

Filling the Gap

By Anthony Braza and Sara L. Wilkins

The United States faces a shortage of up to 122,000 physicians by 2032, according to a 2019 study by the Association of American Medical Colleges (AAMC). The projected shortfall includes both primary care and specialty care physicians. Major factors underlying these predicted shortages include continued population growth and an increase in the proportion of adults over the age of 65.

Wisconsin is facing the same challenges. As early as 2011, a Wisconsin Hospital Association (WHA) report noted that 100 new physicians a year were needed in the areas of primary care, psychiatry and general surgery, especially in rural settings. In 2016, the WHA projected a shortfall of 2,000 physicians in the state.

Medical schools have increased enrollment by more than 30 percent since 2002. However, due to federal caps on support for graduate medical education (GME), the pace of increase in GME positions during this timeframe has substantially lagged the increase in undergraduate medical education (UME) positions – and has led to the physician shortages in the US.

The AAMC notes that fixing the doctor shortage requires a multi-pronged approach that includes finding ways to increase GME positions to augment the overall number of physicians trained in the US annually. The AAMC – of which Joseph E. Kerschner, MD '90, FEL '98, The Julia A. Uihlein, MA, Dean of the MCW School of Medicine, provost and executive vice president, served as chair of the board of directors from November 2019–November 2020 – continues to work closely with elected officials to address this important issue.

New Medical Residencies Meet Future Healthcare Needs

It is clear that Wisconsin continues to require more GME positions – and the Medical College of Wisconsin is working diligently to fill the gap by creating new medical residencies to meet future healthcare needs. MCW not only has brought creative solutions to this difficulty as outlined below, but also has provided funding and expertise to ensure success.

Medical College of Wisconsin Affiliated Hospitals

The Medical College of Wisconsin Affiliated Hospitals, Inc. (MCWAH) combines vast experience and extensive resources to provide a solid foundation for graduate medical education. Led by Kenneth B. Simons, MD, executive director and designated institutional official, and MCW senior associate dean for graduate medical education and accreditation, MCWAH, MCW and its affiliated institutions provide the elements necessary for a broad spectrum of graduate medical education

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*Sources for infographic:
Association of American Medical Colleges (AAMC);
Wisconsin Hospital Association (WHA)*

programs. At present, MCWAH offers 98 Accreditation Council for Graduate Medicine Education (ACGME)–accredited residency and fellowship programs; each program is supervised by a dedicated program director. Most of the residents



(at left) Camille Garrison, MD '06; MCW residency in family and community medicine (2006-2009); now an MCW associate professor of family and community medicine.

and fellows rotate through two or three of the MCWAH's 10 affiliated institutions.

MCWAH has more than 900 residents and fellows in its graduate training programs and offers approximately 200 first-year residency positions in 23 disciplines. Fellowship positions are available in 68 ACGME-accredited subspecialties.

New Psychiatry Residency Programs Launched in 2017

Access to mental healthcare is a crisis in the US and much of the rest of the world. Several underlying factors have led to this predicament, including an incomplete (but positive) emerging understanding that mental illness impacts a substantial percentage of individuals, and that with appropriate intervention, positive outcomes are achievable.

According to the Centers for Disease Control and Prevention, about 25 percent of Americans experience some form of mental illness and close to 50 percent will develop at least one mental illness within their lifetime.

In addition, there has been a reduction in the stigma surrounding mental illness and the openness of individuals seeking treatment – both of which have contributed to an increased demand for mental healthcare and professionals. Further, public/governmental policy and health-care system strategies have underinvested in both personnel and infrastructure for those individuals seeking care. All of these forces have resulted in an aging mental health professional workforce and lack of access, which is arguably among the most important impediments to overall health and well-being in society today. These difficulties are further exacerbated in less populated areas of the US where access to mental health professionals is even more challenged.

A 2012 analysis by the state Department of Health Services found Wisconsin needed more than 200 additional psychiatrists to address shortages. Sixteen counties – all in rural areas – reported having no outpatient psychiatrists.

