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JOINT COMMITTEE ON FINANCE

MEMORANDUM

To: Members
Joint Committee on Finance

From: Senator Alberta Darling
Representative John Nygren

Date: October 14, 2015

Re: UWSMPH Report to JFC

Attached is a report on rural and underserved urban medicine programs from the University of Wisconsin School of Medicine and Public Health, pursuant to s. 13.106, Stats.

This report is being provided for your information only. No action by the Committee is required. Please feel free to contact us if you have any questions.

Attachments

AD:JN:jm

University of Wisconsin School of Medicine and Public Health

Rural and Underserved Urban Medicine Programs
2014 - 2015
Annual Report to the Legislature

RECEIVED
OCT 14 2015
Jt. Finance

WISCONSIN
UNIVERSITY OF WISCONSIN–MADISON

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Introduction

The University of Wisconsin School of Medicine and Public Health (SMPH) has a deep commitment to addressing health disparities in our state, and the expansion of the physician workforce in underserved rural and urban settings is a key component of our strategy.

The Wisconsin Academy for Rural Medicine (WARM) program educates medical students who have a strong interest in practicing in Wisconsin rural communities. The Training in Urban Medicine and Public Health (TRIUMPH) program immerses students in clinical service within underserved urban communities, exposes them to positive physician role models and community leaders, engages them in addressing complex community and public health problems, and encourages them to consider primary care or subspecialty medical careers that will address urban health needs.

This report provides the 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 TRIUMPH and WARM programs. Both programs strive to connect students to underserved populations and to communities where their future practices could make a real difference in addressing health disparities.

13.106 (4) (b) (1): Student Enrollment

Wisconsin Academy for Rural Medicine

The Wisconsin Academy for Rural Medicine (WARM) is a four-year rural medicine education program within the MD Program curriculum at the University of Wisconsin School of Medicine and Public Health. 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 disparities in rural populations. WARM students develop the relevant clinical and community skills through their participation in rural clinics and training at community centers. WARM recruits prospective students who intend to practice rural medicine, provide them with training and education that is tailored to meet the needs of rural communities, and thereby increase the number of physicians who practice in rural Wisconsin.

Table 1: WARM enrollments 2008-2014

WARM Enrollments	Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015
AMCAS applications	40	40	54	64	57	57	119
Interviews	40	29	48	53	51	40	54
Offers	21	21	26	26	24	27	31
Number of students admitted	18	21	23	25	25*	26	26
Avg GPA admitted	3.62	3.65	3.57	3.54	3.66	3.64	3.64
Avg MCAT admitted	28	28	29	29	30	29.8	30.9

*Includes deferred from 2012

Training in Urban Medicine and Public Health Program

The Training in Urban Medicine and Public Health (TRIUMPH) program is a unique immersive learning environment within the MD Program curriculum at the SMPH. The TRIUMPH program selects rising third year medical student applicants who are committed to providing health care for urban populations and reducing health disparities. The program combines Milwaukee-based third-year clinical rotations in primary care: obstetrics and gynecology, and internal medicine, the fourth-year preceptorship and clinical electives with hands-on community service projects and public health experiences. In this way, the program combines clinical medicine with community and public health within an integrated third- and fourth-year curriculum. This urban healthcare training program has had a significant impact in attracting under-represented minority students (African Americans and Hispanics) to the SMPH, as well as others who want to practice in underserved urban settings.

The SMPH established TRIUMPH in early 2009 to recruit, train and retain physicians who will practice in medically underserved urban areas of the state. Initially, faculty leaders selected eight highly motivated second-year medical students from a larger pool of applicants for a six-month pilot program. Based on the overwhelming success of the pilot experience, the program was expanded to a 15-month program in 2010. Student interest immediately exceeded program capacity. The program was further expanded the following year with the addition of a six-month, condensed track (Summer/Fall or S/F TRIUMPH).

Six annual cohorts, a total of 55 students, have participated in the full 15-month version of TRIUMPH from 2010 to 2015. Of these students, 36 have graduated. The demographics of the 55 students are noted in Table 2. All TRIUMPH students had prior experience working with disadvantaged populations. In addition, 33 (60%) self-identified as coming from a minority or low-income background; more than half (37, or 67%) were Wisconsin residents, and 22 (40%) came from the metro Milwaukee regions. All but two were from urban settings. Twenty-nine (53%) TRIUMPH students speak Spanish.

