Costs	\$69,917,693	\$ 81,164,464
Total	\$726,748,397	\$801,540,758

13.106 (3) (ac) Minority Student Recruitment

Diversity, equity, and inclusion are central to UWSMPH's mission to meet the health care needs of the people of Wisconsin and beyond through excellence in education, research, patient care, and service. By providing our students with an inclusive and equitable environment and diverse educational, research, patient care, and service opportunities, we educate health care professionals who will function effectively across an array of working environments and with diverse patient populations.

The work of increasing diversity and building an inclusive environment is shared by all UWSMPH functional areas. The School also leverages and cooperates with multiple campus units and initiatives, as well as with our partners at UW Health and our other academic campuses.

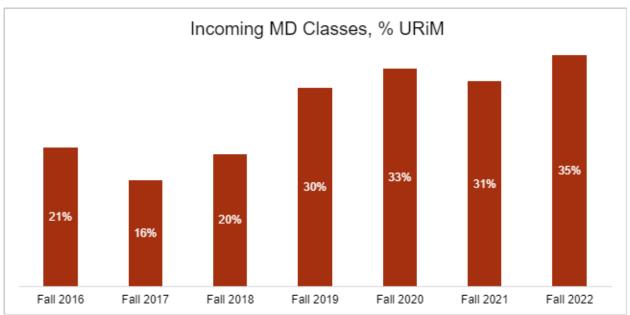


Figure 2. Per the AAMC, "Underrepresented in medicine (URiM) means those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population." UWSMPH includes African American or Black; Hispanic, Latino or Chicano; Native Americans or Alaska Natives; Native Hawaiians or Other Pacific Islanders; and Southeast Asian (Cambodian, Hmong, Laotian, and Vietnamese).

Augmenting our admissions office recruitment efforts, three additional Academic Affairs programs are dedicated to recruiting and supporting a diverse student population. The **Office of Multicultural Affairs (OMA)** takes leadership for the School's student diversity outreach initiatives, including its recruitment and enrollment activities. The **Native American Center for Health Professions (NACHP)** serves all health professions—including the schools of Nursing, Pharmacy, Social Work and Veterinary Medicine—in its mission is to increase the number of Native American students in health professions and to help address the health disparities facing the roughly 86,000 people living in tribal communities in Wisconsin. **There are two key pathway programs administered out of the Office of Admissions – the Rural and Urban Scholars Community Health (RUSCH) program and the Health Professions Shadowing Program (HPSP)**. These programs' aim to increase access into the health professions for students from backgrounds historically underrepresented in health care and from medically underserved rural and urban communities to recruit and develop these students to be well qualified candidates for UWSMPH's professional healthcare programs. The hope is that they will address health inequities and health equity issues by practicing medicine in underserved areas of the state once they complete their education.

Pathway Programs

UWSMPH leaders realize that improving access to healthcare in underserved communities and among underserved populations requires creating pathways to health profession education for diverse students. The UWSMPH supports several programs aimed at boosting the number of students representing URiM populations. Some engage students at the elementary, middle and high school levels, such as **The Ladder**, while others, including the **Health Professions Shadowing Program (HPSP)**, are designed to foster interest among undergraduate students. As shown in **Figure 2**, our investment in pathway programs over the years has been effective: *the 2019 incoming class reached 30% URiM, and matriculating classes have remained above 30% for the last four academic years*.

While the school benefits by having a more diverse student body and workplace, support the Pathway Programs, NACHP, and OMA (units) provides is invaluable for students. Pathway programs provide opportunities for students from diverse backgrounds who might not typically be represented in health care or medicine, so they can learn more about various aspects of the field, gain targeted preparation, and make vital connections at the school so they can be admitted to programs.

Office of Multicultural Affairs (OMA) programming extends from pre-college recruitment through graduation from UWSMPH. At Family Empowerment Day high school students and their parents attend a full day of events geared to provide information about UWSMPH academic offerings, with Pre-Health Career Day targeting undergraduate students attending private and public universities within Wisconsin. Sessions focus on financial aid, admissions processes, and hands on activities such as organ demonstrations. Pre-Health Career Day also includes mock interviews, personal statement development, and opportunities to interact with current professional students. During the pandemic crisis, we moved our recruitment events into a virtual format and partnered with PEOPLE staff to create a series of virtual sessions targeting a cohort of students from Madison and Milwaukee. At the sessions, 60 high school students connected with current UWSMPH health track students and learned about their respective iourneys into their programs. The OMA also facilitated sessions on financial aid and the admission process. With COVID restrictions lifted in Spring 2022, the OMA organized an in-person event with PEOPLE addressing admissions and financial aid, and featuring undergraduate and graduate student panels, clinical skills, organ demonstrations, and tours of the Clinical Teaching and Assessment Center (CTAC) and the Health Sciences Learning Center (HSLC). The session was filled to capacity with 60 high school students attending. The OMA also provides guidance to a number of campus-community educational linkages, summer research efforts, and initiatives targeted towards expanding diverse undergraduate participation in the health professions. Furthermore, pre-medical advising and interaction with merit-based and enrichment programs as well as pre-health organizations have been critical in identifying and mentoring promising medical school applicants.

Native American Center for Health Professions (NACHP) staff work with students at various levels of education, beginning as young as middle school, to develop early interest in a health career. Founded in 2012, NACHP promotes student recruitment and retention, health education, research, and community-academic partnerships with Native American communities in the Great Lakes region with special emphasis on Wisconsin. The NACHP staff give presentations across Wisconsin, participate in college and health fairs in tribal communities, partner with UW-Madison's Pre-College Enrichment Opportunity Program for Learning Excellence (PEOPLE) Program, and conduct Indigenous Health and Wellness Day, a great opportunity to spark interest in a health career. NACHP also reaches out to undergraduate students interested in a health career to begin connecting them with opportunities including the American Indian Science and Engineering Society (AISES) Annual Meeting, the Native American Great Lakes Applicant Workshop, and the Association of American Indian Physicians.

Since 2016 NACHP has sustained a unique partnership with the Oneida Nation of Wisconsin to provide on-site space offered in-kind for NACHP's Tribal Engagement Office (TEO) within the Oneida Community

Health Center. The TEO is instrumental to increasing tribal community engagement with youth and health professionals in the northern rural parts of the state where many of Wisconsin's tribes are located.

As a two-year pre-medical school program, **Rural and Urban Scholars Community Health (RUSCH)** affords undergraduate students the opportunity to learn about careers in medicine in greater depth, engage in research and community health improvement (internships), and develop knowledge, skills, and attitudes (competencies) that will prepare them for admission to the UWSMPH. This program began in 2009 through affiliations with two UW system institutions (UW-Milwaukee and UW-Platteville), and in 2012 added another campus partner, UW-Parkside. The UWSMPH sponsored Biomedical Summer

"This was a great experience for me and would not trade it for anything. All components were great, and I would do it again if I could!" – RUSCH Scholar Research Program with Spelman College, a historically black college, began in 2009 and merged with the RUSCH program during the 2012-2013 academic year. In 2019, UW-Madison students were added to the pool of eligible students for RUSCH, through the partnership that UWSMPH formalized with the UW-Madison Center for Pre-Health Advising to administer the Health Professions Shadowing

Program. The majority of UW-Madison students come into RUSCH after first completing HPSP (thus HPSP has become a 'feeder' program for RUSCH). The program also partners with the Native American Center for Health Professions and students who are affiliated with NACHP (from any campus in the state of Wisconsin) are eligible to become RUSCH scholars.

UWSMPH Student Pathway, Recruitment, and Retention Program Target Populations	 Middle School High School Undergraduate Medical Student Engagement 	Black/Latinx/ Southeast Asian	Native American	First Generation	Socioeconomically Disadvantaged	Health Profession Shortage Areas
	Health Occupations and Professions Exploration (HOPE) Program	•	•	•	•	
	Indigenous Health and Wellness Day (NACHP)		•	•	•	•
	The Ladder	•	•	•	•	•
	Tribal Community Youth Outreach (NACHP)		•	•	•	•
	Doctors Ought to Care				●■6	•=•
	Family Empowerment Day (OMA)					
	AHEC Programs					-
American Indian Sci	ence and Engineering Society (AISES) National Conference (NACHP)		-		-	
AHANA-MAPS	S Pre-Health Society (African, Hispanic, Asian, and Native American)	•	•	•	•	•
Extended Second Look			•			
Great Lakes Native American Medical School Applicant Workshop (NACHP)			•	•	•	•
Health Professions Shadowing Program (HPSP)			•	•	•	•
Pr	rofessional Association of Latinx Students for Medical School Access	•				
	Pre-Health Career Day (OMA)	•	•			
	Rural and Urban Scholars in Community Health (RUSCH)	•	•	•	•	•
Latino Medical Student	Association (LMSA) UW Students United for Latino Health (UNIDOS)	*		*	*	*
	Association of Native American Medical Students (ANAMS)		•	•	•	•
	Building Equitable Access to Mentorship (BEAM)	•	•			
	Diversity Summit	•	•		•	•
	Medical Students for Minority Concerns (MSMC)	•	•			
MEDiC (Student-run free clinics)					•	•
OMA Dinners			•			
Promoting	Promoting Recognition of Identity, Dignity, and Equality (PRIDE) in Healthcare					•
Si	Student National Medical Association (SNMA), UW-Madison Chapter			•	•	•
	Training in Urban Medicine and Public Health (TRIUMPH)	•	•	•	•	•
	White Coats for Black Lives	•			•	•
	Wisconsin Academy for Rural Medicine (WARM)	•	•	•	•	•

Figure 3. Per the AAMC, "Underrepresented in medicine (URiM) means those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population." UWSMPH includes African American or Black; Hispanic, Latino or Chicano; Native Americans or Alaska Natives; Native Hawaiians or Other Pacific Islanders; and Southeast Asian (Cambodian, Hmong, Laotian, and Vietnamese). See Table A1 in the Appendix for additional information on these programs.

RUSCH is designed to teach premedical students about health care careers and address inequities in health care in Wisconsin and beyond. Administrators hope these students will attend medical school and later practice in rural and urban medically underserved communities. The program serves as an important pathway to the UWSMPH's rural and urban medical degree tracks: the **Wisconsin Academy for Rural Medicine (WARM)** and **Training in Urban Medicine and Public Health (TRIUMPH)** Program.

As of 2022, 42 RUSCH scholars, 22 of whom are underrepresented minorities in medicine (16) and/or first-generation college (6) students, have been admitted as medical students to the UWSMPH. 11 have been admitted to the WARM program and five to the TRIUMPH program. RUSCH alumni have also enrolled in UWSMPH graduate programs or other medical schools and health professions programs with the intent to pursue practice in underserved communities.

"I was so much more comfortable going into situations like anatomy and other classes. I never knew I would be so close with the other students so quickly; I appreciated being together with people who look like me." – HPSP Participant The Health Professions Shadowing Program (HPSP) is housed in the UW-Madison Center for Pre-Health Advising (CPHA) which directly partners with the UWSMPH RUSCH program for oversight and administration. UWSMPH has been involved in the program since its inception in 2015 but formalized the partnership in 2019. Through the formal partnership, an FTE was hired to coordinate the shadowing component of the program and UWSMPH committed funding to increase the number of participants from 12 to

16. HPSP is a structured, two-week residential summer program in which students spend over 30 hours shadowing providers at UW Health and affiliated area clinics, building professional networks and skills, and learning about current trends in health care. As a part of the partnership, students who are strongly considering applying to medical school are encouraged to apply to and enter RUSCH upon completion of HPSP. As of 2022, 11 HPSP scholars, 10 of whom are underrepresented minorities in medicine, have been admitted as medical students to the UWSMPH. Two have been admitted to the TRIUMPH program. HPSP alumni have also enrolled in UWSMPH graduate programs or other medical schools and health professions programs with the intent to pursue practice in underserved communities.

Targeted Recruitment Activities

Outreach and Diversity recruitment activities have been developed to personalize the initial step of the admission process and to increase the visibility of the School in minority and underserved communities and with students who would not normally consider UWSMPH. These recruitment activities include:

- American Indian Science and Engineering Society (AISES);
- Association of American Indian Physicians (AAIP) Annual Meeting and National Health Conference;
- Association of American Medical Colleges (AAMC) Minority Student Medical Career Awareness Workshop;
- Graduate and professional school recruitment fairs at Big Ten and other select institutions;
- Latino Medical Student Association (LMSA) recruitment fair at national and regional meetings;
- Medical school recruitment fairs at undergraduate alma maters of our students and alumni from diverse backgrounds;
- National Association of Medical Minority Educators, Inc. (NAMME) meetings and events;
- National Hispanic Medical Association (NHMA) recruitment fair;
- Recruitment fair and career awareness workshops;
- Student National Medical Association (SNMA) recruitment fairs at national and regional meetings;
- Meeting with Minority Association of Premedical Students (MAPS) chapters around the country, including the chapter at UW-Madison (MAPS represents the pre-medical and post baccalaureate section of the Student National Medical Association (SNMA))

Special outreach efforts are made to prospective applicants from ethnically and racially as well as socioeconomically diverse backgrounds whose MCAT scores are exemplary. The prospective applicants are identified through the **Medical Minority Admissions Registry (MedMAR)**, which is an AAMC publication. Special recruitment letters are sent from January to the latter part of August inviting this targeted group of students to apply to UWSMPH. The letter highlights some of the unique features of the School, its commitment to diversity, and educational and research opportunities for medical students.

The dedicated involvement of many faculty, staff, and students is critical to the recruitment of a diverse student body. **Interview Days** are critical opportunities for faculty, staff, and students to help recruit these applicants. Since the 2020-2021 admissions cycle, interviews have been virtual. However, despite this format, the Admissions and OMI teams have developed a program to ensure applicants can connect with several of the school's representatives and recruiters, our current students. Applicants have several forums to interact with current students during their interview. These include faculty and staff presentations on institution, curriculum, support and financial services, residency match outcomes data. Applicants connect with students in a virtual open house and a Diversity Roundtable discussion, both hosted by current medical students.

Academic programs that focus on rural and urban health care are expanding the discussion of diversity in medical education and have the potential of increasing the medical workforce in underserved communities in Wisconsin. Designed to train medical students who have a strong interest in practicing in Wisconsin rural communities The Wisconsin Academy for Rural Medicine (WARM) also has been instrumental in attracting under-represented minority students, namely Native Americans and Hispanics, to apply to the UWSMPH. The Training in the Urban Medicine and Public Health (TRIUMPH) program has demonstrated success in attracting under-represented minorities, including African American and LatinX students, to the UWSMPH. Both programs help a number of minority and non-minority students feel connected to underserved populations and to the communities that they want to eventually serve. The WARM and TRIUMPH programs are covered in detail in the Rural and Underserved Urban Medicine Programs section of this report.

Since 1999, the OMA has worked collaboratively with the **Office of Admissions** and the **Office of the Associate Dean for Students** in sponsoring the **Second Visit Program** to recruit accepted applicants to our medical school. This recruitment strategy was initially designed to invite candidates from diverse backgrounds, especially those with multiple offers from other medical schools, back to the campus for an in-depth look at the UWSMPH and the University community before they make their final decision. UWSMPH faculty, staff, and students as well as community people were involved in this recruitment effort. Additionally, members of **Medical Students for Minority Concerns-UW-Madison** and minority physicians and community leaders provided opportunities for the prospective students to learn more about the Madison community and its resources.

In the spring of 2011, the Admitted Student Visit Day was expanded to include all applicants who had received an offer of admission. The UWSMPH invited all accepted applicants and their guests for a one-day program that highlighted the curriculum, extracurricular opportunities, and services for students. This program has been well received by all. To meet the needs of applicants from backgrounds under-represented in medicine, OMA concurrently developed and offered an **Extended Admitted Student Visit Program** to bring these prospective students to campus a day early so they could attend classes, interact with diverse faculty, and learn more about diverse communities within the city of Madison. While this was virtual during the peak of the pandemic (2020 and 2021), in-person and hybrid events resumed in April 2022. Since the last Biennial Report, we expanded our Diversity Luncheons to include a virtual/hybrid format at all three sessions per admissions cycle in February, March, and April. At these events, accepted and prospective applicants were able to learn more about DEI initiatives organized by OMA and connect with current medical students, residents, and faculty. On average we hosted around 35-40 admitted student per session. At the 2022 Second Look, OMA hosted an in-person reception for admitted student at the school with around 50 students attending the event and wide range participation from medical students and faculty.