The difficulties noted above were recognized by leaders at MCW. When new funding provided an opportunity to increase GME positions – particularly in mental health areas – MCW sought partners at the Veterans Administration Health System and elected officials in the state of Wisconsin (among others) to create a novel solution for the state. MCW already had embarked on a regional campus medical school model that allowed students to complete their entire medical training – both medical school and residency – in regions of greatest physician need in Wisconsin.

As such, creating a psychiatry residency program linked to these regional campuses would provide an opportunity to attract medical students and residents to learn and ultimately to practice in areas of greatest need in the state.

Some of the funding for this plan became a reality in 2014 when the US Department of Veterans Affairs (VA)

Continued on page 18



(at left) Malika Siker, MD; MCW residency in radiation oncology (2007-2011); now an MCW associate dean of student inclusion and diversity, and associate professor of radiation oncology.

approved the addition of 10 new training slots for mental health professionals in northeastern Wisconsin. The positions were established to train seven psychiatrists, two psychologists and a pharmacist to help alleviate a critical shortage of mental health professionals in that region of the state.

Concurrently, in May 2014 (as part of the 2013-2015 biennial budget), the Wisconsin Department of Health Services awarded MCW two grants of more than \$370,000 each to support the development of psychiatry residency programs in central and northeastern Wisconsin. Additionally, more than \$3.3 million was awarded to six Wisconsin healthcare organizations by the State Legislature to help them establish the new residency training programs in their communities.

In May 2016, initial accreditation was received from the ACGME for two new four-year psychiatry residency programs attached to the institution's medical school campuses in central and northeastern Wisconsin. Jon Lehrmann, MD '90, GME '94, the Charles E. Kubly Professor and chair of psychiatry and behavioral medicine and the Milwaukee VA Medical Center's associate chief of staff for mental health, was tapped to oversee the overall program. Carlyle Chan, MD '75, professor and vice chair of

psychiatry and behavioral medicine and former training director of MCW's psychiatry residency program, served as interim residency training director, pending ACGME approval of the training program. The assistance of MCWAH and Dr. Simons in creating these new residencies was invaluable.

These new mental health training programs, which were launched in July 2017, are training three residents per year in central Wisconsin and four residents per year in northeastern Wisconsin. The efforts are already bearing fruit, as six medical school graduates from MCW-Milwaukee, four medical school graduates from MCW-Green Bay and two from MCW-Central Wisconsin are current psychiatry residents in these new GME programs. And even more importantly, of the first seven graduates from the psychiatry residency programs, six have taken positions within Wisconsin and one in nearby rural Iowa (see sidebar).

According to Robert Gouthro, MD '07, GME '11, program director of the Central Wisconsin Residency Program and MCW assistant professor of psychiatry and behavioral medicine, "One of the biggest impacts of the rural residency programs is that they have brought the psychiatrists in these areas together to train our residents and their future colleagues. With

this, the regional psychiatric communities are now connected, and stronger, which has improved care for those in need. When you look at Wisconsin as a whole, we have a severe lack of psychiatrists, and outside of the big cities, the disparity is even worse. Plus, more than half of the psychiatrists in Wisconsin are over 50 and nearing retirement. If we can keep one or two of our residents from every class in Wisconsin, it will make a huge difference."

Dr. Gouthro adds, "Three graduating residents from the rural MCW psychiatry programs are substantially involved in education and will be working in

Inaugural Class of Psychiatry Residency Programs in Central and NE Wisconsin

Six graduates remain in Wisconsin and one practices in rural Iowa:

Amy Butterworth, MD, GME '21:
St. Mary's, Ascension,
Rhineland

Daniel Hoppe, MD, GME '21:
North Central Health Care,
Wausau

Andrew Kordus, DO, GME '21:
Winnebago Mental Health
Institute, Oshkosh

**Brooke Mastroianni, MD,
GME '21:** Continued training,
Child & Adolescent Psychiatry
Fellowship, Milwaukee

Ryan Stever, MD, GME '21:
Gundersen Health System,
Lansing, Iowa

Waqas Yasin, MD, GME '21:
North Central Health Care

Albina Zimany, MD, GME '21:
Continued training, Child &
Adolescent Psychiatry Fellowship,
Milwaukee

underserved areas within the state. Not only will they make an immediate impact to the provider needs of the region, but they will also help train future psychiatrists to help continue the cycle. We tend to think about the benefit trainees will provide after they graduate, but even during their residencies, they have helped to double outpatient access for some of our partner organizations in both central Wisconsin and Green Bay. That's an immediate benefit, before they are even out practicing on their own."