Table 2: Demographics of TRIUMPH full-program students who started the program in 2010-2015, compared to all other UWSMPH students from the same classes

	Gender	Disadvantaged Status	WI Home State	Milwaukee* Metro Home
TRIUMPH N=55	38% (21) male 62% (34) female	60% (33)	67% (37)	40% (22)
Other UWSMPH students, total N varies as listed depending on data source and # choosing to report	50% male 50% female (N=808)	Not available	77% (N = 935)	Not Available

Definitions: Milwaukee Metro Area--Milwaukee, Ozaukee, Waukesha, Racine and Washington counties. Disadvantaged--minority or low SES background (first generation in family to get four-year college degree)

Based on feedback from community partners and participating students, and the initial program results, the UW Madison School of Medicine and Public Health decided to double the size of the full TRIUMPH program from eight to sixteen students annually beginning with the graduating class of 2016.

13.106 (4) (b) (2): Medical Specialties and Residency Locations

WARM

Of the 75 WARM students who have graduated from the program so far, 60% (45) have entered residency programs in primary care (Internal Medicine, Family Medicine or Pediatrics), compared to 39.5% of regular UW medical students in the same time period. In addition, 55% of WARM graduates (41) have entered residency programs in Wisconsin, compared to 29% of regular UW medical graduates in the same time period. Putting those two factors together, the 41% of WARM graduates from 2011-15 doing Wisconsin Primary Care residencies is three times the rate of UW's Non-WARM and Non-TRIUMPH MD graduates (13%).

Table 3: Graduates from the UWSMPH's MD programs from 2011-2015 who went into residencies in Wisconsin and/or in Primary Care specialties (Internal Medicine (IM), Family Medicine, IM-Pediatrics).

Location/Specialty	WARM	TRIUMPH	Non-WARM; Non-TRIUMPH MD Students	Grand Total
In Wisconsin	**54.7% (41)**	**27.3% (15)**	**29.3% (194)**	**31.6% (250)**
Primary Care	41.3% (31)	18.2% (10)	12.9% (85)	15.9% (126)
Other specialty	13.3% (10)	9.1% (5)	16.5% (109)	15.7% (124)
Outside WI	45.3% (34)	72.7% (40)	70.7% (467)	68.4% (541)
Primary Care	18.7% (14)	45.5% (25)	26.6% (176)	27.2% (215)
Other specialty	26.7% (20)	27.3% (15)	44.0% (291)	41.2% (326)
Primary Care Total	**60.0% (45)**	**63.6% (35)**	**39.5% (261)**	**43.1% (341)**
Grand Total	100.0% (75)	100.0% (55)	100.0% (661)	100.0% (791)

While family medicine is the specialty in greatest demand in rural Wisconsin, rural hospitals and clinics also need more physicians in many other specialties. Because of this, the WARM program is unique among rural programs in supporting student interest in all specialties where shortages exist in our rural communities. Of the 75 graduates, 45 (60%) have entered primary care residencies (family medicine, internal medicine, pediatrics or medicine-pediatrics). Since completing both medical school and residency education in Wisconsin highly predicts practicing in Wisconsin, 54.7% (41/75) graduates of the WARM completing their residency education in Wisconsin indicates the success of the WARM program in expanding the pipeline of physicians who are likely to practice in our state.

Table 4: WARM Medical Specialties and Residency Locations for Alumni 2011-2015

Specialty by Residency Location	Residency Program Count
Anesthesiology	**1**
University of Nebraska (Omaha, NE)	1
Dermatology	**1**
University of Wisconsin Hospital and Clinics, (Madison, WI)	1
Emergency Medicine	**7**
Geisinger Health System-PA (Danville, PA)	1
HealthPartners Institute/Regions Hospital (St. Paul, MN	1
Madigan Army Medical Center (Tacoma, WA)	1
Medical College of Wisconsin (Milwaukee, WI)	2
University of Nebraska (Omaha, NE)	1
University of Virginia (Charlottesville, VA)	1
Family Medicine	**29**
Altru Health System (Grand Forks, NC)	1
Aurora St. Luke's Medical Ctr-WI (Milwaukee, WI)	1
University of Wisconsin SOM and Public Health (Baraboo, WI),	2
Family Medicine Res of Idaho (Boise, ID)	1
Greenville Hospital, USC (Greenville, SC)	1
Kootenai Health (Coeur D'alene, ID)	1
La Crosse Mayo (La Crosse, WI)	3
Medical College of Wisconsin (Milwaukee, WI)	1
Medical College of Wisconsin (Waukesha, WI)	2
Mercy Health System (Janesville, WI)	1
St. Anthony North (Westminster, CO)	1
Sutter Medical Center of Santa Rosa-CA (Santa Rosa, CA)	1
University of Minnesota Med School-Duluth	2
University of Minnesota Med School-North Memorial	1
University of Rochester (Rochester, NY)	1
University of Wisconsin SMPH (Appleton, WI)	5
University of Wisconsin SMPH (Madison, WI)	3
University of Wisconsin SMPH (Augusta/Eau Claire)	1
Internal Medicine	**9**
Abbott Northwestern-MN (Minneapolis, MN)	1
Aurora Health Care (Milwaukee, WI)	1
Central Iowa Health System (Des Moines, IA)	1
Gundersen Lutheran Med Fdn-WI (La Crosse, WI)	2
Marshfield Clinic/St. Josephs,(Marshfield, WI)	1
Medical College of Wisconsin (Milwaukee, WI)	1