Holistic Review and Selection Process

UWSMPH employs a **holistic review process** to select a cross section of students who will address health equity issues as well as add to the richness of the learning environment. Academic merit and integrity are critical and valued components of the review process but are not the only factors considered in the selection of the medical school class.

The School has a strong tradition of assessing applicants in a variety of areas such as: academic service/volunteerism, leadership, diversity, personal qualities, response to adversity, distance traveled in pursuit of goals, and scholarship. UWSMPH understands how important it is to build upon this tradition to select a medical school class that represents a cross section of the citizens of the state, and that will address the health issues of Wisconsin and beyond. In order to achieve these aims, the admissions unit provides education in holistic admissions practices and unconscious bias mitigation to committee members.



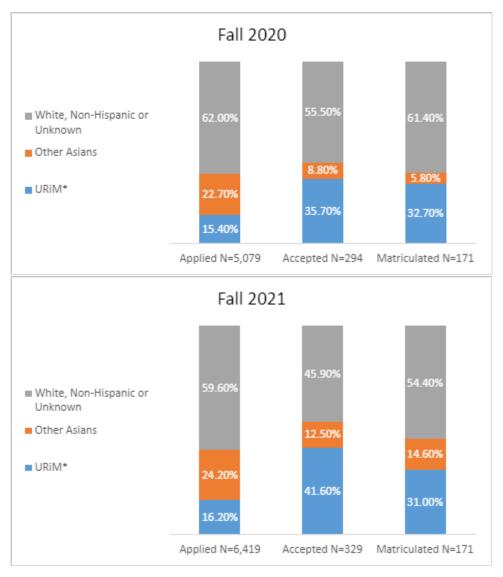


Figure 4 provides a visualization of the change of entering class composition from Fall 2020 to Fall 2021. **Table 2** provides further detail for the incoming classes, as well as total MD student enrollment by population.

Table 2. Recruitment and Enrollment Data for 1st Year Medical Students

		1 st `	Year Me	dical Stud	ents		T	otal
2020-2021	Ар	plied	Acc	epted	Matı	riculated	Enr	ollment
All Minorities	1932	38.0%	131	44.6%	66	38.6%	244	34.7%
URiM*	780	15.4%	105	35.7%	56	32.7%	174	24.7%
Other Asians	1152	22.7%	26	8.8%	10	5.8%	70	9.9%
Unknown	427	8.4%	14	4.8%	10	5.8%	33	4.7%
White, Non-Hispanic	2720	53.6%	149	50.7%	95	55.6%	426	60.5%
Total	5079		294		171		704	
2021-2022	App	olied	Acc	epted	Matri	culated	Total E	nrollment
All Minorities	2594	40.4%	178	54.1%	78	45.6%	253	37.0%
URiM*	1042	16.2%	137	41.6%	53	31.0%	181	26.5%
Other Asians	1552	24.2%	41	12.5%	25	14.6%	72	10.5%
Unknown	454	7.1%	9	2.7%	6	3.5%	31	4.5%
White, Non-Hispanic	3371	52.5%	142	43.2%	87	50.9%	399	58.4%
Total	6419		329		171		683	3

^{*}URIM includes African American or Black; Hispanic, Latino or Chicano; Native Americans or Alaska Natives; Native Hawaiians or Other Pacific Islanders; and Southeast Asian (Cambodian, Hmong, Laotian, and Vietnamese)

Additionally, **scholarships are provided to matriculating URIM medical students** for their four years of medical school. Philanthropic donors to the UWSMPH have strongly supported diversity aims, and the majority of recruitment scholarships, 91% of awards, went to URIM matriculants (n = 48/53) in the Fall 2021 entering class.

Student Retention

Creating a diverse student body requires emphasis on student recruitment; however, retention and graduation of students are equally valued. Therefore, the offices of OMA, NACHP, Admissions, and the Associate Dean for Students work jointly to recruit, retain, and successfully graduate students from diverse groups.

Student Support Services are critical to the successful matriculation and graduation of students. The UWSMPH is mindful that a comprehensive approach must be used in identification and implementation of appropriate student services. Student advisement and counsel on social, cultural, and personal issues, and how they impact academic performance are key support services offered to minority and other students by the UWSMPH. Students are most concerned about their academic success and the support services that would enhance their success. The OMA, working collaboratively with the Office of the Associate Dean for Students, namely its Student Academic Support Services, monitors academic progress of minority students on a regular and assiduous basis and refers them to other services when appropriate, such as the University Health Services Counseling and Consultation Services. By working collaboratively, UWSMPH's student support services have been successful in identifying students experiencing challenges and in developing appropriate plans of action to help students succeed and comply with medical school academic policy.

When launching the **Building Equitable Access to Mentorship (BEAM)** program in 2019, UWSMPH initiated a new learning community aimed at increasing mentoring skills for our diverse faculty scholars. These faculty offer mentoring experiences that assist medical students from URiM racial/ethnic groups in acquiring relevant social and cultural capital to maximize experiences and resources in UWSMPH while also enhancing their own professional development and academic success.

The goals of the BEAM program are to:

- Identify URiM faculty to participate in the URiM Student Mentorship Program and to provide mentor training to BEAM scholars.
- Enhance the faculty experience and connectedness of BEAM scholars through professional development and social networking.
- Provide opportunities for URiM faculty members to support UWSMPH diversity initiatives through involvement in activities that sustain our URiM students in our UWSMPH training programs.
- Build a cohesive and supportive community of faculty scholars across diverse health science disciplines and who are from URiM groups in Wisconsin.

With the incoming medical school classes since 2019 and 2020 surpassing 30% URiM students, the need for visible and involved role models for our UWSMPH students and trainees has also increased. BEAM

"I have loved getting to know my mentees. They are thoughtful, inquisitive, and do not accept the status quo. We've had some very difficult conversations about systemic racism, micro-aggressions, and how to stand up when injustices occur. They give me hope that the future is bright. I hope to be in touch with them for the rest of my career." – BEAM Faculty Scholar

provides competency-based education and resources to faculty scholars who assume mentorship roles. They participate in extensive evidenced based, mentorship education workshops by colleagues within UWSMPH who are national/international experts. The workshops explore multiple mentoring models, tools to improve mentoring, and culturally aware mentoring practices. The education is presented in multiple online modules and in-person and synchronous virtual discussions.

During the pandemic BEAM activities went virtual, and the program is currently shifting back to in person events for FY23. From the initial cohort of 16, seven mentors are still active plus 30 new mentors have been recruited. BEAM has mentored 133 students since its inception.

OMA has continued to provide our **monthly dinners with faculty from BIPOC backgrounds** on a virtual format. To increase attendance during the 2021-2022 we provided meals/dinner for students/faculty registered for each event. This helped to have a steady number of participants (25 per session) at each virtual dinner. During this academic year, we are shifting from a virtual format to an in-person event at the Health Sciences Learning Center. A total of eight monthly dinners are planned for this academic year. At these dinners faculty share stories of their paths in medicine as clinicians, researchers, and educators in a small-group environment where personal connection is the goal. Finally, OMA hosts an alumni reception during homecoming weekend as a means of connecting minority alumni with current students. A special reception allows students the opportunity to create mentoring relationships that last beyond homecoming weekend.

Due to the concerns brought by our students during these sessions, the position of Diversity, Equity, and Inclusivity Coordinator for MD Student Services was created as an additional resource for URiM students that could serve as bridge between the students and other units within UWSMPH. With this new role, we have continued to create sessions geared to support our URiM students such as the celebration of

cultural identities during the academic year (Black History Month, Hispanic Heritage Month, etc.), in addition to sessions designed to address issues such as cultural bias and microaggressions.

Through the collaborative work of many, students have been successful in graduating and obtaining residency positions. A growing number of minority students have not only graduated from the UWSMPH, but after completing their residency training have accepted faculty positions at the UWSMPH. Currently, eight UWSMPH minority alumni hold faculty positions at the Madison hospital and clinic sites.

Faculty Leadership in Diversity and Outreach

UWSMPH has excelled in attracting and promoting talented women medical leaders. Over half of the school's senior level leadership positions (deans and department chairs) are held by women. This by far surpasses the national averages as reported by the AAMC, see Figure 5.

Since the last biennial report, several UWSMPH leaders have been recognized for their achievements with the UW-Madison Outstanding Women of Color Award:

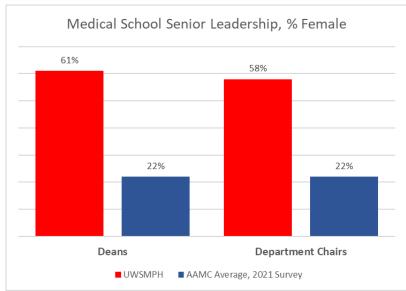


Figure 5. Percent leadership positions held by women at UWSMPH, compared to the AAMC average. (Excludes open positions.)

FY22

- Cat Nguyen Burkat, M.D., F.A.C.S., is a professor (CHS) and board-certified ophthalmologist in the UWSMPH. Dr. Burkat is an expert in plastic and reconstructive surgery and aesthetic surgery around the eyes. She serves as co-chair of the Global Ophthalmology Initiatives program and has a fellowship from the American Society of Ophthalmic Plastic and Reconstructive Surgery.
- **Sheryl Henderson**, Sheryl Henderson, M.D., Ph.D., F.A.A.P., is an associate professor (CHS) in the Department of Pediatrics at UWSMPH. Dr. Henderson earned her medical degree from Johns Hopkins University and completed her internship and residency at Johns Hopkins Hospital. She completed her fellowship in pediatric infectious disease at Emory University and is board certified in pediatrics and pediatric infectious diseases.
- **Danielle Yancey**, M.S., is the director of the Native American Center for Health Professions in UWSMPH. She has nearly 20 years of service working with tribal communities in precollege programming, intergovernmental affairs, and community and economic development. She was raised on the Menominee Indian reservation in north-central Wisconsin and is a graduate of UW–Madison.

FY21

• Shenikqua Bouges, M.D, Advanced Geriatric Fellow, UWSMPH/Division of Geriatrics and Gerontology. As a researcher, Shenikqua focuses on assessing recruitment strategies to improve the participation of under-represented populations in Alzheimer's disease (AD) research.

Table 3. UWSMPH Faculty Data*

Academic Year	Minorities Including Asians	% of Total Faculty	Minorities Excluding Asians	% of Total Faculty	White or Unknown	% of Total Faculty	Total
2015	225	14.6%	64	4.2%	1,319	85.4%	1,554
2016	221	14.1%	62	4.0%	1,346	85.9%	1,567
2017	263	16.1%	65	4.0%	1,370	83.9%	1,633
2018	277	16.6%	72	4.3%	1,387	83.4%	1,664
2019	218	12.2%	59	3.3%	1,576	87.8%	1,794
2020	239	12.9%	69	3.7%	1,612	87.1%	1,851
2021	309	16.3%	83	4.4%	1,584	83.7%	1,893

^{*}Includes Tenure, Clinical Health Science, Clinical-Teacher, Part-Time and Full-Time Faculty. Minorities Include African American, Latino/Latina, Native American, Native Hawaiian or Other Pacific Islander

The UWSMPH continues to examine practices and opportunities to recruit and retain a more diverse faculty, and this is emerging as a priority for the next two years. Growth in the number of URiM faculty has not kept pace with overall growth in faculty numbers and lags our success in building a diverse student population. In addition to the direct recruitment and retention programs described below, UWSMPH is investigating approaches to build diversity in the Graduate Medical Education (GME) program.

The Centennial Scholars and Centennial Clinicians Programs are designed to support departments in hiring and developing diverse faculty from groups who experience health disparities in Wisconsin. Faculty diversity enhances the quality of education, clinical care and research at UWSMPH.

In 2020, the Centennial Scholars program was expanded to include clinicians in addition to researchers and educators as participants. With the expansion of the program in 2020, the number of Scholars/Clinicians has grown from nine participants in 2020 to 17 participants as of July 2022.

Faculty from groups who are underrepresented in academic medicine may feel isolated in academic medical centers. This condition has been exacerbated during the past two years by the inability to gather in-person due to the COVID-19 pandemic. A focus of the Centennial program is to provide professional development programming and build community among the Scholars/Clinicians. During the pandemic this was achieved through virtual meetings. Programmatic content over the past two years focused on providing professional development topics to Scholars/Clinicians such as negotiation and how to present a TED-style talk. On Medical Education Day in May 2022, Centennial Scholars/Clinicians had the opportunity to have a private meeting with keynote speaker Dr. Ana Nunez, Vice Dean for Diversity, Equity and Inclusion, University of Minnesota Medical School. Starting with the 2022-23 academic year, more in-person community-building events will be held for the Scholars/Clinicians in order to foster dialogue and support among the cohort.

While the primary impetus for creating the **Building Equitable Access to Mentorship (BEAM)** program was to mentor our increasingly diverse student population, the program was also designed to support our participating URiM faculty:

- Creates a community of URiM faculty
- Coaches mentors in how to turn their educational work into scholarship to support their career advancement and promotion on their faculty track
- Provides a professional evaluation of their promotion packet
- Pays a stipend for each scholar to cover expenses associated with mentoring activities

The Advancing Health Equity and Diversity (AHEAD) initiative is a collaborative effort of the UWSMPH Centennial Scholars Program, the Health Disparities Research Scholars Program, the Building Interdisciplinary Research Careers in Women's Health training program, and two Department of Family

Medicine & Community Health fellowship programs. Sponsored by a P-60 supplement to the UWSMPH Clinical and Translational Science Award, this consortium of programs focused on diversity and medical disparities has allowed shared programing as well as the development of a grant program.

13.106 (3) (ag) Enrollment of Wisconsin Residents

The objective of the Admissions Committee, which is supported by the mission statements of UW-Madison and the UWSMPH, is to select a diverse class of medical students who have demonstrated essential academic, personal, and professional attributes that will allow them to succeed as clinicians, scientists, educators, and leaders to meet the health care needs of Wisconsin and beyond.

All decisions concerning who is accepted by the UWSMPH are made solely by the Admissions Committee. (Two subcommittees work with the Admissions Committee: Wisconsin Academy for Rural Medicine (WARM), and Medical Scientist Training Program (MSTP, also known as MD/PhD)).

Admissions committee members include faculty, researchers, students, and community members appointed by the Dean of the Medical School or designee, as well as elected faculty members. All Wisconsin resident and non-resident applicants are evaluated by the same criteria. Highly qualified and well-prepared applicants from throughout the United States are encouraged to apply. The 179 member Entering Class of 2020 included 170 newly enrolled Doctor of Medicine (MD) degree students and nine students who had deferred or previously matriculated and were for various reasons restarting their first year. In 2021, 74% of students were Wisconsin residents.

Table 4. Wisconsin Residency Status of Medical Students by Class and Academic Year

Student Level	Non-Re	sident	Resid	dent	Total
2020-2021	178	25%	527	75%	705
Med1	43	24%	136	76%	179
Med2	54	30%	126	70%	180
Med3	46	26%	129	74%	175
Med 4	35	20%	136	80%	171
2021-2022	187	26%	520	74%	707
Med1	44	25%	131	75%	175
Med2	42	24%	136	76%	178
Med3	54	31%	123	69%	177
Med4	47	27%	130	73%	177

Extended classes in which students follow a decelerated curriculum due to personal or academic factors are included in the appropriate level counts.