This spring, the seven members of the inaugural class of the MCW's psychiatry residency programs in central and northeastern Wisconsin graduated and are practicing in the region. Six are remaining in Wisconsin, and one practices in rural Iowa just across the border.

Waqas Yasin, MD, GME '21, is among this august group. He completed residency in the Northeastern Wisconsin Psychiatry Residency Program in June and immediately started as an inpatient attending psychiatrist at North Central Health Care in Wausau and assistant professor of psychiatry and behavioral medicine at MCW.

"We were the first class in the residency program, and we had a chance to lay down the structure and develop the culture. They needed self-starters, and I think the group of residents they selected fits into that category," Dr. Yasin shares. "I worked with local partners including the VA. We worked with prisoners. We worked with patients at one of the state's only two state hospitals. I leave the program feeling confident I have been exposed to most of what I'll see with my future patients. We have lots to do. MCW has done the work they promised to do, and now it is our turn to do our part. We trained in this community and will be more connected to it."

The Central Wisconsin Psychiatry and the Northeastern Wisconsin Psychiatry Residency Programs now have a total of 28 residents.

"This inaugural class of residents, almost all of whom have taken positions to remain in Wisconsin, is really fulfilling the vision of why we have the regional campuses and the difference they can make in the overall health of Wisconsin. Having these new psychiatrists stay in our state will fundamentally change access to



(at right) Jennifer Connelly, MD '03; MCW combined residency in medicine and neurology (2003-2008); MCW fellowship in neuro-oncology (2008-2009); now an MCW associate professor of neurology.

mental healthcare in these regions," says Dr. Kerschner.

Kirubel Woldemichael, MD '17, is an MCW graduate and a third-year psychiatry resident in the Central Wisconsin Psychiatry Program. "At MCW-Milwaukee, I was involved with the Saturday Free Clinic for the Uninsured, served veterans and worked in homeless shelters. MCW's community outreach and education stand out. I wanted to stay with an MCW residency program because I was familiar with the staff and the culture of psychiatry at MCW – which helped make it an easier transition. The impact from these new programs is tremendous. Green Bay and central Wisconsin were psychiatry deserts, and people had to wait a long time to get mental health help. Now, we are making progress. People can meet with us when they want to and when they need to. Access has improved. We are making an impact on the community's well-being," he says.

Although MCW is endeavoring to innovate in many areas of medical education, establishing these new mental health residencies attached to the regional campuses is likely to be among the most significant in improving the health of the citizens of Wisconsin. At the heart of this effort is the realization that these two new residency programs will increase the training of psychiatrists in Wisconsin by more than 40 percent, which will improve access to mental healthcare for many of Wisconsin's citizens.

New Family Medicine Residency Programs

In late 2016, ACGME initial accreditation was received for a new residency program in family medicine at Froedtert Menomonee Falls Hospital, which is beginning to alleviate the current deficit of nearly 200 family medicine/primary care physicians in Wisconsin as well as a projected deficit by 2035 of nearly 750. This new residency program is sponsored by MCWAH, which, along with MCW's department of family and community medicine, is responsible for ensuring that the program meets all ACGME requirements.

This new MCW family medicine residency program, which began on July 1, 2017, trains six residents per year over a three-year period – for a total of 18 new residents now that the program is up to full speed. Three MCW-Milwaukee alumni entered the inaugural residency class in 2017 and graduated in June 2020. An additional MCW-Milwaukee alumnus finished his three-year residency training in June 2021. Currently, four MCW medical school graduates are residents in this new program.

Jason Domagalski, MD '05, serves as program director of the Froedtert Menomonee Falls Hospital Family Medicine Residency Program. "Menomonee Falls is a great place to have a family medicine residency program. There is an aging community, but there also are young families moving in and having babies, so training extends through all stages of life," he notes. "The residency significantly

Continued on page 20

increases access, so patients don't have to wait a long time (there are 22 primary care doctors available). Patients also benefit from the teaching and educational component. MCW students rotate with us for their third and fourth years, so we get to see how they work in teams and how they interact with each other. We want to keep as many of them as possible in the state," Dr. Domagalski says. This approach seems to be working, as there are four residents practicing currently in the Froedtert & the Medical College of Wisconsin health network.

