

How Montana Expanded Graduate Medical Education

Jay S. Erickson, MD
Paul H. Rockey, MD, MPH

Toward the goal of universal health insurance for all citizens, the well-intentioned Affordable Care Act was built on the premise of expanding the United States' uniquely pluralistic mix of privately and publically funded coverage. However, insurance coverage is not equivalent to the ability to obtain timely and appropriate health care services. Socioeconomic and geographic barriers to access are widespread.¹ Some of these barriers are due to the lack of an adequate and well-distributed physician workforce, especially for urban and rural people living in poverty.² These demographics, combined with vast rural regions, make access to medical care in Montana a significant challenge.

In this Perspectives, we describe how Montana expanded graduate medical education (GME) to improve patient access and mitigate physician workforce shortages. Five years ago, Montana was ranked 50th among all states in the number of resident physicians in GME programs.³ Since 2012, Montana has quadrupled the number of resident physicians entering GME programs in the state.^{4,5}

To support this expansion, in addition to Medicare Part A funding for hospital-based GME, Montana appropriated state funds and secured funding from the Health Resources and Services Administration (HRSA) and Medicaid. The District of Columbia and 42 states use Medicaid payments to fund GME.⁶ Medicaid support for GME has doubled over the past 2 decades, and now totals \$4.6 billion of the \$16 billion spent on public GME payments.⁶

Background

Since 1971, Montana has been part of the WWAMI (Washington, Wyoming, Alaska, Montana, and Idaho) medical education collaborative with the University of Washington School of Medicine (UWSOM). Through WWAMI, Montana has seen steady growth in undergraduate medical education, and currently enrolls 30 medical students per year for 18 months of basic sciences and clinical experiences at Montana State University (MSU) in Bozeman. Subsequently,

Montana's WWAMI students may choose from more than 40 clinical clerkships located in 16 Montana communities, or elect from several hundred clinical opportunities at sites in other WWAMI states. In the 2015–2016 academic year, 140 WWAMI students from all 5 states completed at least 1 Montana clerkship. Since the inception of WWAMI, 662 Montana graduates have entered practice, with 41% of these graduates returning to practice in Montana. When graduates from other WWAMI states are included, Montana's investment in WWAMI has resulted in 378 WWAMI graduates entering practice in Montana, representing a return on investment of 57%.⁷

While the Montana undergraduate medical education program has been a success, GME has lagged. The first residency program was established in Billings in 1995. This 18-resident family medicine program focused on training for rural practice with a Montana retention rate of 68%. With only this GME program, Montana had the lowest ratio of resident physicians per capita among all US states.

Formation of the Montana GME Council⁸

In 2008, WWAMI regional leadership recognized that all WWAMI partner states lacked adequate GME numbers and called for the development of new GME programs. At a WWAMI GME summit in 2010, eight Montana communities learned about the extensive efforts and resources required to begin new GME programs. In 2011, Montana's offices of WWAMI and the Area Health Education Center (AHEC) inaugurated the Montana GME Council with key Montana stakeholders from WWAMI, AHEC, teaching hospitals, both state universities (MSU and the University of Montana), the medical, hospital, and primary care associations, as well as Montana's Commissioner of Higher Education, Department of Health and Human Services, and the governor's office.

The council meets twice yearly and is staffed by the AHEC office. The council has continuously received grant funding to support its activities. Its responsibilities include:

DOI: <http://dx.doi.org/10.4300/JGME-D-17-00103.1>

- Track, measure, and make recommendations regarding Montana's physician workforce and GME needs.
- Help coordinate GME development within Montana.
- Develop relationships with GME providers, including UWSOM and others.
- Serve to distribute state funds for GME.
- Seek financial support to sustain and expand Montana GME programs.
- Seek new sources of funding for new GME programs within Montana.
- Assist current GME programs to maintain high-quality experiences within Montana.
- Advocate and effectively communicate the benefits of robust GME efforts within Montana.

Evidence of the success of the Montana GME Council includes:

- All Montana residencies have an expressed goal of training residents for rural practice.
- 2012: Expanded the Family Medicine Program in Billings, from 6 to 8 entering residents, funded by HRSA Primary Care Expansion and Teaching Health Center GME grants.
- 2013: Initiated the Family Medicine Program of Western Montana in Missoula/Kalispell. Of 10 entering residents in Missoula, 7 remain in Missoula for all 3 years, and 3 residents train in Kalispell for postgraduate year 2 (PGY-2) and PGY-3. The program is funded by federal GME dollars.
- 2013: Increased state funding to \$500,000 per year; obtained matching Medicaid funds for a 2:1 match creating over \$1.5 million of yearly GME funding.
- 2014: Initiated the Billings Clinic Internal Medicine Program with 6 entering residents; expanded to 8 entering residents in 2016, funded by federal GME dollars and private grant funding from the Helmsley Charitable Trust.
- 2014: Hosted a regional WWAMI GME summit in Bozeman.
- Continued advocacy with Montana congressional delegation for changes in GME funding for rural states like Montana.
- 2016: US Senator for Montana Jon Tester introduced Senate Bill S.3030 "Restoring Rural

Residencies Act of 2016," which was reintroduced in 2017 as Senate Bill S.455.⁸

- 2016: Advocated for increased state funding for Montana GME in anticipation of the 2017 Montana State Legislative Session to continue to gain federal matching Medicaid funds.