13.106 (3) (al) Average Faculty Salaries at the UWSMPH Compared to National Averages

		UWSMPH	All Schools
AAMC Departments	Rank	Average	Average
PhD, No MD			
Basic Sciences	Assistant	\$129,576	\$107,974
	Associate	\$146,377	\$139,632
	Professor	\$197,338	\$209,392
Clinical Sciences	Assistant	\$150,497	\$118,402
	Associate	\$148,216	\$152,585
	Professor	\$205,194	\$221,542
MD, may have PhD			
Basic Sciences	Assistant		
	Associate	\$226,373	\$164,217
	Professor	\$230,806	\$253,957
Clinical Sciences	Assistant	\$339,355	\$307,310
	Associate	\$374,151	\$361,845
	Professor	\$429,372	\$411,216

Table 5. Average Faculty Salaries at UWSMPH compared to National Averages: FY21The UWSMPH submits FY faculty salaries to the Association of American Medical Colleges (AAMC) annually in October. Because the AAMC FY22 salary survey figures are not published until January 2023, the UWSMPH figures for this period are not yet available.

These data confirm the perceived trends in faculty salary levels compared to national averages. In the case of our PhD Basic Science faculty, we must provide a competitive salary level at the Assistant Professor level in order to hire or be competitive in recruiting faculty in the national marketplace. As is the trend with other UW-Madison faculty, we have not remained competitive at the Full Professor level and lag peers making us vulnerable to losing our most experienced faculty to competing institutions. We have had targeted compensation programs and funds to retain senior faculty in recent years, narrowing the gap to national average mean from 91% in FY19 to 94% in FY21 for Basic Sciences and from 89% to 93% for Clinical Sciences Full Professors.

Our clinical MD faculty have salaries that are above national averages. Clinical faculty salary is determined primarily by the amount of clinical income generated by the faculty member and the overall profitability of the healthcare system in which they operate. UWSMPH clinical faculty have been very productive in the clinical setting, and the Madison healthcare market has a more favorable payer mix of patients than many other academic medical centers located in major urban settings.

13.106 (3) (ap) Cooperative Educational Programs

Overview of Degree and Non-degree Educational Programs in UWSMPH

Degree Programs:

- Doctor of Medicine (MD), including WARM and TRIUMPH program students
- Doctor of Physical Therapy (DPT)
- Doctorate (PhD) and master (MS) degrees in basic, clinical and population health sciences
- Master of Genetic Counselor Studies (MGCS)
- Master of Physician Assistant Studies (MPAS)
- Master of Public Health (MPH) and dual degrees (MD/MPH, MD/MPAS, MD/DPT, MD/MGCS)
- Medical Scientist Training Program (MD/PhD)

Non-Degree Programs:

- Certificate programs for undergraduate, graduate and professional degree programs
- Graduate Medical Education, including clinical residency & fellowship programs in 60 specialties
- Postdoctoral fellowships
- Professional Development in Medicine & Public Health programs for health care professionals

Physician Assistant Program

The UW-Madison Physician Assistant (PA) Program at the UWSMPH is a nationally respected professional program that offers graduates a Master of Physician Assistant Studies (MPAS). Its mission is to educate professionals committed to the delivery of comprehensive health care in a culturally and ethnically sensitive manner, with an emphasis on primary health care for populations and regions in need.

In addition to its two-year, full-time Madison campus-based program, the PA program offers an innovative **three-year distance education track**, which enables students to remain in their communities while completing the majority of their education. In cooperation with the UW-Stevens Point, it also offers the **Wisconsin Physician Assistant Community Based Track (wisPACT)**, which is designed to educate PA students for practice in northern Wisconsin.

Both options make PA education more accessible, especially for students from rural, urban, and underserved communities. It also provides a rich clinical experience in their communities, so students can better serve them after graduation. Students can also choose a 33-month MPH-PA dual degree track, where they earn master of public health and master of physician assistant studies (MPH-MPAS) degrees.

The program educated 122 students in FY21, and 130 in FY22. It had 52 graduates in FY21 and 54 graduates in FY22. Of those clinically employed, 58% and 70%, respectively, entered practice in Wisconsin, and 23% and 12%, respectively, entered primary care.

Table 6: Practice Plans of PA Program Graduates

	2021	2022		
Entering Primary Care	23%	12%		
Practicing in Wisconsin	58%	70%		
Practicing in HPSAs/MUAs 62% 67%				
*Clinically practicing graduates who responded to follow-up surveys				

Table 7. PA Program Funding

- I - I - I - I - I - I - I - I - I - I	FY2019	FY2020	FY2021	FY2022
Total Budget	\$1,878,116	\$2,005,428	\$2,418,834	\$2,245,740
UWSMPH	53%	49%	42%	92%
UW Credit Outreach	47%	38%	48%	
Federal Grant		13%	10%	8%

Wisconsin Partnership Program

UWSMPH is home to the Wisconsin Partnership Program (WPP), a grantmaking program within the UWSMPH established as the result of a generous endowment gift from Blue Cross Blue Shield United of Wisconsin (BCBS). The Wisconsin Partnership Program is committed to improving health and advancing health equity through investments in community partnerships, education and research.

Since WPP began making grants in 2004, its approach to grantmaking has harnessed the power of academic research combined with community knowledge to address some of Wisconsin's most pressing and complex health challenges. Its principles and practices are integrated with the time-honored concept of the Wisconsin Idea, recognizing the tremendous opportunity to bridge the knowledge and resources of the university with communities to improve life within the state of Wisconsin and beyond. Our mission and work are strongly aligned with the UWSMPH mission to advance health through innovative research, outstanding education, and remarkable service to communities.

During FY21 and FY22 WPP supported the implementation of 156 active grants including 52 new awards for \$27.7 million dollars.

156 FUNDED PROJECTS

Total Active Grants
*2021-2022

52 GRANTS AWARDED

\$27.7 Million Awarded

591 FUNDED PROJECTS

\$281 Million Awarded
*since 2004

Since its inception, WPP has awarded 591 grants totaling more than \$281 million. Building on WPP investments, grant recipients have leveraged more than \$661 million since 2004 in additional funding from federal, foundation, or other agencies to sustain or enhance their work. Since 2004, the Wisconsin Partnership Program has supported work that reached every county in the state.

WPP Grant Activity and Impact

WPP advances its mission through a strong portfolio of grant programs that propel medical research, enhance health education and workforce development, support community health partnerships, advance health equity, and respond to the COVID-19 pandemic. The work of WPP and its grantees touches all corners of the state, across a wide range of health challenges, communities, populations, and geographic areas.

Responding to COVID-19 42 COVID-19 Response Grants /\$6.75 Million (FY04 – FY22)

In FY21 and FY22, WPP continued its response to COVID-19. <u>New grants</u> promote vaccine delivery, increase capacity for testing and surveillance in schools, address the dual crises of COVID-19 and drug overdose particularly in Wisconsin's rural communities, and support community organizations who are



addressing the pandemic's toll on the mental health of our state's youth. WPP also partnered with the UW System nursing schools for initiatives to:

- Bolster the health care workforce during the pandemic through a tuition incentive program for UW
 System nursing and health sciences students
- Promote vaccine delivery through a partnership with the UW–Madison School of Nursing and community organizations

Improving Health and Advancing Health Equity through Community Partnerships 321 Community Partnerships/\$90 Million (FY04 – FY22)

WPP's community grant programs support projects that improve health and advance health equity in diverse populations and geographic areas across the state, including grants that provide seed funding, technical assistance and capacity-building, to large-scale, evidence-based, community-academic partnerships that have the potential to create sustainable changes to systems, policies, and environments that impact health. Grant recipients are:

- Increasing access to treatment and care for people struggling with substance use disorders in rural Wisconsin
- Improving the quality of care for Wisconsin's seniors residing in assisted living facilities, by expanding participation by facilities across the state in quality improvement programs
- Developing a community health worker program to reduce health disparities experienced by Black women
- Expanding access to dementia diagnoses and care for Latinx populations in southeast Wisconsin
- Promoting and sustaining accessible, high-quality early care and education opportunities to support children, working parents, and childcare providers in under-resourced communities
- Promoting food sovereignty and cultural identity as a means to promote healthful food intake and improve health outcomes in the Oneida Nation
- Preventing suicide and promoting well-being among Wisconsin farmers by making mental health services more accessible for farmers and their families

Improving maternal and child health outcomes: WPP is committed to improve maternal and child health across Wisconsin. As a result, WPP developed a new maternal and child health funding mechanism that supports a broad range of community partners and effective approaches to improving maternal and infant health outcomes, with a focus on under-resourced and marginalized communities across Wisconsin, including, but not limited to, Asian, Black, Hispanic, Native American, and rural communities. Awards totaling \$2.6 million were made to 18 projects during the 2021 and 2022 grant cycles. Recent grants include:

- Expanding a community-based doula program
- Expanding early childhood program to support mothers at risk for poor maternal and infant health outcomes
- Strengthening post-partum care and family support and resources through collaboration

Enhancing Medical and Public Health Education *44 Education Grants/\$38.9 Million (FY04 – FY22)*

WPP supports strategic education initiatives at UWSMPH as well as statewide initiatives for public health training and workforce development. Its funding helped catalyze the transformation of the UW Medical School into the UWSMPH. WPP has a strong track record of supporting successful education initiatives including:

- Providing initial funding to establish the Wisconsin Academy for Rural Medicine, the Preventive Medicine Residency Program and the Master of Public Health Program—all critical to the Wisconsin health care workforce.
- Promoting diversity in medical education through the WPP Scholarship Program, which provides tuition support to increase the enrollment and retention of medical students from communities that are historically underrepresented in medicine; four scholarships for full four-year medical school tuition have been made since 2020. This considerable financial commitment has been made to awardees who represent racial or ethnic groups that are historically underrepresented in medicine and are from diverse geographic areas in the state, including rural, urban, and suburban communities.
- Strengthening the public health workforce through the Wisconsin Population Health Services
 Fellowship Program— the two-year service and training program places early career individuals
 working in public health and allied sciences in practice-based settings spanning community,
 nonprofit, government, and health service organizations in Wisconsin. To date, more than 80
 masters- or doctoral-prepared fellows from diverse backgrounds have been placed in more than
 40 local and state public health and community-based organizations.
- A grant for the Transforming Medical Education initiative has supported the development of the Forward curriculum, an education model that has truly transformed education across UWSMPH and fully integrates basic, public health, and clinical sciences throughout UWSMPH medical students' education.

Propelling Research and Discovery 184 Research Grants/\$145.7 Million (FY04 – FY22)

WPP's research grant programs address a wide range of health and healthcare issues across basic, clinical, translational, and applied public health research. Research grants support innovative research to prevent, diagnose, treat and cure diseases, and prevent injuries. Projects focus on a wide range of topics including Alzheimer's disease, cancer, diabetes, infectious disease, maternal and child health, and more, including the following examples:

- Improving surgical outcomes for cancer patients through a collaboration with 85 Wisconsin hospitals where nearly 75 percent of breast and colorectal procedures are performed
- Preventing strokes in the Oneida nation though a partnership with clinicians and community members
- Training future health professionals to better detect and treat dementia
- Advancing precision medicine to target cancer and rare genetic diseases
- Identifying novel interventions to help patients coping with heart failure

In alignment with the strategic direction of the UWSMPH, the Wisconsin Partnership Program provides critical funding to initiate or further enhance novel education and research infrastructure programs vital to improving health and health care and to advancing health equity in Wisconsin and beyond. Since 2006, WPP has provided over \$58 million in matching funds to the UW Institute for Clinical and Translational Research to transform the culture of translational research and community engagement at the UWSMPH and across campus so that research discoveries make a difference in Wisconsin lives. WPP's matching support helped the UWSMPH leverage over \$122 million from the National Institutes of Health through three Clinical and Translational Science Awards.

Lasting Impact

WPP is committed to improving health and well-being of the people of Wisconsin. Its investments propel new knowledge and discovery, enhance medical and public health education, create partnerships, and stimulate new ideas and initiatives to improve health across Wisconsin communities and beyond. Funding supports new ideas and initiatives that have the potential to positively impact patients and populations now and for years to come. For example, previous grant recipients such as those noted below have leveraged their WPP funding to expand their work, with significant potential to develop new cures and to greatly improve health and healthcare:

- **Fighting infectious disease:** A WPP-funded research collaboration aimed at fighting the alarming rise of drug-resistant infections through the discovery and identification of potential new antibiotics has led to sizeable National Institutes of Health grants totaling \$46 million to develop new ways to discover the next generation of microbial drugs
- Preventing Blindness: Researchers have leveraged preliminary data obtained with WPP funding
 to obtain funding from the National Institutes for Health/National Eye Institute for a multicenter
 clinical trial that will increase access to vision-saving care in rural Wisconsin through an innovative
 telehealth remote eye screening program
- Dissemination of knowledge: Grantees have published and submitted more than 1300 articles and other media reporting the findings of their WPP projects during FY21 and FY22.
- **Economic impact:** WPP grantees have leveraged more than \$661 million since 2004 in additional funding from federal, foundation, or other agencies to sustain or enhance their work. This represents a 235% return on investment—a truly remarkable impact.



Funds leveraged by grantees since 2004

Solving Wisconsin's complex health challenges is an ambitious goal that requires a wide range of approaches, partners, funding sources, and solutions. The Wisconsin Partnership Program recognizes its significant role and responsibilities as a statewide health funder and continues to identify and invest in innovative solutions to improve health and healthcare, and advance health equity for all populations across the state.

Wisconsin Area Health Education Center (AHEC) System

Wisconsin AHEC advances health equity in our rural and underserved communities through education and training opportunities that aim to increase the diversity, distribution, and development of our healthcare workforce. Wisconsin AHEC accomplishes this mission through its network of self-governing Centers (separate from academic health centers), and strategic partnerships with statewide academic institutions and community-based organizations, to develop and oversee programs focused on the unique needs of each region and serving learners at all stages of their academic and professional careers. As

such, Wisconsin AHEC is positioned as a statewide connector—connecting students to careers, professionals to communities, and communities to better health.

The Wisconsin AHEC Program is an essential component of Wisconsin's efforts to maintain its competitive advantage in providing high quality, high value health care at reasonable costs, and to assure that those benefits are available to all its citizens. The program currently supports seven AHEC Centers. With offices located in Manitowoc, Wausau, Milwaukee, Beloit, Cashton, Marengo, and Rhinelander, these Centers form a statewide network of community and academic partners providing:

- Enrichment programs for high school students interested in health careers,
- · Community-based training opportunities for health professions students, and
- Professional development programs for currently practicing health professionals.

Since 1991, Wisconsin AHEC has developed partnerships with health professions training programs throughout the state and provided programs and services in over 300 communities. The AHEC Centers provide local support for health professions workforce development through partnerships with the UWSMPH and the UW System campuses in each region, as well as the Wisconsin Technical College System campuses, private colleges and universities, local and tribal health departments, and other community service agencies. These partnerships are critical for the success of Wisconsin AHEC's efforts to enable the health professions programs to recruit well-prepared high school students from communities where health professionals are most needed; to provide the community-based clinical training sites necessary for creating experiences for students in rural and underserved urban areas; and to integrate public and community health, interprofessional and team-based practice into the clinical curriculum.

Evaluating our programs: Wisconsin AHEC invests significant resources towards evaluation of our programs. Our evaluation plan models a broad, continuous feedback loop that engages our strategic partners, Centers, training participants and at-large community members and drives data-informed decision making around our program goals. In FY21 and FY22, Wisconsin AHEC programs served a combined 407 medical students, 1,942 other health profession college students, 9,447 students in grades 9-12, and 1,418 practicing health professionals and community participants.

Medical students: Each year, the AHEC Centers support UWSMPH medical students during their Phase 2 Chronic and Preventative Care block where activities are centered on health promotion, outpatient-based chronic disease management, and community health. All medical students complete this block offsite at primary care clinics located throughout the state, supported by our AHEC Center teams, by engaging in longitudinal community health engagement projects. Additionally, Wisconsin AHEC continues supporting the ongoing development and growth of two programs at the UWSMPH: the Wisconsin Academy of Rural Medicine (WARM), and the parallel urban underserved community training track in Milwaukee, Training in Urban Medicine and Public Health (TRIUMPH).