Patricia Toro Perez, MD '19, graduated from MCW-Central Wisconsin and is a third-year resident in the Froedtert Menomonee Falls Hospital Family Medicine Program. "My clinical experiences in Antigo, Wisconsin, were the highlight of medical school for me. The preceptors were eager to teach, and everyone in the hospital/clinics was welcoming. I was able to get a lot of hands-on experience that I truly don't believe I would have had otherwise. These experiences helped to set me up for success in residency and made the transition from student to resident very smooth," she remarks.

"I chose to attend MCW-Central Wisconsin after my interview day. I had a gut feeling of belonging during that interview, and I followed it. I had that same feeling during my interview at Froedtert Menomonee Falls. I liked that the residency program was focused on community medicine and based at a community hospital while still being close to the Froedtert & MCW main campus," Dr. Toro Perez adds.

MCW also recently created a new family medicine residency program in Green Bay in conjunction with Prevea Health and Hospital Sisters Health System (HSBS). Founding program director Manal Soliman, MD, MBA, began to build the program in September 2019. The inaugural class of residents began on July 1, 2021; when fully running, the program will train four residents per year for three years. The program was funded in part by a new residency startup grant from Wisconsin's Department of Health Services, state funds earmarked for MCW's family medicine GME development in northeast Wisconsin and the two healthcare systems.

"There is a great shortage of primary care physicians in the Green Bay area," says Dr. Soliman, who also serves as associate professor of family and community



(at center) Martha Grace Courtright, MD '18, graduated from the inaugural class at MCW-Green Bay and completed the Fox Valley Family Medicine Residency Program in 2021. Shown here with classmates Andre Theuerkauf, MD '18, and Allison Meyer, MD '18.

medicine at MCW. "The program provides service to families, especially when it comes to the underserved who don't have access to care. Residents also will be providing health education to the community."

Additionally, in July 2015, MCW became the academic affiliate of the Fox Valley Family Medicine Residency Program in Appleton, Wis., which previously had been a campus of the University of Wisconsin School of Medicine and Public Health department of family medicine. The program is undertaken in collaboration with Mosaic Family Health Clinic in partnership with St. Elizabeth Hospital and ThedaCare Regional Medical Center – Appleton. There are 21 residents in the program, with seven graduating each year.

According to Beth Menzel, MD, program director of the Fox Valley Family Medicine Residency Program and MCW assistant professor of family and community medicine, the crux of the community-based residency program is that most individuals will practice within 100 miles of where they do their residency training. "The academic scholarly approach we can bring into our community and our systems provides an elevated level of care for the residents because the existing physicians need to keep up on the latest approaches to care. This gets infused into the community. The residents practice evidence-based medicine, and they demand it from the

physicians they train with, and care is elevated throughout the community. Now, even the patients are making sure they are cared for with evidence-based approaches," she notes.

"We just graduated two residents from the inaugural class of MCW-Green Bay, and they have been phenomenal. We are impressed with the students we get from MCW," Dr. Menzel adds.

Martha Grace Courtright, MD '18, GME '21, is one of the two MCW-Green Bay alumni who graduated from the Fox Valley Family Medicine Residency Program in 2021; she will be practicing full-spectrum medicine (outpatient, inpatient, OB deliveries and nursing home care) at Essentia Health in Hayward, Wis.

"I was able to rotate at Fox Valley Family Medicine Residency in medical school at MCW-Green Bay, and that experience is what made me want to match at Fox Valley. I really felt that the residents were getting a broad education and that their OB curriculum was top-notch. I knew I wanted to do deliveries as part of my future practice, and so I wanted to go somewhere that was going to give me that intense training," Dr. Courtright remarks.

"Fox Valley Family Medicine Residency's goal is to prepare full-spectrum physicians for which rural communities are so desperately searching. A unique part of our residency training is our third year, during

which we function like a mini-call pool covering clinic calls, admissions and deliveries for two hospitals and a nursing home. This really solidifies your training from the first two years and gives you a sense of what a rural, full-scope practice might look like,” Dr. Courtright explains.