University of Vermont, (Burlington, VT)	1
University of Wisconsin Hospitals and Clinics (Madison, WI	1
Internal Medicine/Emergency Medicine	**1**
Hennepin County, (Minneapolis, MN)	1
Internal Medicine/Pediatrics	**3**
Indiana University SOM (Indianapolis, IN)	1
Marshfield Clinic/St Josephs (Marshfield, WI)	2
Neurology	**1**
University of Utah Affiliate Hospitals	1
Obstetrics and Gynecology	**1**
St Vincent Hospital Center (Indianapolis, IN)	1
Orthopedic Surgery	**4**
Mayo School of Graduate Medical Education (Rochester, MN)	1
University of Iowa Hospitals and Clinics (Iowa City, IA)	1
University of Wisconsin Hospitals and Clinics (Madison, WI)	1
Wright State University Boonshoft SOM-OH (Dayton, OH)	1
Otolaryngology	**1**
University of Kentucky Medical Center (Lexington, KY)	1
Pediatrics	**3**
University of Wisconsin Hospital and Clinics (Madison, WI)	3
Physical Medicine and Rehabilitation	**2**
Carolinas Medical Center (Charlotte, NC)	1
University of Wisconsin Hospital and Clinics (Madison, Wi)	1
Psychiatry	**3**
University of Washington Affiliate Hospitals (Seattle, WA)	1
University of Wisconsin Hospital and Clinics (Madison, WI)	2
Radiology	**3**
Medical College of Wisconsin,(Milwaukee)	1
Ohio State University Medical Center (Columbus, OH)	1
University of Wisconsin Hospital and Clinics (Madison, WI)	1
Surgery	**6**
Bassett Medical Center (Cooperstown, NY)	1
Central Iowa Health System (Des Moines, IA)	1
Marshfield/St. Josephs-WI (Marshfield, WI)	1
University of Wisconsin Hospital & Clinics (Madison, WI)	2
Wright State University Boonshoft SOM (Dayton, OH)	1
Urology	**1**
University of Maryland, (Baltimore, MD)	1
Grand Total	**76**

TRIUMPH

All of the graduates to date have entered residencies serving urban, underserved populations. Across the five full TRIUMPH cohorts 2011-2015, 83.3% (30/36) of students have entered residencies in primary care specialties (Family Medicine, Internal Medicine, Internal Medicine/Pediatrics, and Pediatrics), a percentage considerably higher than for SMPH non-TRIUMPH graduates (42.3%) in the classes 2011-15. All of the graduates to date have entered residencies serving urban, underserved populations. Fourteen graduates (40%) have remained in the state for their residency training, including four at UW-Madison (Emergency Medicine, Family Medicine (2), and Psychiatry), five at the Medical College of Wisconsin (Internal Medicine (2), Internal Medicine/Pediatrics, Pediatrics (2)), and five at Aurora Family Medicine.

Table 5: TRIUMPH Medical Specialties and Residency Locations for Full TRIUMPH Program Alumni (N=36) – Graduating Classes of 2011-2015

Specialty (In-state Residency Location)	Residency Program Count
Emergency Medicine	**3**
(UW- Madison)	1
Family Medicine	**15**
(UW Madison)	2
(Aurora Health Care)	5
Internal Medicine	**7**
(Medical College of Wisconsin)	2
Internal Medicine/Pediatrics	**2**
(Medical College of Wisconsin)	1
Obstetrics and Gynecology	**2**
Pediatrics	**6**
(Medical College of Wisconsin)	2
Psychiatry	**1**
(UW Madison)	1
Grand Total	**36**
Total in State	14

This spring the program conducted phone interviews with 26 of the full program's first 29 graduates to see whether their commitment to urban underserved areas and their engagement in community health projects had been sustained. Amazingly, 20 (77%) of the 26 interviewees found time during residency to work on community or public health projects, including resident education and curriculum development in these areas. And for the six interviewees who hadn't engaged in public or community health projects as residents, two had volunteered to treat patients at free clinics and one was doing lab research on the impact of maternal diet on mothers and their children. Of the 10 alumni

who had finished or were about to finish residency, all 10 were practicing or about to practice in urban areas, and 4 had remained in or moved back to Milwaukee, with all of them heavily involved with training other TRIUMPH students or alumni in community medicine. Of the 26 interviewees, 12 (46%) saw themselves practicing in Wisconsin in the long term, with 10 (38%) saying Milwaukee was their favored location.