AHEC Scholars Program: AHEC Scholars is a two-year program designed to enhance and broaden healthcare training for students through a combination of didactic and community-based experiential learning activities that support six core topic areas including interprofessional education, behavioral health integration, social determinants of health, cultural competency, practice transformation, and current & emerging health issues. Each fall we welcome a new interprofessional cohort of students to join our second year AHEC Scholars, serving over 200 students annually. Our students form a diverse group of learners originating from graduate, undergraduate, and technical health professions programs from academic institutions statewide. Collectively, our AHEC Scholars represent dietetics, behavioral health, medicine, nursing, occupational therapy, pharmacy, physical therapy, physician assistant, public health, and social work disciplines. Additionally, our FY22 cohort included 64% identifying as coming from a rural

background, 20% identifying as coming from a disadvantaged background, and 12% identifying as underrepresented.

Interprofessional collegiate programs: Wisconsin AHEC offers statewide programs open to technical, undergraduate, and graduate students from a wide array of health-related academic disciplines. Wisconsin Express is a week-long cultural immersion program offered at over a dozen sites around the state, each focusing on vulnerable populations and communities. Our Community Health Internship Program (CHIP) provides partnerships with local health departments, tribal health centers, community health centers, and community service agencies to develop research projects and provide mentoring for health professions students interested in an intensive two-month summer experience in community health. Wisconsin AHEC's CHIP also continues to support premed students in the Rural and Urban Scholars in Community Health program at UW-Madison. Our diverse FY22 CHIP cohort includes 37 percent identifying as coming from a rural background, 24 percent identifying as coming from a disadvantaged background, and 31 percent identifying as underrepresented — from 34 different academic institutions and representing a variety of pre-health and health profession disciplines. Our Centers also provide local programs to support students at partner academic institutions. Collectively, these programs bridge discipline and institutional boundaries and provide transformational field experiences with underserved populations for students interested in the health professions, often while extending the capacity and reach of partnering community agencies.

Health careers pipeline programs: Due to a shift in focus from early pipeline activities at the high school level by the federal AHEC program, Wisconsin AHEC has scaled back a significant portion of our health careers pipeline programming. Despite this reduction we served nearly 185 high school students in our intensive, multi-day health careers camp programs and over 9,200 students engaged in our health careers exposure activities.

Continuing education programs: Wisconsin AHEC continues to dedicate resources towards developing and maintaining a health care workforce that delivers high quality care in rural and underserved communities and areas. In FY21 and FY22 we provided continuing education programming to over 1,400 currently practicing health professionals, 96 of which successfully completed our Community Health Worker (CHW) training program, a program now expanded statewide through partnerships with the UWSMPH Office of Continuing Professional Development and the UW Collaborative Center for Health Equity (CCHE).

Support for other training and outreach activities: The presence of the Wisconsin AHEC Program Office on the UW-Madison campus, statewide coverage by our seven AHEC Centers, and the connection AHEC provides to community organizations around the state have been important factors in the successful application by other UW-Madison programs for a variety of health professions grants. AHEC continues to partner with the Native American Center for Health Professions (NACHP) program to support the enrollment of American Indians and Alaska Natives to pursue careers in medicine and other health fields through their Indians Into Medicine (INMED) grant award. AHEC plays a key role in the Health Resources and Services Administration (HRSA) funded project with the Physician Assistant program to increase the number of primary care Physician Assistants, particularly in rural and underserved settings, and improve primary care training to strengthen access to and delivery of primary care services across the state. Additionally Wisconsin AHEC continues to partner with the Medical College of Wisconsin-Central Wisconsin and UW-Stevens Point at Wausau to co-administer the Advocates in Medicine Pathways program designed to promote inclusion of rural and Hmong students in the physician workforce. New activities in FY21 and FY22 include a partnership with WI Department of Public Instruction to support HOSA-Future Health Professionals programming at the post-secondary and collegiate level, and Center funding through the Advancing a Healthier Wisconsin Endowment (AHW) to develop a Health Career Path2Practice Certificate program and Integration of CHWs into Public Health Initiatives for Rural & Urban Communities. Wisconsin AHEC maintains strong collaborative relationships at UW-Madison and beyond that support our Center efforts to secure future funding sources and amplify our impact in our communities statewide.

Other Relevant Programs and Initiatives

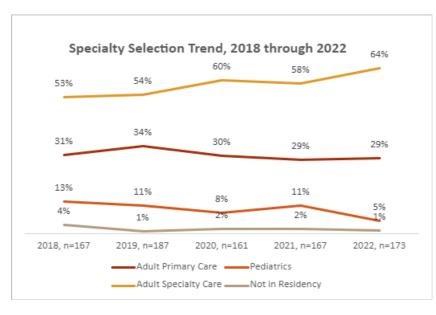
Ombuds Office: One ombudsperson is dedicated to student issues, and the campus Ombuds Office serves faculty and staff concerns in an impartial manner and strives to see that all people at the School are treated fairly and equitably.

Collaborative Center for Health Equity (CCHE): The CCHE connects partners from rural, urban, and tribal communities with UW faculty, research staff and trainees with the aim of improving the health and wellness of Wisconsin's underserved, minority, and immigrant populations. The Center also holds a Health Equity Leadership Institute yearly, which attracts scholars in the areas of health equity and diversity from across the country. Additionally, CCHE provides a listserv to connect diversity researchers and scholars and also sponsors educational programming.

Office of Continuing Professional Development (OCPD): Training and education for those working in the medical field continues well after completing formal training. Through the Office of Continuing Professional Development in Medicine and Public Health (OCPD), UWSMPH in partnership with the School of Nursing and the School of Pharmacy provides a wide range of accredited interprofessional continuing education activities for health professions caring for Wisconsin's citizens.

The interprofessional continuing education partnership formed by the three schools promotes best practices in healthcare team performance optimizing patient and population health. Over the biennium, these units offered more than 600 learning activities annually, reaching an average of 57,180 physicians, nurses, and other healthcare providers each year. In this biennium, continuing education activities addressed several public health initiatives including safe opioid prescribing, mental health, and COVID-19. OCPD and partner schools continue to ensure that practicing clinicians have access to high-quality, relevant, and inclusive education needed to maintain their licenses and provide the best possible care.

13.106 (3) (at) Placement of Graduates of Doctor of Medicine and Residency Training Programs



For the graduating class 2021, 27% matched into a Wisconsin residency while the graduating class of 2022 increased to 31%. The percentage of graduates going into primary care (adult and pediatrics) was up to 40% in 2021 but dropped to 36% 2022. For TRIUMPH 2021 graduates, 67% went into primary care while 27% of WARM 2021 graduates are in primary care residencies. (Details on TRIUMPH and WARM can be found in the **RURAL AND UNDERSERVED** URBAN MEDICINE PROGRAMS section of this report.)

Figure 6. MD Specialty Selection Trend

Table 8. Specialty Selections by Geography, Classes of 2021 and 2022

Class of 2021	Out of State	Wisconsin	Total	%
Adult Primary Care	37	12	47	29%
Pediatrics	15	3	18	11%
Total Primary Care (Adult & Child)	40	15	55	40%
Total Specialty Care	71	28	98	60%
Total in Residency	121	43	164	
Not in Residency			3	
Total Class of 2021			167	

Class of 2022	Out of State	Wisconsin	Total	%
Adult Primary Care	32	19	51	30%
Pediatrics	10	1	11	6%
Total Primary Care (Adult & Child)	42	20	62	36%
Total Specialty Care	77	32	109	64%
Total in Residency			171	
Not in Residency			2	
Total Class of 2022			173	

^{*}Detailed specialty data can be found in the Appendix, Tables A2 and A3.

FAMILY MEDICINE RESIDENCY PROGRAMS

Reported by the University of Wisconsin Department of Family Medicine and Community Health

Introduction

Since 1970, the University of Wisconsin Department of Family Medicine and Community Health (DFMCH) has educated medical students and family medicine residents to care for Wisconsin.

In FY21, we educated 422 medical students and 161 residents in our academic partner programs. In FY22, we educated 479 medical students and 164 residents in our sponsored and academic partner programs.

Of the 37 residents who graduated in 2021 and 2022, 19 (51%) entered practice in Wisconsin. Of the 1,519 residents who have graduated since the DFMCH's inception in 1970, approximately 985 (65%) entered practice in Wisconsin.

Every day, our physicians in training and faculty work to promote healthy individuals, families, and communities. In FY22, we provided 358,223 patient visits at our 17 UW Health clinics statewide (86,834 of which were at residency training clinics).

Investigators in our nationally recognized research program focus on such important topics as addiction and substance misuse prevention and treatment, pain management, and infectious.

The DFMCH's physical presence throughout the state allows us to forge partnerships with individuals, community organizations, and local governments—and together, we are working to address the unmet primary care needs of Wisconsin. Our presence also supports development of communities throughout Wisconsin.

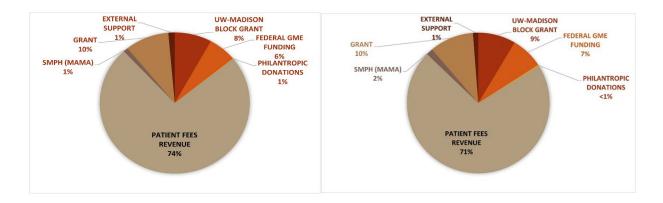
Key Facts About the DFMCH

The DFMCH's administrative offices are leased from SSM Health St. Mary's Hospital–Madison. Resident and medical student education, research, and patient care take place throughout Wisconsin.

Fiscal Year	# of Employees	Annual Revenue	UW-Madison Block Grant
2021	564 (171 faculty)	\$98,199,167	\$7,862,831
2022	521(177 faculty)	\$90,768,855	\$7,737,973

Figure 7. DFMCH Annual Revenue

FY21 = \$98,082,621 (\$98,199,167 with donations) FY22 = \$90,516,435 (\$90,768,855 with donations)



Faculty Accomplishments

The DFMCH's 171 faculty are engaged in scholarly projects in support of education, research, practice improvement and community health. In 2021, they published 104 academic publications and gave 31 presentations at state, national and international conferences. Faculty accomplishments in FY21 and FY22 also include:

- Invited to serve on the on the National Quality Forum 2021-2022 Measure Applications Partnership (MAP) Equity Health Advisory Group (Jeffrey Huebner, MD);
- Accepted to the 2021-2022 class of the North American Primary Care Research Group (NAPCRG)
 <u>Grant Generating Project</u> (GGP) Fellows program (**Edmond Ramly, PhD, MS**);
- Awarded UW Health 2021 Physician Excellence Leadership Awards (Seth Barudin, MD, and Jennifer Lochner, MD);
- Received the Wisconsin Medical Society Foundation's 2022 "Superhero of Medicine" award (Patricia Tellez Giron, MD):
- Inducted into the Edward A. Bouchet Graduate Honor Society (Linda Park, PhD);
- Inducted into the Alpha Omega Alpha (AOA) medical honor society (Patricia Tellez Giron, MD)
- Appointed editor-in-chief of Family Medicine, the <u>official journal</u> of the Society of Teachers of Family Medicine (Sarina Schrager, MD)
- Awarded a five-year federal grant from the Agency for Healthcare Research and Quality (AHRQ) (Edmond Ramly, PhD, MS)
- Selected as a 2022 American Academy of Family Physicians Vaccine Science Fellowship recipient (James Bigham, MD)
- Awarded a <u>Baldwin Wisconsin Idea</u> Project Grant by the Ira and Ineva Reilly Baldwin Wisconsin Idea Endowment (Kristi Hallisy, PT, DSc)
- Award a Research Project Grant (R01) from the National Institutes of Health (NIH) (Andrew Quanbeck, PhD)
- Recognized by Governor Tony Evers and Department of Health Services Secretary-Designee Karen Timberlake for participation in the Vaccination Community Outreach Grant program (Patricia Tellez Giron, MD).

The UW-Madison Block Grant

The UW-Madison block grant helps support the DFMCH's academic, research and community health missions, which are ultimately focused on sustaining Wisconsin's primary care workforce and partnering with communities to provide the people of Wisconsin with local, accessible health care.

The UW-Madison block grant has consistently helped support medical student education and family medicine residency programs offered by the DFMCH in collaboration with clinical partners. In addition, we have represented the UWSMPH on the Board of Directors of the Wisconsin North and Central GME Consortium (WiNC) and serve as an academic partner to support its success.

We recognize the need for more rural physicians in Wisconsin, and with UW-Madison block grant support we are able to offer required rural rotations for all residents as part of our Madison program. In 2018 we launched the Rural Health Equity Track, which expanded the Madison Residency by six additional residents who have supplemental curriculum and experiences in rural health.

Our addiction medicine fellowship—the only one of its kind in Wisconsin—educates primary care physicians to better care for patients with substance use disorders. Fellowship director **Randall Brown MD**, **PhD**, **DFASAM**, is on the board of directors of the American Board of Addiction Medicine (ABAM) and the Addiction Medicine Foundation and is president of the Addiction Medicine Fellowship Directors Association. The addiction medicine fellowship has ACGME accreditation and provides a valuable service to the communities of Wisconsin that are dealing with this challenging condition.

DFMCH faculty play major educational roles at the UWSMPH, leading longitudinal programs, teaching courses, and overseeing preceptorships and other clinical experiences for medical students. As part of the UWSMPH's MD curriculum transformation, DFMCH faculty lead the *Chronic and Preventive Care* clinical rotation, and the *Patients, Professionalism and Public Health* integrated bloack in the Phase 1 preceptorship program curriculum.

Finally, with our 2015 name change to the Department of Family Medicine and Community Health, we are even more committed to promoting community health in all aspects of our mission. We have improved the **community health curriculum** in all of our residency and fellowship programs, including involvement in community health projects in collaboration with local partners and clinics, holding conferences that address health equity and promote care for underserved populations and developing a diversity, equity and inclusion initiative that serves as a model for the UWSMPH. We are also actively collaborating with community partners to empower populations at most risk for poor health outcomes. **We are particularly investing in LatinX, Black, Rural and LGBTQ+ populations.**

The UW-Madison Block Grant is only a portion of what is required to sustain the strength of our department and the significant work it does. From FY09 to FY22, the dollar amount of the UW-Madison Block Grant has decreased from \$10,442,106 to \$7,737,973—an over \$2.7 million difference that represents a nearly 26% decrease in funding support.

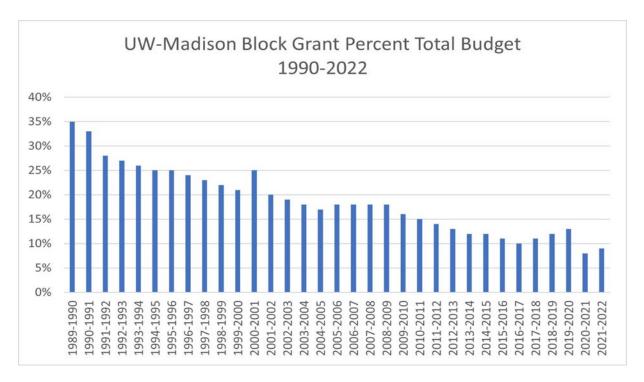


Figure 8. UW-Madison Block Grant Trend

13.106 (3) (ax) Financial Status of Family Practice Residency Sites

Overview

Our statewide residency programs prepare medical school graduates for practice in family medicine. DFMCH-sponsored residency programs are currently located in Baraboo and Madison. Academic partner residency programs are currently located in Eau Claire/Augusta, La Crosse, Elkhart (Lakeland RTT), Milwaukee, Wausau, and Waukesha. These programs educated 161 residents in FY21, and 164 residents in FY22. Six of them have received Osteopathic Recognition, an educational designation from the Accreditation Council for Graduate Medical Education (ACGME).

In each program, residents receive their education at sponsoring hospitals and at assigned clinics where they and faculty provide health care for the community. The Wisconsin hospitals and health care systems (see list below) that have formal affiliation agreements with the DFMCH's residency programs each receive federal Medicare Graduate Medical Education (GME) funds for resident education.