Recent MCW-Milwaukee graduate Samuel Beschta, MD ’21, has just begun his training at the Fox Valley Family Medicine Residency Program. “There were a few factors that led me to an MCW residency. First, I was born and raised in Wisconsin and wanted to stay close to family. Second, the Fox Valley program helps physicians become full-scope rural family doctors, which is my goal. Finally, I was not ready to leave my MCW family,” Dr. Beschta shares.

Additional Efforts to Address the Projected Physician Shortfall

Another critical contribution to addressing the projected physician shortfall in Wisconsin was the creation in 2020 of 54.5 additional GME slots made available for MCW’s allocation by the institution’s adult healthcare affiliate, Froedtert Hospital (FH).

Recognizing the importance of training the next generation of specialists in Wisconsin as well as MCW’s singular role in supplying more than 50 percent of the physicians currently practicing in the state, this substantial expansion represented an even larger commitment to Wisconsin’s future workforce given that FH is well over the federally mandated cap for GME positions. As such, each of these positions required additional funding in Froedtert and MCW’s affiliate funds flow model, and agreement on these positions demonstrated the remarkable cooperation and commitment of both organizations to medical education and Wisconsin’s future health.

Determination of where to add these positions was made after a well-defined process and submission of proposals based upon GME needs and conversations with MCW’s clinical departments. The 54.5 slots were allotted based on the strategic needs of the Milwaukee Regional Medical Center campus, Milwaukee and Wisconsin as a whole; program growth, expansion of services at FH and the record of filling in the Match.

Eleven departments received the new GME allotments: anesthesiology; dermatology; emergency medicine; medicine

(endocrinology and molecular medicine, hematology/oncology, palliative care, pulmonary and critical care medicine); neurology; OB/GYN; ophthalmology and visual sciences; otolaryngology and communication sciences; psychiatry and behavioral medicine; radiology (diagnostic); and surgery (cardiothoracic and vascular).

“We are extremely grateful to our Froedtert Hospital partner in working with the medical school to create these critical additional GME slots, which will significantly expand access to care in Wisconsin and beyond, and substantively help to reduce the state’s projected physician shortage. This work represents one of the single largest increases in GME positions in Wisconsin’s history, and its importance and future impact are difficult to overestimate,” Dr. Kerschner shares.



As part of this GME expansion, MCW also has added positions through the VA program in cardiovascular, emergency medicine, gastroenterology, general surgery, hematology/oncology, nephrology, neurology and pulmonary/critical care. In total, including the psychiatry residencies mentioned above, the VA has added more than 20 full-time equivalent positions – with additional slots expected shortly.

In addition to creating new residency programs, MCW continues to help alleviate the overall physician shortage in the state via its placement of undergraduate medical education (UME) students into Wisconsin GME slots. According to the AAMC’s 2019 biennial report on state-specific data about active physicians and physicians-in-training, 37 percent of medical school

graduates from Wisconsin’s two medical schools remained in the state for residency, while about 45 percent remained here after residency training. In total, 70 percent of all physicians who both attended medical school in Wisconsin and then completed residency in Wisconsin remained in the state to practice.

One way the ACGME measures the adequacy of a state’s number of residency positions is to use the ratio of positions per 100,000 members of the population. As Wisconsin has continued to expand residency programs, so too have other states. But according to the AAMC, the state’s rank for GME residents per medical school enrollee improved from 25 in 2012 to 20 in 2018.

MCW’s success in growing both its UME and GME programs and in placing

its medical students in Wisconsin-based GME programs is reflected in the fact that more than 50 percent of all Wisconsin physicians currently practicing in Wisconsin completed some of their training and education at MCW.

MCW’s regional campus model, which strongly emphasizes Wisconsin residents with roots in this state, will have an even greater impact on the institution’s efforts to alleviate Wisconsin’s physician shortage.

These campus expansions, together with state investment in medical residencies, are projected to create more than 450 new physicians in the next 15 years.

Indeed, MCW is helping to fill the physician shortage gap by creating new medical residencies to meet future healthcare needs. ■