Advocacy and Collaboration

By advocating for increased state and federal funding for these new residency programs, the Montana GME Council helped to ensure their quality and success. While the council deserves credit for facilitating these successes, countless individuals and organizations contributed their time and energy to expand and create GME programs throughout the state and region.

New GME programs require significant support and leadership from teaching hospitals, community physicians, the community itself, and state governmental officials. These collective efforts over the past 5 years have increased entering GME positions in Montana 400%; this has moved Montana from 50th to a rank of 46th among states for the ratio of resident physicians per capita.⁹

Challenges to Continuation and Future Growth

Montana's experience demonstrates how state and federal funding is crucial to the creation of a rural physician workforce. However, the formation of new Montana residency programs has resulted in a number of Montana teaching hospitals reaching their Medicare funding cap under the Balanced Budget Act of 1997.¹⁰ Because current federal GME funding does not follow residents to rural rotations, continued support for existing and expanded rural clinical experiences is in jeopardy. Despite these challenges, the Montana GME Council is using current medical workforce data to advocate for the creation of new residency experiences, which will serve the state population's future medical needs. For example, the council continues to explore the creation of additional residencies in psychiatry, family medicine, and internal medicine as well as rural residency rotations in general surgery. The council's advocacy role at the federal and state levels will be important to maintain and enhance GME within Montana and other rural states like Montana.

References

1. Kirby JB, Kaneda T. Neighborhood socioeconomic disadvantage and access to health care. *J Health Soc Behav.* 2005;46(1):15–31.

2. Bodenheimer T, Pham HH. Primary care: current problems and proposed solutions. *Health Aff.* 2010;29(5):799–805.
3. Association of American Medical Colleges. *2013 State Physician Workforce Data Book*. Washington, DC: AAMC; November 2013:37. <https://www.aamc.org/download/362168/data/2013statephysicianworkforcedatabook.pdf>. Accessed July 18, 2017.
4. 2017 NRMP Main Residency Match. Match Rates by Specialty and State; page 9. <http://www.nrmp.org/wp-content/uploads/2017/06/Main-Match-Results-by-State-and-Specialty-2017.pdf>. Accessed August 23, 2017.
5. National Resident Matching Program. Results and Data: 2012 Main Residency Match; page 69. http://sls.downstate.edu/student_affairs/documents/NRMP2012Results_Data.pdf. Accessed August 23, 2017.
6. Association of American Medical Colleges. Medicaid graduate medical education payments: a 50-state survey. 2016. https://members.aamc.org/eweb/upload/Medicaid_Graduate_Medical_Education_Payments-A_50_State_Survey.docx.pdf. Accessed July 18, 2017.
7. Montana WWAMI 2017 Executive Summary. [http://www.uwmedicine.org/education/Documents/md-](http://www.uwmedicine.org/education/Documents/md-program/MT_ExecutiveSummary.pdf)
[program/MT_ExecutiveSummary.pdf](http://www.uwmedicine.org/education/Documents/md-program/MT_ExecutiveSummary.pdf). Accessed August 23, 2017.
8. Senate Bill, S. 455: Restoring Rural Residencies Act of 2017. <https://www.govtrack.us/congress/bills/115/s455>. Accessed July 18, 2017.
9. Accreditation Council for Graduate Medical Education. *ACGME Data Resource Book 2015–2016*. Chicago, IL: ACGME; 2016:58. <http://www.acgme.org/About-Us/Publications-and-Resources/Graduate-Medical-Education-Data-Resource-Book>. Accessed July 18, 2017.
10. Iglehart JK. Medicare and graduate medical education. *N Engl J Med.* 1998;338(6):402–407.



Jay S. Erickson, MD, is Clinical Professor, Family Medicine, University of Washington, and Assistant Dean for Regional Affairs, Montana WWAMI Clinical Coordinator; and **Paul H. Rockey, MD, MPH**, is Senior Scholar in Residence, Accreditation Council for Graduate Medical Education, and Professor Emeritus, Internal Medicine and Medical Humanities, Southern Illinois University School of Medicine.

Corresponding author: Paul H. Rockey, MD, MPH, Accreditation Council for Graduate Medical Education, 401 N. Michigan Avenue, Suite 2000, Chicago, IL 60611, 312.755.7473, prockey@acgme.org