Graduate Medical Education Partners (FY22)

- Aspirus Wausau Hospital
- Aurora Health Care
- Gundersen Lutheran Medical Center
- Mayo Clinic Health System

 Eau Claire Hospital
- Sacred Heart Hospital

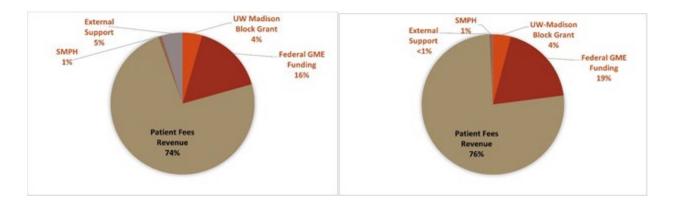
- SSM Health St. Clare Hospital

 Baraboo
- SSM Health St. Mary's Hospital–Madison
- UW School of Medicine and Public Health
- UW Health
- UW Medical Foundation
- Waukesha Memorial Hospital

Figure 9. Revenue - DFMCH-Sponsored Residency Programs

FY21 = 27,777,439

FY22 = \$ 25,385,335



DFMCH-sponsored Residency Programs

Baraboo Rural Training Track (RTT)

Residency program director: Stuart Hannah, MD

The Baraboo program is the oldest rural residency site in the state. Residents experience maximal continuity of care with their patients, seeing them in the clinic, hospital, surgical suite, nursing home, and emergency department—providing care in all these sites.

Number of resident positions: 6 (2 per year)

Supporting hospital: SSM Health St. Clare Hospital-Baraboo

Area served: Sauk County (2019 estimated population: 65,697)

Infrastructure support: \$83,562 (FY21) • \$67,216 (FY22)

Federal GME funding: \$432,859 (FY21) • \$422,752 (FY22)

Uncompensated care: Information not available from SSM Health

Madison Residency Program

Residency program director: Ildi Martonffy, MD

Founded in 1970 as one of the first 15 family medicine residency programs in the nation, the Madison program is the DFMCH's largest and oldest residency program. It is consistently ranked as one of the top family medicine residency programs in the U.S. It offers urban, suburban, and rural experiences at four Dane County sites: Belleville, Northeast, Verona, and Wingra/Access. First-year education of Baraboo RTT residents also takes place at the Madison campus.

Number of resident positions: 48 (16 per year plus 2 additional for first-year Baraboo RTT

residents)

Supporting hospitals: SSM Health St. Mary's Hospital–Madison, University Hospital

(UW Health)

Total clinic visits: 106,399 (FY21) — 23,780 at Belleville; 21,861 at Northeast;

35,972 at Verona; and 24,786 at Wingra/Access

97,799 (FY22) — 19,865 at Belleville; 18,999 at Northeast;

37,105 at Verona; and 21,830 at Wingra/Access

Area served: Dane County (2021 estimated population: 563,951) and

surrounding counties

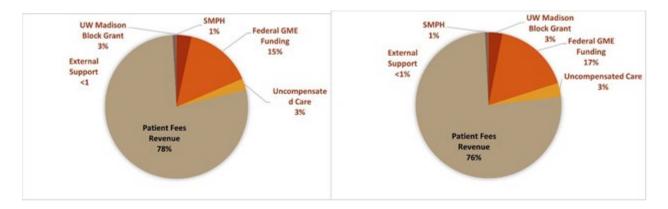
UW-Madison block grant support: \$937,014 (FY21) • \$787,359 (FY22)

Federal GME funding: \$4,193,907 (FY21) • \$4,319,814 (FY22) Uncompensated care: \$708,903 (FY21) • \$781,556 (FY22)

Figure 10. Madison Residency Program Revenue

FY21 = \$27,614,002

FY22 = \$25,451,923



Wausau Residency Program*

Residency program director: John Wheat, DO

The Wausau program is one of the oldest family medicine residency programs in Wisconsin. It is part of the Aspirus health care system and has its academic affiliation with the DFMCH. It offers a diverse rural/urban experience in a family medical center built with community support. It is also a major education site for medical students.

Number of resident positions: 15 (5 per year)

Supporting hospital: Aspirus Wausau Hospital

Clinic visits (provider only): 22,958 (FY19):

10,700 at Aspirus Wausau Family Medicine and

12,258 at Aspirus Weston Clinic

18,048 (FY20):

9,080 at Aspirus Wausau Family Medicine and

8,968 at Aspirus Weston Clinic

Area served: Marathon County (2019 estimated population: 135,692)

and surrounding communities

UW-Madison block grant support: \$180,000 (FY19) • \$260,000 (FY20)

(plus approximately \$231,000 of in-kind support each year)

^{*} On July 1, 2012, the DFMCH transitioned ownership of the Wausau Family Medicine Clinic to Aspirus, Inc. Aspirus has operational accountability for the clinical practice, employs the faculty and staff there, and as of July 1, 2013, employs the residents. Through an affiliation agreement, the DFMCH remains the academic sponsor of the residency program and continues to oversee resident education. The DFMCH also provides in-kind support for faculty development, medical student education, research, clinical service consultation, and general administration.

Academic Partner Residency Programs

Eau Claire/Augusta Residency Program*

Residency program director: Joan Hamblin, MD

The Eau Claire/Augusta program** offers both an urban and rural training site. The Eau Claire residency program is located at Chippewa Valley Technical College, which offers unique, interdisciplinary education and state-of-the-art resources.

Number of resident positions: 15 (5 per year)

Supporting hospitals: Mayo Clinic Health System-Eau Claire Hospital, Sacred Heart

Hospital

Area served: Eau Claire County (2019 estimated population: 106,452)

La Crosse Residency Program

Residency program director: Paul Klas, MD

In FY15, the DFMCH entered into a formal collaboration with Gundersen Lutheran Medical Foundation's Family Medicine Residency Program to serve as the program's academic partner. Core elements of this partnership include support for residency faculty as educators and academic physicians; sharing resources that advance family medicine resident education; promoting medical student interest in DFMCH family medicine residency programs; collaboration in service to our communities; and highlighting the accomplishments of residents, graduates and faculty. This partnership advances our shared mission of increasing the number of family medicine residents, and ultimately, family physicians, in Wisconsin. The La Crosse Family Medicine Residency Program welcomed its first class of residents on July 1, 2016.

Number of resident positions: 18 (6 per year in FY21 and FY22)

Supporting hospital: Gundersen Lutheran Medical Center

Area served: La Crosse County (2021 estimated population: 120,433) and

surrounding communities

Lakeland Rural Training Track (RTT)

Residency program director: Jeffrey Tiemstra, MD

In FY17, the DFMCH formalized an academic partnership with the new Aurora Lakeland Rural Training Track Family Medicine Residency in Elkhorn, Wisconsin. This partnership advances our shared mission of increasing the number of family medicine residents, and ultimately, family physicians, in Wisconsin. The Lakeland RTT welcomed its first class of residents on July 1, 2017.

Number of resident positions: 12 (4 per year in FY21 and FY22)

Supporting hospitals: Aurora Lakeland Medical Center, Aurora St. Luke's Medical

Center, Aurora Sinai Medical Center, Children's Hospital of

Wisconsin

Area served: Walworth County (2021 estimated population: 106,799) and

surrounding communities

Milwaukee Residency Program

Residency program director: Wilhelm Lehmann, MD

The Aurora Family Medicine residency program in Milwaukee has its academic affiliation with the DFMCH. UWSMPH students rotating in family medicine, especially those in the Training in Urban Medicine and Public Health (TRIUMPH) program may also receive clinical education here. Located in Wisconsin's largest city,

this dual MD/DO-accredited program offers urban and suburban experiences in ethnically and economically diverse sites.

Number of resident positions: 30 (10 per year)

Supporting hospitals: Aurora St. Luke's Medical Center, Aurora Sinai Medical Center,

Children's Hospital of Wisconsin

Area served: Milwaukee County (2021 estimated population: 928,0598) and

surrounding communities

Waukesha Residency Program

Residency program director: Patrick Ginn, MD

In FY17, the DFMCH formalized an academic partnership with the Waukesha Family Medicine Residency in Waukesha, Wisconsin, which transitioned from Medical College of Wisconsin sponsorship to Aurora Health Care sponsorship as of July 1, 2017. This partnership advances our shared mission of increasing the number of family medicine residents, and ultimately, family physicians, in Wisconsin.

Number of resident positions: 20 total (6 per year)

Supporting hospital: Waukesha Memorial Hospital

Area served: Waukesha County (2021 estimated population: 408,756) and

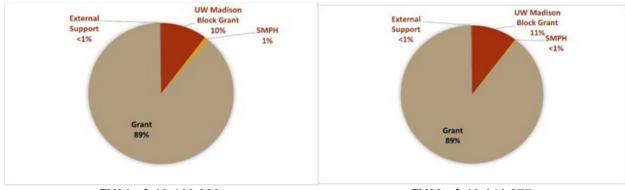
surrounding communities

Research

The DFMCH has a robust family medicine research program. In FY21, we allocated \$1,075,640 from the UW-Madison block grant to support our research efforts; in FY22, we allocated \$1,049,279. These allocations enabled us to obtain \$7.9 million in grant awards in FY21, and \$9.8 million in FY22—a substantial return on investment.

With 37 funded external grants in FY21, DFMCH investigators focus on such important topics as:

- Addiction and substance misuse prevention and treatment.
- Infectious disease surveillance; and
- pain management.



FY21 =\$ 10,416,820

FY22 = \$ 10,141,277

Figure 11. Research Revenue

13.106 (3) (b) Family Practice Residents in Medically Underserved Areas Upon Graduation

In FY21 and FY22, our residency programs graduated a total of 35 family physicians; 16 (46%) entered practice in Wisconsin.

Since its inception in 1970, the DFMCH has graduated 1,480 residents. Of these, approximately 966 (65%) entered practice in Wisconsin and meet critical health care needs, especially in rural and underserved areas.

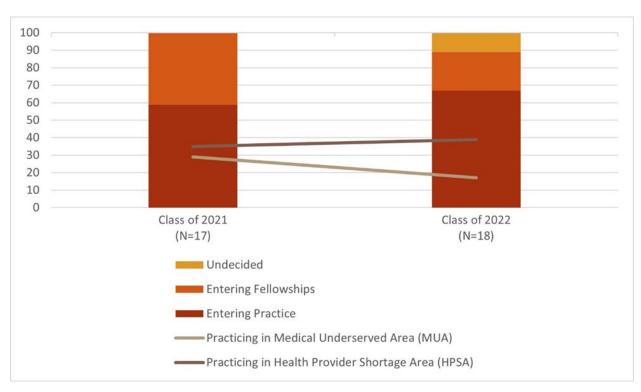


Figure 12. Practice Plans of DFMCH Residency Graduates (Classes of 2021 and 2022)

^{*} In-state fellowships: 2 (11%) in FY21 and 4 (22%) in FY22. Out-of-state fellowships: 5 (29%) in FY21 and 0 (0%) in FY22. Fellowships included academic, sports medicine, integrative health, obstetrics and faculty development.

^{**} In-state practice: 6 (35%) in FY21 and 10 (56%) in FY22. Out-of-state practice: 4 (24%) in FY21 and 2 (11%) in FY22.

13.106 (3) (c) Graduates Entering Family Practice as a Career

The DFMCH's Office of Medical Student Education (OMSE) develops and conducts family medicine education for students at UWSMPH.

In FY21 and FY22, the office supported 422 and 479 UWSMPH students, respectively, throughout all four years of medical school. Although these activities are coordinated from a central office in Madison, in FY21 and FY22 over 250 volunteer family physicians statewide provided students with community-based education.

DFMCH faculty play major educational roles at the UWSMPH, leading longitudinal programs, teaching courses and overseeing preceptorships and other clinical experiences.

In Phase 1: Christa Pittner- Smith, MD, leads the Phase 1 preceptorship program; In Phase 2: Mark Anderson, MD, is the faculty lead for Family Medicine clinical training, which is part of the "Chronic and Preventive Care" course. In Phase 3: Lauren Mixtacki, MD, leads the Family Medicine Internship Prep Course, and Paul Hunter, MD, leads the Active Ambulatory Internship. Several DFMCH faculty serve as "Longitudinal Teaching Coaches" and in this role work with students across their four years of training to promote skills and professional growth.

DFMCH clinical adjunct faculty **Kjersti Knox, MD**, **Michelle Buelow, MD**, **MPH**, and **Theresa Umhoefer-Wittry, MD**, are leaders for Training in Urban Medicine and Public Health (TRIUMPH), a program within the UWSMPH's MD curriculum. TRIUMPH seeks medical students who are committed to providing health care for urban populations and to reducing health disparities and provides them with Milwaukee-based clinical medicine and community and public health experiences.

In 2021 and 2022, 13.7% and 13.6% of American medical school graduates who matched in residency programs chose family medicine as their specialty (*source: National Residency Matching Program*). In those same years, 10.6 % and 12.9% of UWSMPH graduates chose family medicine as their specialty.

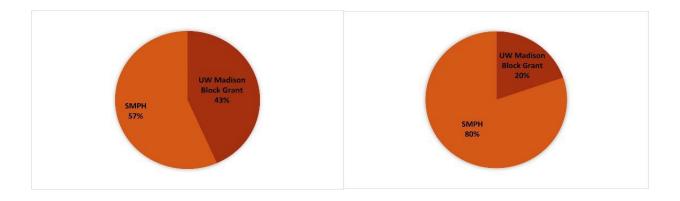


Figure 13. Medical Student Education Revenue

FY21 = \$896,114

FY22 = \$ 573,172

The charts below show UWSMPH students' postgraduate specialty selections compared to that national benchmark. Even though we would like to have even more UWSMPH graduates choose family medicine, our percentages over the past two years are significantly greater than the national match.

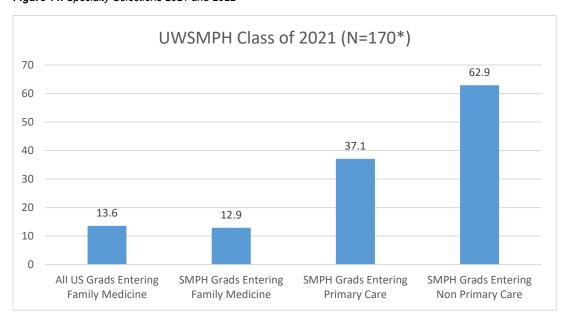
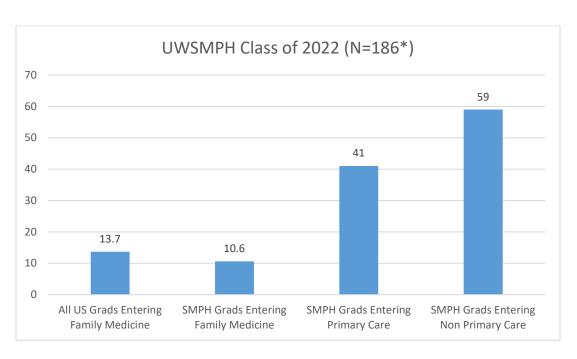


Figure 14. Specialty Selections 2021 and 2022



DFMCH Conclusion

The DFMCH is deeply grateful to the State of Wisconsin for financial support. In the DFMCH, these monies fund its residency programs, medical student education efforts, and academic and research mission. In FY21 and FY22, we:

- Provided innovative educational opportunities for UWSMPH students (422 in FY21 and 479 in FY22) and family medicine residents (53 in FY21 and 54 in FY22); and
- Graduated a total of 35 new family physicians, with 16 (46%) entered practice in Wisconsin.

In FY22, we provided 358,223 patient visits at our 17 UW Health clinics statewide (86,834 of which were at residency clinics.