Abbreviated TRIUMPH Program (6-Month TRIUMPH Program)

The abbreviated 6-month TRIUMPH program was created to pilot the TRIUMPH program and expand capacity prior to enlarging the full program. Of the 30 students who participated in the abbreviated TRIUMPH program, 30 have graduated as of May 2015. Of these abbreviated program alumni, 13 (43%) are in primary care medical specialties or residency training programs (5-Family Medicine, 4-Internal Medicine, 1-Internal Medicine/Pediatrics, and 3-Pediatrics). Seventeen (57%) of the abbreviated TRIUMPH program alumni are in non-primary care residencies (1-Dermatology, 5-Emergency Medicine, 4-Obstetrics/Gynecology, 1-Ophthalmology, 1-Otolaryngology, and 5-Surgery). Five (17%) of the abbreviated TRIUMPH program alumni remained in Wisconsin for their residency training, three at Medical College of Wisconsin and two at UW Madison.

Based on feedback from community partners and participating students, and the initial program results, the UW Madison School of Medicine and Public Health decided to double the size of the full TRIUMPH program from eight to sixteen students annually beginning with the graduating class of 2016. The abbreviated TRIUMPH program was discontinued in 2014.

Table 6: TRIUMPH Medical Specialties and Residency Locations for Abbreviated TRIUMPH Program Alumni (N=30) – Graduating Classes of 2010-2015

Specialty (In-state Residency Location)	Residency Program Count
Anesthesiology	**1**
Dermatology	**1**
Emergency Medicine	**5**
Family Medicine	**5**
(UW Madison)	1
Internal Medicine	**4**
Internal Medicine/Pediatrics	**1**
Obstetrics and Gynecology	**4**

(Medical College of Wisconsin)	1
Ophthalmology	**1**
(UW Madison)	1
Otolaryngology	**1**
Pediatrics	**3**
(Medical College of Wisconsin)	1
Surgery	**4**
(Medical College of Wisconsin)	1
Grand Total	**30**
Total in State	5

13.106 (4) (b) (3): Postresidency Practice Locations

As of August 2015, seven WARM students from the graduating classes of 2011 (1) and 2012 (6) have completed their residencies, and five of those are now practicing in WI, with one more just over the border in Duluth. Six of these graduates are in Family Medicine (with one now doing a sports medicine fellowship) and one is in Internal Medicine. The specialties and current practice locations of the first seven WARM graduates to complete residency are the following:

- FM: Practices in Oconto Falls, WI, with Prevea Health.
- FM: Practices in Shawano, WI, with ThedaCare Physicians
- FM: Practices in Black River Falls, WI, with Krohn Clinic
- FM: Practices in La Crosse, WI, with Mayo Clinic Health System-Franciscan Healthcare
- FM: Practices in Duluth, MN, with St. Luke's
- FM: Sports Medicine fellowship in MT, with Montana Family Medicine Residency, completed a residency with University of Wisconsin Hospital and Clinics, Appleton, WI
- IM: Practices in Menomonie, WI, with Red Cedar Clinic

Seven TRIUMPH graduates from the graduating class of 2010 and 2011 are now finished with residency training and their initial practice areas are indicated in the Table 5 below. As of the spring of 2015, most TRIUMPH graduates from the class of 2011, and all from the classes of 2012, 2013 and 2014 are still in residency training programs. There will be more information on practice location for the class of 2011 by fall 2015. Four graduates of the TRIUMPH program are currently practicing in the central city of Milwaukee, two at a Federally Qualified Health Center (FQHC).

Table 5: Postresidency Practice Locations for TRIUMPH Alumni

# TRIUMPH Alumni	Practice Location	Specialty
3	Milwaukee, WI	Family Medicine
1	Milwaukee, WI	Internal Medicine
1	Salt Lake City, UT	Internal Medicine
1	Houston, TX	Obstetrics and Gynecology
1	Long Island, NY	Emergency Medicine