We are committed to excellence on all fronts—education, patient care, community health and research—and are continually working to improve all that we offer for the future family physicians, patients, and communities of Wisconsin. The DFMCH continues to be one of the leading departments in the country due to the broad range of accomplishments of its outstanding faculty and because of its excellent staff who assure an infrastructure that effectively supports our missions

In the future, there are major challenges to maintaining this level of excellence given reduced federal funding for medical education, changing accreditation requirements that require faculty supervision, very limited support for primary care research, and the overall undervaluation of family medicine and primary care within the U.S. health care system.

There is no doubt that Wisconsin is facing a shortage of primary-care physicians. According to a July 2018 report from the Wisconsin Council on Medical Education & Workforce (https://www.wcmew.org/publications/), by 2035 the overall demand for primary care is projected to increase by 20.9% with a statewide projected shortfall of 745 FTE primary-care physicians (14% compared to overall supply), with provider gaps distributed unevenly across the state. The report specifically recommends continuing to fund programs that invest in infrastructure development and training in underserved areas and expanding and increasing coordination of clinical training sites.

Fortunately, family physicians are more prevalent in this state than in many others because the State of Wisconsin has made an investment in family medicine education. That investment has made a significant difference in the lives of Wisconsinites who depend on family physicians for their health care needs. In the face of Wisconsin's deepening primary care workforce shortage, state support is critical to maintain quality family medicine education and, ultimately, care for the people of our state.

RURAL AND UNDERSERVED URBAN MEDICINE PROGRAMS

Introduction

UWSMPH has a strong and growing commitment to addressing health inequities in our state and expanding the physician workforce in underserved rural and urban settings is a key component of our strategy.

This report provides information, as prescribed under Wisconsin Statute 13.106 (4), on the enrollments, medical specialties and residency locations, and initial post-residency practice locations of graduates of the Training in Urban Medicine and Public Health (TRIUMPH) and Wisconsin Academy for Rural Medicine (WARM) programs. Both programs strive to connect students to underserved populations and to communities where their future practices could make real progress in addressing health inequities.

The WARM program is a rural education program within the Doctor of Medicine (MD) program curriculum and admits students who have a strong interest in practicing in Wisconsin rural communities. It prepares students for residency in any specialty with an emphasis on primary care. The TRIUMPH program immerses students in clinical service within underserved urban communities, exposes them to physician role models and community leaders, engages them in addressing complex community and public health problems, and encourages them to consider primary care or high need specialties to create a medical career that will address urban health needs. Both programs embody the Wisconsin Idea for the 21st century—to share and apply advances in knowledge for the common good in collaboration with the state, its constituents and communities, and its partners around the world.

13.106 (4) (b) (1): Number of Students Enrolled in Rural or Underserved Urban Medicine Programs

WARM

The Wisconsin Academy for Rural Medicine (WARM) is a four-year rural medicine education program within the MD Program curriculum at the UWSMPH. Applicants apply directly to WARM, which is identified as a distinct program in our medical school admissions process. WARM students are provided with unique curricular elements throughout their four years of medical school that focus on rural practice and health care issues, with an emphasis on health inequities in rural populations. WARM students develop the relevant clinical and community skills through their participation in rural clinics and training at community centers.

With the aim to significantly increase the number of UW graduates who practice in medically underserved rural areas in Wisconsin—especially in primary care and other high need specialties—WARM recruits aspiring physicians who intend to practice rural medicine and who meet the UWSMPH admission standards. With each cohort of up to 26 students, the program strives to provide them with training and education tailored to meet the needs of rural communities and thereby increase the number of physicians who practice in rural Wisconsin. Specifically, the program:

- Maintains their interest in rural practice over four or more years of medical school as students are exposed to positive rural role-models-tempering challenges of treating patients in rural settings; and
- Provides students with the broad skill set and wide perspective needed to be successful
 physicians in rural areas with fewer health care providers and resources.

Table 9. WARM Admissions Data 2012-22

WARM Enrollments	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021	Fall 2022
AMCAS Applications	64	57	57	119	124	109	93	89	86	84	74
Interviews	53	51	40	54	54	44	44	53	50	45	42
Offers	26	24	27	31	27	25	28	30	31	34	39
Number of Students Admitted	25	25*	26	26	26	22	26	25***	26	26	25
Avg GPA Admitted	3.54	3.66	3.64	3.64	3.69	3.74	3.63	3.7	3.72	3.79	3.76
Avg MCAT Admitted	29	30	29.8	30.9	29.9/ 509**	27.4/ 508**	510	510	509	508	510

^{*}Includes deferred from 2012

TRIUMPH

The Training in Urban Medicine and Public Health (TRIUMPH) Program is a unique urban health track within the MD Program at the UWSMPH. TRIUMPH selects first year medical student applicants who are committed to providing health care and promoting health equity for urban, disadvantaged communities. The program combines Milwaukee-based clinical rotations in primary care, obstetrics and gynecology, internal medicine, pediatrics, psychiatry, neurology, and surgical specialties; the fourth-year preceptorship; and clinical electives with hands-on community service-learning and public health experiences. In this way, the program integrates clinical medicine with community and public health throughout the second, third, and fourth years of medical school. TRIUMPH attracts students from Wisconsin and across the nation, and from populations that are underrepresented in medicine including African American, Latinx, Southeast Asian, and Native American.

History of TRIUMPH

The UWSMPH established TRIUMPH in 2008 to recruit, train, and retain physicians to practice in Wisconsin's medically underserved urban areas as defined by the Health Resources and Services Administration (HRSA). Faculty leaders selected six highly motivated third-year medical students for a six-month pilot that started in 2009. The program has since expanded four times after the initial pilot. The first expansion occurred in response to the overwhelming success of the pilot. TRIUMPH grew to accept eight students per year to a 15-month long third and fourth-year program in 2010.

Student and community interest continued to exceed program capacity, and TRIUMPH expanded a second time with the addition of an abbreviated six-month third year program for eight students per year. The program offered both full (15-month) and abbreviated (six-month) experiences during this period. Although the abbreviated program was a success, students and community partners agreed that a longer program was more beneficial for students and communities alike. When funds became available, the 15-

^{**}MCAT scoring changed, and applicants could submit scores from two different MCAT formats for 2016 and 2017.

^{***}The regular MD program was over capacity and WARM was asked not to fill its class

month (M3/M4) TRIUMPH program was expanded a third time to accept 16 students per year (double prior capacity) and the abbreviated program was discontinued in 2014.

Finally, in 2017, the current version of TRIUMPH was established as the medical school implemented a curriculum transformation that restructured clinical rotations to start in January of the second year of medical school. The curriculum transformation allowed students to enter clinical training 6 months earlier, and TRIUMPH embraced the opportunity to expand a fourth time and welcome students to the program earlier.

Currently, 16 students are now accepted annually via a competitive application process into a two-and-one-half-year TRIUMPH program. Students enter the program nearly one full year earlier than in prior years, which allows completion of all clinical experiences in Milwaukee and extends the length of students' community health improvement project by a year. Many TRIUMPH students also elect to complete a Master of Public Health (MPH) degree between their third and fourth years of medical school to further develop their health improvement project and public health skills. Through these multiple expansions, the total number of Milwaukee-based TRIUMPH students has increased from six in 2009 to over 50 students per year.

TRIUMPH Program Demographics

Almost 225 students have participated in the ten years of TRIUMPH programming since its inception. 42 students are currently in the program. 181 students have graduated and are alumni of the program. The demographics of graduates of the program are noted below.

All TRIUMPH students had prior experience working with underserved populations. TRIUMPH students are also more likely to be URiM students and more likely to be women than traditional medical students. Over one-third, 69/181 (38.1%), of TRIUMPH students self-identified as underrepresented racial/ethnic minority (URiM), which is a significantly higher percentage than the 13.3% of other cohorts of UWSMPH medical students who are URiM. The majority, 122/181 (67.4%), of TRIUMPH students are women.

TRIUMPH students are also highly likely to speak languages such as Spanish and Hmong which are in high need in physicians in Wisconsin's urban areas. Over three quarters, 136/181 (75.1%), of the students in the program speak both English and another language. As a whole, TRIUMPH students speak 40 languages and dialects.

Finally, 124/181 (68.5%) percent of TRIUMPH students stated that Wisconsin is their home state, equal to other medical students, with 65/181 (35.9%) of TRIUMPH students coming from the metro Milwaukee region (Dodge, Jefferson, Milwaukee, Ozaukee, Racine, Walworth, Washington, or Waukesha counties).

13.106 (4) (b) (2): Medical Specialties and Residency Locations of Students in Rural or Underserved Urban Medicine Programs

Table 10. Graduates from the UWSMPH's MD programs from 2010-2022 with residencies in Wisconsin and/or in Primary Care specialties (Internal Medicine, Family Medicine, Pediatrics, Internal Medicine/Pediatrics).

Specialty and Residency Location	WARM	TRIUMPH	Traditional MD Students*	Grand Total
In Wisconsin	45.6% (115)	20.7% (37)	28.0% (478)	29.4% (630)
Primary Care	29.8% (75)	13.4% (24)	11.9% (203)	14.1% (302)
Other specialty	15.9% (40)	7.3% (13)	16.1% (275)	15.3% (328)
Outside WI	54.4% (137)	79.3% (142)	72.0% (1232)	70.6% (1511)
Primary Care	20.2% (51)	44.8% (82)	27.5% (471)	28.2% (604)
Other specialty	34.1% (86)	33.5% (60)	44.5% (761)	42.4% (907)
Primary Care Total	50.0% (126)	59.2% (106)	39.4% (674)	42.3% (906)
Grand Total	100.0% (252)	100.0% (179)	100.0% (1710)	100.0% (2141)

^{*} Traditional students include MD and MD/MSTP who are not in the WARM or TRIUMPH Programs

- The 50.0% of WARM's graduates going into Primary Care residencies is about 1.25 times the 39.4% of Traditional MD graduates.
- WARM's 45.6% of graduates staying in WI for residency is over 1.6 times the 28.0% of Traditional MD graduates.
- TRIUMPH's 59.2% of graduates going into Primary Care residencies has been 1.5 times the 39.4% of Traditional MD graduates.
- TRIUMPH's 20.7% of graduates staying in WI for residency is significantly less than the 28.0% for Traditional MD graduates, p=0.03, reflecting their desire to continue residency training in underserved communities in major urban centers.

WARM

As of May 2020, 204 students have completed the WARM program and graduated from the UWSMPH. Of those graduates 48% have entered residency programs in Wisconsin. 51% of graduates have matched into primary care residencies (family medicine, internal medicine, internal medicine/pediatrics, pediatrics). The number of WARM graduates remaining in Wisconsin is well above that of the TRIUMPH and traditional MD students, and the number of graduates entering primary care in Wisconsin is 33% compared to 14% for TRIUMPH and 12% for traditional MD students over the same time period.

Table 11. WARM Medical Specialties and Residency Locations for alumni 2011–2022 (n= 252)

	Total	Residency Locations*	·
Specialty	Alumni	States	lumni in WI
Anesthesiology	10	IL, MN, NE, NY, WI, CT	5
Child Neurology	1	MO	0
Dermatology	3	WI	3
Emergency Medicine	29	FL, IL, IA, ME, MI, MN, MO, NE, OH, OR, PA, VA, WA, WI, WV	4
Family Medicine	78	CA, ID, IN, KS, MN, MO, NC, ND, NM, NY OR, SC, UT, WA, WI	
General Surgery	22	FL, HI, IA, IL, MI, MN, NC, NY, OH, SD, W	VI 6
Internal Medicine	29	CO, IA, MI, MN, NC, VT, WI	19
Internal Medicine/Emergency Medicine	1	MN	0
Internal Medicine/Pediatrics	3	IN, WI	2
Neurology	3	IA, UT, WI	3
Obstetrics/Gynecology	17	CT, CA, DE, IN, ME, MI, NC, NY, OR, WI, WV	2
Ophthalmology	3	AZ, UT, MI	1
Orthopedic Surgery	10	IA, MN, OH, PA, WI, WV	5
Otolaryngology	3	KY, PA, WI	1
Pediatrics	15	CA, IL, FL, MI, MN, MO, OR, VA, VT, WI	4
Physical Medicine and Rehabilitation	3	MO, NC, WI	1
Psychiatry	12	IA, IL, MN, WA, WI	4
Psychiatry Child & Adolescent	1	WI	1
Radiology	5	GA, OH, WI	3
Urology	3	MD, NE, WI	1
Total	252	41 States	114 *(45%)

^{*}The percentage in WI is higher than non-Warm, non-Triumph students. For additional detail on the residency locations of WARM alumni, see Table A2 in the Appendix.

TRIUMPH

Among TRIUMPH alumni from 2010-2020, 143/144 (99.3%) of graduates entered residencies serving urban, underserved populations with one entering residency training in a rural underserved area. The majority 84/144 (58.6%) of alumni entered residencies in primary care specialties (Family Medicine, Internal Medicine, Internal Medicine/Pediatrics, and Pediatrics), considerably higher than all UWSMPH graduates (43.3%) from the same classes. **32 graduates (22.2%) remained in Wisconsin for their residency training**, including seven at Advocate Aurora, one at Gundersen Lutheran, 14 at the Medical College of Wisconsin/Children's Hospital, and 10 at UWSMPH.

Table 12. TRIUMPH medical specialties and residency locations for alumni 2010-2020 (n=144)

rubie 12. Tritoini 11 inculcul spe	Total	·			Medical College
Specialty	Alumni	UWSMPH	Advocate	Gundersen	of Wis
Anesthesiology	3	1			
Child Neurology	1				
Dermatology	2				
Emergency Medicine	17	1			2
Family Medicine	41	3	7		3
General Surgery	8				1
Internal Medicine	22	1		1	3
Internal Medicine/Pediatrics	4				2
Internal Medicine/Primary Care	3				
Obstetrics/Gynecology	15	1			2
Ophthalmology	1	1			
Orthopedic Surgery	1				
Otolaryngology	1				
Pediatrics	13				3
Psychiatry	10	2			1
Psychiatry Child & Adolescent	1				
Urology	1				
Total	144	10	7	7	17

13.106 (4) (b) (3): Initial Post-residency Practice Locations for Graduates of Rural or Underserved Urban Medicine Programs

WARM

WARM has tracked 79 graduates into practice as of 2020:

- 75% of post-residency WARM graduates are practicing in Wisconsin.
- 49% are practicing in rural areas (as defined by a RUCA code-Rural Urban Commuting Code-of 4 or greater).
- 32% of graduates have returned to their hometowns (or within a radius of about 20 miles).

Table 13. Post-residency Practice Locations for WARM Graduates (n= 79)

	Total		
Specialty	Alumni	States	Alumni in WI
Anesthesiology	1	NE	0
Child and Adolescent Psychiatry	1	WI	1
Dermatology	1	WI	1
Emergency Medicine	12	CO, KY, TX, VA, WI	8
Endocrinology	1	MN	0
Family Medicine	36	CO, ID, MN, OR, WI	30
Hospitalist Medicine	5	WI	5
Internal Medicine	4	WI	4
Internal Medicine/Pediatrics	2	WI	2
Obstetrics/Gynecology	3	WI	3
Orthopedic Surgery	2	IL, WI	1
Otolaryngology	1	WI	1
Pediatrics	1	WI	1
Physical Medicine and Rehabilitation	2	WI	2
Psychiatry	2	IL, WI	1
Radiology	2	WA, WI	1
Surgery (General)	2	WI	1
Urology	1	WI	1
Total	79	11 states	*59 (75%)

^{*}The percentage in WI is higher than non-WARM graduates. For additional detail on the practice locations of WARM graduates, see Table A5 in the Appendix.

TRIUMPH

Due to the length of post-graduate residency training (3-5 years) and challenges with alumni follow-up post residency, data is available for a subset of alumni who have completed their residency. Their practice locations are indicated in Table 14. Almost half 33/76 (43.4%) of TRIUMPH alumni have returned to practice in Wisconsin. The greatest concentration of alumni in Wisconsin includes 18 remaining in the Milwaukee Metro area and nine in Madison, serving in high need areas including five practicing in Federally Qualified Health Centers (FQHCs), one at a Veteran's Affairs (VA) hospital, and one at a tribal clinic.

Table 14. Post-Residency Practice Locations for TRIUMPH Alumni (n=76)

Table 14.1 det Regiaeriey i ractioe Educ	Total	,	
Specialty	Alumni	WI Practice Locations	Alumni in WI
Anesthesiology	1		
Cardiology	1		
Child and Adolescent Psychiatry	1	Racine	1
Dermatology	1		
Emergency Medicine	11	Milwaukee	1
Endocrinology			0
Family Medicine	25	Milwaukee (6), Madison (3), Waukesha, West Allis, Keshena	12
Hospitalist Medicine			
Internal Medicine	9	Milwaukee (6), Madison	7
Internal Medicine/Pediatrics	3	Milwaukee, Madison	2
Internal Medicine/Primary Care	2		
Obstetrics/Gynecology	5	Milwaukee, Madison, Marshfield	3
Ophthalmology	1	Madison	1
Otolaryngology	1		
Pediatrics	10	Milwaukee (3), Madison	4
Psychiatry	2	Madison, Waukesha	2
Surgery (General)	3		
Total	76	11 states	33

At the time of this report (August 2020) a portion of the graduates from the classes of 2016 and 2017, and all from the classes of 2018 – 2020 are still in residency training.

TRIUMPH Benefits to Urban Wisconsin

Innovative strategies are required to address physician shortages for urban medically underserved populations. Physician shortages persist in Milwaukee, Wisconsin's largest city, where an additional 40 PCPs are required to meet minimal thresholds for primary care physician coverage in 2020 (according to the Health Resources and Services Administration data webpage). Community partners have welcomed TRIUMPH students and consistently submit more project proposals than the number of students available. FQHCs in Milwaukee have also welcomed senior TRIUMPH students for longitudinal preceptorships.

Many Wisconsin counties are designated as Health Professional Shortage Areas (HPSAs). HPSA status is conferred by the US Health Resources and Services Administration to designate service areas, populations, or facilities with shortages of human resources to provide essential primary health care

services. In August 2020 the state of WI had 101 primary care HPSAs; 26 (25.7%) were designated as non-rural, 4 (4.0%) as partly rural, and 71 (70.3%) as rural populations. More than 376,888 Wisconsin residents live in non-rural HPSAs. Due to the greater density of urban populations, while 26/101 (25.7%) of WI HPSAs are non-rural, a greater proportion 376,888/1,150,794 (32.8%) of people living in a HPSA are from non-rural areas. To illustrate the scope of the challenge faced by urban areas it is worth noting that a single HPSA in north Milwaukee accounts for 248,640 (21.6%) of all Wisconsinites living in a Health Professional Shortage Area. This fact underscores the continued importance of the TRIUMPH program.

TRIUMPH has been successful in recruiting, training, and retaining physicians to work with urban medically underserved populations. At the time of our last report in 2018 there was a deficit of 60 primary care providers in Wisconsin's urban areas. That deficit has been reduced to 40 in the current report in large part due to TRIUMPH alumni returning to Wisconsin from their residencies. TRIUMPH students have been more likely to enter primary care careers as compared to traditional medical students. Early outcomes confirm graduates who have completed residency are returning post-residency to provide health care to the urban underserved in Wisconsin's urban areas

APPENDIX

Table A1. Minority Student Recruitment Efforts

Title/Event,	Student Recruitment E Targeted	
Date/s	Population	Description
Indigenous Health and Wellness Day	Native American middle and high school youth	 Organized in partnership with NACHP, Madison College and the Great Lakes Native American Research Center for Health (NARCH). This annual two-day event brings 100 Native youth to the Madison area to visit both campuses and learn about college opportunities and health related careers.
Tribal Community Youth Outreach	Native American youth in Wisconsin Tribal and urban communities (middle and high school)	 Each year NACHP collaborates with Tribal communities during summer programs to deliver one-day presentations and hands-on activities to promote college and health care career awareness. In place of in-person activities in Summer 2020, NACHP launched a "Summer Wellness Bingo", a virtual interactive program. This new initiative was developed in partnership with one of NACHP's medical students to promote wellness and learning during the summer months. Approximately 100 youth participated.
NACHP collaboration with other programs and initiatives	Native American high school students	 Each year NACHP collaborates with the UW-Madison PEOPLE Program, Information Technology Academy (ITA), Area Health Education Center Programs as well as the Great Lakes Inter-Tribal Council-Native American Research Center for Heath (GLITC-NARCH) to promote college readiness, internship, and scholarship programs to enhance Native American youth involvement in these programs. Several of our current health professional students are alumni of these programs. These partnerships have been effective pathways for supporting students interested in health careers.
Great Lakes Native American Medical School Applicant Workshop	Native American College students	 This annual, multi-day "boot camp" assists Native American students with the medical school application process. Hosted in partnership with other Great Lakes area medical schools. Proven an effective method for preparing students for medical school application as well as recruiting and matriculating them to UWSMPH.
American Indian Science and Engineering Society (AISES) National Conference	Native American high school and college students who are interested in college and STEM fields	 NACHP is an active participant in the AISES annual conference by providing student scholarships for attendance and participates in the recruitment fair and serves as a presenter. Attracts nearly 3,000 Native American youth from all over the county. This has served as a prime opportunity for NACHP to recruit and engage Native American students interested in health professional training programs.

Title/Event, Date/s	Targeted Population	Description
Largest ever Cohort of Native American Medical Students to Matriculate	Native American MD students	 NACHP matriculated its largest cohort of Native American medical school students to UWSMPH, a 175% increase from the previous year. UWSMPH is ranked in the top ten of M.D. granting institutions for graduating American Indian/Alaska Native students.
Community- University Partnership Award	Youth engagement, student clinical rotations, health- related research, and continued partnership building	NACHP, in partnership with the Oneida Nation, received the Community-University Partnership Award in recognition of our strong working partnership with the Oneida Nation through the Tribal Engagement Office that has strengthened our collaboration on multiple fronts from youth engagement, student clinical rotations, health-related research and continued partnership building.
RUSCH Students are enrolled for 2 academic years	Undergraduate pre- medicine/pre- health students from partner schools and programs	 RUSCH is a two-year pathway program designed for prehealth students who aspire to practice medicine in Wisconsin's rural or urban health professional shortage areas and who are interested in addressing health inequities. Participation strengthens a student's preparation for application to the UWSMPH and its rural or urban training tracks The program is administered through UWSMPH Office of MD Admissions. Emphasis is on admitting underrepresented minority students to the program at UWSMPH: encouraging them to apply, assisting them with their application, and preparing them for admission. URIM Data: 2018 cohort – 19%; 2019 cohort – 60%; 2020 cohort – 67%. Total URIM students in the program: 2019 and 2020 cohorts – 63%. Two URIM alumni were in the entering class of 2019; Two URIM alumni are in the entering class of 2020; (MD Program); Six URIM alumni are applying to the MD Program for fall 2021.

Title/Event,	Targeted	
Date/s	Population	Description
Health Professions Shadowing Program (HPSP) Annually each summer (2 weeks)	UW-Madison undergraduate pre- health students, primarily first-generation college students, underrepresented students of color, and those from rural areas or socioeconomically disadvantaged backgrounds who lack connections to health care professionals	 HPSP is a structured, two-week residential summer program in which students spend over 30 hours shadowing providers at UW Health and affiliated area clinics, building professional networks and skills, and learning about current trends in health care. Housed in the UW-Madison Center for Pre-Health Advising (CPHA). Oversight and administration are done through direct partnership with the UWSMPH Office of MD-Admissions. UWSMPH has been involved in the program since its inception in 2015 but began a formal partnership with Admissions in 2019. A full-time employee has been hired to coordinate the shadowing component of the program. UWSMPH contributes funding that increased the number of participants from 12 to 16. Students who are strongly considering applying to medical school are encouraged to apply to and enter RUSCH upon completion of HPSP. URIM Data: 2018 cohort – 75%; 2019 cohort – 69%; 2020 cohort – 88%. One participant was in the entering class of 2019; One participant is in the entering class of 2020 (MD Program); and three participants are applying to the MD Program for fall of 2021.
Pre-med/pre- health fairs and meeting with pre-health student organizations Regular and Ongoing	Prospective Pre-med students & applicants from underrepresented minority backgrounds	Recruitment efforts such as attending pre-med/pre-health fairs and meeting with pre-health student organizations
MCAT Prep courses & workshops	Pathway Program Students (RUSCH and HPSP) and other URiM students identified as lacking resources to cover expenses associated with preparing for the MCAT exam	 MCAT Prep courses, workshops, and exam preparation materials offered to students to help them score high enough to meet (and exceed) UWSMPH's minimum metric. Formats offered: a full prep course (e.g., Kaplan or The Princeton Review), workshops (either offered through a national resource such as Kaplan or The Princeton Review, as a part of the RUSCH summer program, or offered through the UW-Madison Center for Pre-Health Advising), or materials like Question Banks.

Title/Event, Date/s	Targeted Population	Description
Family Empowerment Day	High School students and their parents	 A full day of events that provide information about UWSMPH academic offerings. Topics covered include financial aid and admissions, and hands on activities like organ demonstrations and clinical skills are offered In total, 85 participants (students and parents) have attended the event.
Pre-Health Career Day	Undergraduate students from within the private and public universities within Wisconsin	 A full day of events geared to provide information about UW health academic offerings. Sessions focus on financial aid, the admissions process, and personal statements, and include hands-on activities (organ demonstrations, clinical skills, etc.), mock interviews, and opportunities to interact with current professional students. In total, 65 students have participated in the program.
Extended Second Look (E2L)	Accepted URiM students	 This annual, four-day event is an opportunity for accepted URiM students to learn more about UWSMPH and for developing interactions among accepted and current medical students, faculty, and staff. This event has become a crucial element in our recruitment efforts and has helped to create a sense of community and belonging among participants. An opportunity for participants to explore in-depth the city of Madison and its surroundings. Throughout its history, 65-75% of E2L participants have matriculated here. In 2020 the event was offered in a virtual format due to COVID.
Diversity Breakfast	Prospective applicants	 All interviewees are invited to attend OMA's Diversity Breakfast the morning of their interview. The breakfast is an opportunity to interact with current medical students and learn more about the school and its curriculum. Between 20 to 25 students typically attend each breakfast.

Table A2. WARM Medical Specialties and Residency Locations for Alumni 2011–2022 (n= 252)

Specialty and Residency Location	Residency Count
Anesthesiology	10
Mayo Clinic School of Grad Med Ed (Rochester, MN)	1
University of Buffalo School of Medicine (Buffalo, NY)	1
University of Illinois COM-Chicago (Chicago, IL)	1
University of Nebraska Affiliate Hospitals (Omaha, NE)	1
University of Wisconsin Hospitals and Clinics (Madison, WI)	5
Yale-New Haven Hospital (New Haven, CT)	1
St. Louis Children's Hospital	1
Dermatology	3
Indiana University School of Medicine (Indianapolis, IN)	1
University of Wisconsin Hospital and Clinics (Madison, WI)	2
Emergency Medicine	28
Amita Resurrection Medical Center (Chicago, IL)	1
Beaumont Health (Royal Oak, MI)	1
Detroit Medical Center/WSU (Detroit, MI)	1
Geisinger Health System (Danville, PA)	2
HealthPartners Institute/Regions Hospital (St. Paul, MN)	2
Hennepin County Medical Center (Minneapolis, MN)	1
Madigan Army Medical Center (Tacoma, WA)	1
Maine Medical Center (Portland, ME)	2
Medical College of Wisconsin (Milwaukee, WI)	2
Ohio State University (Columbus, OH)	1
St. Louis University School of Medicine (St. Louis, MO)	1
University of Iowa Hospitals and Clinics (Iowa City, IA)	1
University of Nebraska Medical Center (Omaha, NE)	1
University of Virginia (Charlottesville, VA)	1
University of Wisconsin Hospital and Clinics (Madison, WI)	2
UCF COM/GME Consortium (Kissimmee, FL)	1
University Hospitals-Columbia (Columbia, MD)	1
Virginia Tech Carilion School of Medicine (Roanoke, VA)	1
UPMC Hamot Medical Center (Erie, PA)	1
West Virginia University School of Medicine (Morgantown, WV)	3
Western Michigan U. Stryker School of Medicine (Kalamazoo, MI)	1
Family Medicine	79
Altru Health System (Grand Forks, ND)	1
Aurora Health Care/ASMC (Waukesha, WI)	2
Aurora St. Luke's Medical Center (Milwaukee, WI)	2
Family Medicine Res of Idaho (Boise, ID)	1
Greenville Hospital, USC (Greenville, SC)	1
Gundersen Lutheran Medical Foundation (La Crosse, WI)	13

Specialty and Residency Location	Residency Count
Indiana University School of Medicine (Indianapolis, IN)	1
Kootenai Health (Coeur D'Alene, ID)	1
Mayo Clinic School of Graduate Medical Education (Eau Claire, WI)	3
Mayo Clinic School of Graduate Medicine (La Crosse, WI)	5
Medical College of Wisconsin (Appleton, WI)	2
Medical College of Wisconsin (Milwaukee, WI)	1
Medical College of Wisconsin (Waukesha, WI)	2
Mercy Health System (Janesville, WI)	1
Mountain Area Health Education Center (Ashville, NC)	1
Oregon Health & Science University (Klamath Falls, OR)	2
Sutter Med Ctr of Santa Rosa-CA (Santa Rosa, CA)	1
Swedish Medical Center (Port Angeles, WA)	1
Tacoma Family Medicine (Tacoma, WA)	1
University of Kansas SOM (Wichita, KS)	2
University of Minnesota (Mankato, MN)	1
University of Minnesota (North Memorial, MN)	1
University of Minnesota Medical School (Duluth, MN)	4
University of Minnesota Medical School (Minneapolis, MN)	3
University of Minnesota Medical School (St. Louis Park)	1
University of New Mexico SOM (Albuquerque, NM)	1
University of North Carolina Hospitals (Chapel Hill, NC)	1
University of Rochester (Rochester, NY)	1
University of Utah Affiliated Hospitals (Salt Lake City, UT)	1
University of Utah Health (Salt Lake City, UT)	1
University of Wisconsin - Fox Valley (Appleton, WI)	1
University of Wisconsin SMPH (Appleton, WI)	3
University of Wisconsin SMPH (Augusta/Eau Claire, WI)	1
University of Wisconsin SMPH (Baraboo, WI)	3
University of Wisconsin SMPH (Eau Claire, WI)	1
University of Wisconsin SMPH (Madison, WI)	8
University of Wisconsin SMPH (Wausau, WI)	1
University Hospitals-Columbia (Columbia, MO)	1
WiNC GME Consortium (Eau Claire, WI)	1
General Surgery	22
Bassett Medical Center (Cooperstown, NY)	2
Central Iowa Health System (Des Moines, IA)	2
Creighton University Affiliate Hospitals (Omaha, NE)	1
Florida Hospital (Orlando, FL)	1
Gundersen Lutheran Medical Foundation (La Crosse, WI)	1
Marshfield/St. Josephs (Marshfield, WI)	2
Mount Carmel Health System (Grove City, OH)	1

Specialty and Residency Location	Residency Count
Mountain AHEC (Asheville, NC)	1
Northwestern McGaw/NMH/VA (Chicago, IL)	1
Rush University Medical Center (Chicago, IL)	1
St. Joseph Mercy (Ann Arbor, MI)	1
Tripler Army Medical Center (Honolulu, HI)	1
University of Minnesota Medical School (Minneapolis, MN)	1
University of South Dakota School of Medicine (Sioux Falls, SD)	2
University of Wisconsin Hospital and Clinics (Madison, WI)	3
Wright State University Boonshoft School of Medicine (Dayton, OH)	1
Internal Medicine	31
Abbott Northwestern (Minneapolis, MN)	1
Aurora Health Care (Milwaukee, WI)	1
Aurora Health Care/Aurora Sinai Medical Center (Milwaukee, WI)	1
Central Iowa Health System (Des Moines, IA)	1
Gundersen Lutheran Medical Foundation (La Crosse, WI)	6
Henninpin County Medical Center (Minneapolis, MN)	1
Marshfield/St. Josephs (Marshfield, WI)	4
Medical College of Wisconsin (Milwaukee, WI)	2
Mountain AHEC (Asheville, NC)	1
University of Colorado SOM-Denver (Aurora, CO)	1
University of Iowa Hospitals and Clinics	1
University of Michigan Hospitals (Ann Arbor, MI)	1
University of Minnesota Medical School (Minneapolis, MN)	1
University of Vermont Medical Center (Burlington, VT)	2
University of Wisconsin Hospital and Clinics (Madison, WI)	7
Internal Medicine/Emergency Medicine	1
Hennepin County (Minneapolis, MN)	1
Internal Medicine/Pediatrics	3
Indiana University School of Medicine (Indianapolis, IN)	1
Marshfield/St. Josephs (Marshfield, WI)	2
Neurology	4
Medical College of Wisconsin (Milwaukee, WI)	1
University of Iowa Hospitals and Clinics (Iowa City, IA)	1
University of Utah Affiliated Hospitals (Salt Lake City, UT)	1
University of Wisconsin Hospital and Clinics (Madison, WI)	1
Obstetrics/Gynecology	17
Christiana Care (Newark, DE)	1
Maine Medical Center (Portland, ME)	1
Marshall University School of Medicine (Huntington, WV)	1
Mountain AHEC (Asheville, NC)	1

Specialty and Residency Location	Residency Count
Oregon Health & Science University (Portland, OR)	1
Sparrow Hospital (Lansing, MI)	2
St. Vincent Hospital Center (Indianapolis, IN)	1
University of Buffalo School of Medicine (Buffalo, NY)	2
University of Colorado School of Medicine-Denver (Aurora, CA)	1
University of Connecticut School of Medicine (Farmington, CT	1
University of Minnesota Medical School (Minneapolis, MN)	1
University of Wisconsin Hospital and Clinics (Madison, WI)	2
University of Vermont Medical Center (Burlington, VT)	1
West Virginia University School of Medicine (Morgantown, WV)	1
Ophthalmology	2
University of Arizona (Tucson, AZ)	1
University of Utah Health (Salt Lake City, UT)	1
Orthopedic Surgery	10
Mayo School of Graduate Medical Education (Rochester, MN)	1
Medical College Wisconsin Affiliate Hospitals (Milwaukee, WI)	1
University of Iowa Hospitals and Clinics (Iowa City, IA)	1
University of Wisconsin Hospital and Clinics (Madison, WI)	4
UPMC Hamot Medical Center (Erie, PA)	1
West Virginia University School of Medicine (Morgantown, WV)	1
Wright State University Boonshoft School of Medicine (Dayton, OH)	1
Otolaryngology	3
Hospital of the University of Pennsylvania (Philadelphia, PA)	1
University of Kentucky Medical Center (Lexington, KY)	1
University of Wisconsin Hospital and Clinics (Madison, WI)	1
Pediatrics	15
Advocate Health Care (Park Ridge, IL)	1
Children's Hospital (Oakland, CA)	1
Eastern VA Medical School (Norfolk, VA)	1
Mayo School of Graduate Medical Education (Rochester, MN)	1
Oregon Health & Science University (Portland, OR)	1
Spectrum Health/Michigan State University (Grand Rapids, MI)	2
UC Davis Medical Center (Sacramento, CA)	1
University Hospital (Columbia, MO)	1
University of Florida COM-Shands Hospital (Orlando, FL)	1
University of Vermont Medical Center (Burlington, VT)	1
University of Wisconsin Hospital and Clinics (Madison, WI)	4
Physical Medicine and Rehabilitation	3
Barnes and Jewish Hospital (St. Louis, MO)	1
Carolinas Medical Center (Charlotte, NC)	1

Specialty and Residency Location	Residency Count
University of Wisconsin Hospital and Clinics (Madison, WI)	1
Psychiatry	12
Loyola University (Maywood, IL)	2
Mayo Clinic School of Grad Medical Education (Rochester, MN)	1
Medical College of Wisconsin (Milwaukee, WI)	1
Pine Rest Christian Mental Health Services (Grand Rapids, MI)	1
University of Iowa Hospitals and Clinics (Iowa City, IA)	1
University of Minnesota Medical School (Minneapolis, MN)	1
University of Washington Affiliated Hospitals (Seattle, WA)	2
University of Wisconsin Hospital and Clinics (Madison, WI)	3
Psychiatry Child & Adolescent	1
University of Wisconsin Hospital and Clinics (Madison, WI)	1
Radiology	3
Medical College of Wisconsin (Milwaukee, WI)	1
Ohio State University Medical Center (Columbus, OH)	1
University of Wisconsin Hospital and Clinics (Madison, WI)	1
Radiology-Diagnostic	1
Emory University School of Medicine (Atlanta, GA)	1
Urology	2
University of Maryland (Baltimore, MD)	1
University of Nebraska Medical Center (Omaha, NE)	1

Table A3. Post-residency Practice Locations for WARM Graduates as of 2021 (n= 79)

Specialty and Residency Location	Count of
Anesthesiology	Specialty 1
University of Nebraska Medical Center (Omaha, NE)	1
Child and Adolescent Psychiatry	1
Rogers Behavioral Health (Oconomowoc, WI)	1
Dermatology	1
Gundersen Health System (La Crosse, WI)	1
Emergency Medicine	12
Aspirus (Wausau, WI)	1
Ascension (Milwaukee, WI)	1
Centra (Lynchburg, VA)	1
Elmbrook Memorial Hospital (Brookfield, WI)	1
Marshfield Clinic (Eau Claire, WI)	1
Mayo Clinic Health System (Eau Claire, WI)	2
The Hospitals of Providence Sierra Campus (El Paso, TX)	1
Prevea at St Clare Memorial Hospital (Oconto, WI)	1
University of Colorado (Aurora, CO)	1
University of Kentucky (Lexington, KY)	1
Vernon Memorial Hospital (Viroqua, WI)	1
Endocrinology	1
Allina Health (Minneapolis, MN)	1
Family Medicine	36
Agnesian Healthcare (Waupun, WI)	1
Ascension Medical Group (Plover, WI)	1
Ascension Columbia St. Mary's (West Allis, WI)	1
Aurora Healthcare (Germantown, WI)	1
Aurora Healthcare (Elkhorn, WI)	1
Aurora Lakeland (Lake Geneva, WI)	1
Bellin Health (Oconto, WI)	1
Boulder Community Health (Erie, CO)	1
Cascades East Family Medicine (Klamath Falls, OR)	2
Essentia Health (Superior, WI)	1
Essentia Health - Hermantown Clinic (Hermantown, MN)	1
Divine Savior Healthcare (Portage, WI)	1
Family Health Center (Sand Point, ID)	1
Fond du Lac Regional Clinic (Waupun, WI)	1
Gundersen Health System (La Crosse, WI)	3
Krohn Clinic (Black River Falls, WI)	1
Mayo Clinic Franciscan Health System (La Crosse, WI)	2
Mayo Clinic Health System-Northland (Rice Lake, WI)	1

Specialty and Residency Location	Count of Specialty
Mayo Clinic Health System (Tomah, WI)	1
Mile Bluff Medical Center (Elroy, WI)	1
Monroe Clinic (Albany, WI)	1
Monroe Clinic (Monroe, WI)	1
Mosaic Family Health (Appleton, WI)	1
Prevea St Clare Memorial Hospital Oconto Falls Health Center (Oconto Falls, WI)	1
SSM Health Dean Medical Group (Waunakee, WI)	2
St. Joseph's Hospital with Froedtert Health (West Bend, WI)	1
St. Luke's Duluth Internal Medicine Association (Duluth, MN)	1
Southwest Health Center (Platteville, WI)	1
ThedaCare (Shawano, WI)	1
Vernon Memorial Hospital (Viroqua, WI)	1
UW Health (Beaver Dam, WI)	1
Hospitalist Medicine	5
Aurora Baycare (Green Bay, WI)	1
Essentia Health (Duluth, WI)	1
Gundersen Health System (Alma, WI)	1
Unity Point-Meriter (Madison, WI)	1
University of Wisconsin Hospital and Clinics (Madison, WI)	1
Internal Medicine	4
Ascension (Neenah, WI)	1
Aspirus Wausau Hospital (Wausau, WI)	1
Marshfield Clinic (Marshfield, WI)	1
Mayo Health System-Red Cedar Clinic (Menomonie, WI)	1
Internal Medicine/Pediatrics	2
Marshfield Clinic (Marshfield, WI)	1
Marshfield Clinic (Rhinelander, WI)	1
Obstetrics/Gynecology	3
Aurora Health Care (Elkhorn, WI)	1
Northlakes Community Clinic (Ashland, WI)	1
Southwest Health Center (Platteville, WI)	1
Orthopedic Surgery	2
Orthopedic and Sports Medicine Specialists of Green Bay (Green Bay and Marinette, WI)	1
Mercyhealth Orthopedic Specialists (Rockford, IL)	1
Otolaryngology	1
Aurora Baycare Medical Center (Green Bay and Kaukauna, WI)	1
Pediatrics	1

Specialty and Residency Location	Count of Specialty
Marshfield Clinic (Minocqua, WI)	1
Physical Medicine and Rehabilitation	2
Gundersen Health System (La Crosse, WI)	1
Ascension (Rhinelander, WI)	1
Psychiatry	2
Mayo Clinic Franciscan Health System (La Crosse, WI)	1
Amita Health (Maywood, IL)	1
Radiology	2
Gundersen Health System (La Crosse, WI)	1
TRA Medical Imaging (Tacoma, WA)	1
Surgery (General)	2
Mayo Clinic Healthy System (Eau Claire and Menomonie, WI)	1
Sauk Prairie Healthcare (Prairie du Sac, WI)	1
Urology	1
Grant Regional Health Center (Lancaster, WI) and Memorial Hospital of Lafayette County (Darlington, WI)	1
Grand Total	79

Table A4. Specialty Selections, Class of 2021

	Out o	f State	Wisconsin			Total		
	n	%	n	%		n	%	
Anesthesiology	5	3.0%	3	1.8%		8	4.9%	
Dermatology	2	1.2%	2	1.2%		4	2.5%	
Emergency Medicine	14	8.6%	3	1.8%		17	10.4%	
Family Medicine	10	6.1%	7	4.3%		17	10.4%	
Internal Medicine	25	15.3%	5	3.1%		30	18.4%	
Internal Medicine-Prelim	0	0.0%	1	0.6%		1	0.6%	
Medicine – Pediatrics	4	2.4%	0	0.0%		4	2.5%	
Neurology	3	1.8%	0	0.0%		3	1.8%	
Neurology-Child	1	0.6%	0	0.0%		1	0.6%	
Obstetrics and Gynecology	13	8.0%	0	0.0%		13	8.0%	
Ophthalmology	1	0.6%	1	0.6%		2	1.2%	
Orthopedic Surgery	3	1.8%	4	2.5%		7	4.3%	
Otolaryngology	1	0.6%	0	0.0%		1	0.6%	
Pathology	1	0.6%	0	0.0%		1	0.6%	
PEDS/Medical Genetics	1	0.6%	0	0.0%		1	0.6%	
Pediatrics	11	6.7%	3	1.8%		14	8.6%	
Plastic Surgery	0	0.0%	2	1.2%		2	1.2%	
Preliminary Year / Gen Surg	2	1.2%	2	1.2%		4	2.5%	
Psychiatry	9	5.5%	6	3.7%		16	19.2%	
Radiology/Nuclear Medicine	1	0.6%	0	0.0%		1	0.6%	
Radiology-Diagnostic	3	1.8%	2	1.2%		5	3.1%	
Surgery-General	7	4.3%	1	0.6%		8	4.9%	
Transitional Year	1	0.6%	0	0.0%		1	0.6%	
Urology	2	1.2%	1	0.6%		3	1.8%	
Total Matching	121		43			164		
Total in Class						167		

Table A5. Specialty Selections, Class of 2022

	Out of State		Wisconsin				Total	
	n	%	n	%		n	%	
Anesthesiology	4	2.3%	4	2.3%		8	4.6%	
Dermatology	1	0.6%	1	0.6%		2	1.2%	
Emergency Medicine	11	6.3%	2	1.2%		13	7.5%	
Family Medicine	13	6.3%	9	5.2%		22	11.5%	
Internal Medicine	19	10.9%	10	5.8%		29	16.7%	
Internal Medicine-Pediatrics	2	1.2%	0	0.0%		2	1.2%	
Internal Medicine-Preliminary	0	0.0%	1	0.6%		1	0.6%	
Interventional Radiology (Integrated)	1	0.6%	0	0.0%		1	0.6%	
Neurology	2	1.2%	0	0.0%		2	1.2%	
Obstetrics and Gynecology	6	3.5%	3	1.7%		9	5.2%	
Ophthalmology	0	0.0%	2	1.2%		2	1.2%	
Orthopedic Surgery	4	2.3%	4	2.3%		8	4.6%	
Otolaryngology	3	1.7%	1	0.6%		4	2.3%	
Pathology	3	1.7%	0	0.0%		3	1.7%	
Pediatrics	8	4.6%	1	.6%		9	5.2%	
Plastic Surgery	2	1.2%	0	0.0%		2	1.2%	
PM&R	1	0.6%	1	0.6%		2	1.2%	
Psychiatry	17	9.8%	3	1.7%		20	11.5%	
Radiation Oncology	2	1.2%	0	0.0%		2	1.2%	
Radiology-Diagnostic	7	4.0%	2	1.2%		9	5.2%	
Surgery-General	9	5.2%	3	1.7%		12	6.9%	
Surgery Preliminary	0	0.0%	4	2.3%		4	2.3%	
Urology	1	0.6%	1	0.6%		2	1.2%	
Vascular Surgery	3	1.7%	0	0.0%		3	1.7%	
Total Matching	119		52			171		
Total in Class						173		

Table A6. WARM & TRIUMPH Students Residency Placements (2022)

	Out of	Out of Wisconsin						
	State	Unaffiliated	UWSMPH	UWSMPH Affiliated	Grand Total			
TRIUMPH	15	1	2	0	18			
Emergency Medicine	1	1	0	0	2			
Family Medicine	3	0	1	0	4			
Internal Medicine	4	0	0	0	4			
Medicine-Pediatrics	1	0	0	0	1			
Neurology	1	0	0	0	1			
Pathology	1	0	0	0	1			
Pediatrics	1	0	0	0	1			
Psychiatry	3	0	0	0	3			
Surgery-Preliminary	0	0	1	0	1			
WARM	12	4	5	2	23			
Dermatology	0	0	0	1	1			
Emergency Medicine	1	0	0	0	1			
Family Medicine	3	2	1	1	7			
Internal Medicine	2	1	1	0	4			
Obstetrics and Gynecology	1	0	0	0	1			
Orthopedic Surgery	0	1	1	0	2			
Pediatrics	1	0	1	0	2			
Psychiatry	2	0	0	0	2			
Surgery-General	2	0	0	0	2			
Urology	0	0	1	0	1			
Grand Total	27	5	7	2	41			

Table A7. Historical Specialty Data, Primary Care Specialties (2018-2022)

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	20	18	2019		2020		2021		2022	
	N	%	N	%	N	%	N	%	N	%
Family Medicine	26	16.3	35	18.9	17	10.8	17	10.4	22	12.6
Internal Medicine	23	14.3	28	15.1	31	19.6	30	18.3	29	16.7
MED/PEDS	2	1.3	2	1.1	3	1.9	4	2.4	2	1.2
Pediatrics	18	11.3	18	9.7	10	6.3	14	8.5	9	5.2
Total Matched	161		185		158		164		171	
Primary Care Out of Total Matched	69	42.9	83	44.9	61	38.6	65	39.6	62	36.3
Total in Class	167		187		161		167		173	
Primary Care Out of Total in Class	69	41.3	83	44.4	61	37.9	65	38.9	62	35.8