## **Rural Health Policy Brief 1**

# Special Needs in Rural America: Implications for Healthcare Workforce Education, Training, and Practice

## Rural Health Disparities

Almost 60 million people, or one in five Americans live in a rural area.<sup>1</sup> While rural communities have many inherent strengths and support a high quality of life,<sup>2</sup> rural residents experience significantly worse health outcomes than their urban counterparts. Compared to those living in urban areas, <u>rural residents have</u> higher rates of mortality from heart disease, respiratory disease, cancer, stroke, and unintentional injury which are the five leading causes of death in the U.S.3; higher maternal and infant mortality4; and higher rates of death by suicide.<sup>5</sup> Overall, rural populations are older and sicker than those in urban areas, and face an increasing gap in life expectancy. These disparities are increasing over time.<sup>5,6</sup> Public health emergencies like the coronavirus disease COVID-19 pandemic will further exacerbate these disparities<sup>7</sup> [see Brief Statement, page 2].

# **COGME**

#### **Council on Graduate Medical Education**

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#### Overview:

Rural populations face increasing disparities in many health outcomes and a significant gap in life expectancy, compared to urban populations. At the heart of these disparities is a lack of access to health care, which can be exacerbated by a public health emergency like the coronavirus disease (COVID-19) pandemic. Many rural areas have a shortage of health care providers and lack a hospital or similar facility. Many rural hospitals have closed or are at financial risk of closure, which further impairs the local health care workforce. However, the health care system as a whole is shifting away from acute hospital care and toward care provided in community- or home-based settings. Rural communities need to assess their health care needs and the available workforce and facilities, while providers in rural areas must be flexible in addressing the wide-ranging needs of their patient population.

Combating the nation's rural health challenges requires a redesign of the investments in rural health workforce training to place patients, their families, and their community needs at the center of policy interventions. The Council on Graduate Medical Education (COGME) provides a series of three Rural Health Policy Issue Briefs, with recommendations to strengthen rural health workforce training and improve access to health care in rural communities. The recommendations address the health and social care needs of rural America through evidence-based, patient- and community-centered health workforce investments spanning education, training, and practice.

At the heart of many rural-urban health disparities is the lack of access to quality health care. Rural communities often lack basic health care facilities, and <u>rural residents face</u> chronic shortages of doctors, nurses, pharmacists, and non-physician providers.<sup>8</sup>

The health care landscape is changing rapidly. New health and payment incentives are shifting care to outpatient, community, and home settings. The shift from fee-for-service to value-based payments places greater emphasis on ambulatory care provided in community- and home-based settings.

Combating the nation's rural health challenges in the context of rapid health system change requires radically redesigning the way we invest in the rural health workforce to place patients, their families, and their community needs at the center of policy interventions.<sup>9</sup>
Recognizing the changing needs of rural America, the Council on Graduate Medical Education

#### **Brief Statement on COVID-19 and Rural Health Care**

As COGME was preparing this set of issue briefs on rural health care, the nation began to experience the COVID-19 pandemic. A national public health emergency will likely exacerbate the health care access gaps between rural and urban areas. Rural hospitals and health systems will not have the capacity to respond on their own, and will likely need substantial federal assistance, at least until a vaccine can be developed or an effective treatment devised.

Initial steps in the federal response are working to:

- · ease restrictions on the use of telehealth,
- expand the health care workforce by facilitating the entry of recent graduates and the re-entry of retirees,
- encourage states to allow all members of the health care team to work to their full scope of practice.

COGME appreciates the efforts of all who are called to respond to caring for COVID-19 patients, maintaining the health system to respond to all persons in need of care, and reducing or preventing the spread of this and other diseases. Lessons learned during this crisis will help inform COGME's recommendations to strengthen rural health care access and improve rural health outcomes.

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### Rural Disparities in Access to Care

At the heart of many rural-urban health disparities is the lack of access to quality health care. Of the roughly 2,000 U.S. counties classified as rural, more than 170 lacked an in-county critical access hospital, Federally Qualified Health Center, or rural health clinic, collectively known as safety-net providers. As a result, travel to the nearest hospital or clinic can take over an hour. The problem of health care access is also worsening, as the rate of rural hospital closures has accelerated in the last 10 years, further reducing access to emergency care and other health services. By some estimates, more than half of all rural counties in the United States lack a single local hospital where a pregnant woman can get prenatal or labor and delivery care. 13,14

Even when the necessary facilities do exist, they are frequently understaffed and suffer from health workforce shortages. According to the latest data from the Health Resources and Services

Administration, in March 2020 almost 70% of areas designated as primary medical health professional shortage areas were rural or partially rural areas. Rural hospital closures are associated with long-term decreases in the supply of physicians in multiple specialties, including primary care physicians, medical specialists and surgeons. 16

With fewer health care professionals available, clinical practice in rural areas demands the generalist skills of a primary care provider who can treat patients with a wide range of complex physical and behavioral health needs. Because the rural workforce is interdependent and interprofessional, shortages among one profession or specialty have a domino effect on others. For example, general surgeons are essential to the provision of full-service medical care. Lack of access to a general surgeon as backup limits other hospital services such as trauma care, oncology treatment, and colonoscopies. This interdependence is not limited to general surgeons. Recent reports have highlighted declining access to maternity care in rural communities, in part because hospitals face chronic shortages of maternity-care providers such as family physicians, obstetricians, certified nurse midwives, and labor and delivery nurses, as well as surgeons and anesthesiology providers. 17,18

Primary care workforce shortages and difficulty accessing needed specialty services result in unnecessary trips to the emergency room, which further exacerbate the strain on hospitals that are already underfunded and understaffed.<sup>19</sup>

## Rural Health Workforce: The Demand-Capacity Mismatch

Current investments in workforce training are not adequately addressing rural health disparities or bolstering our rural health workforce. The nation spends significant taxpayer dollars on workforce training — \$14.5 billion alone on graduate medical education for physicians—but the workforce remains maldistributed by specialty, geography and setting. Efforts to better distribute funding to meet rural health workforce needs have been unsuccessful despite the fact that residency location is a known predictor of a physician's future practice location. One study showed that 56% of family medicine residents practice within 100 miles of where they completed their training. The Government Accountability Office estimates that only 1% of residents train in rural areas. And while care is shifting from hospital to ambulatory settings, most GME funding still goes to hospitals in urban settings.

A focus on patients and populations instead of individual provider groups is needed to redefine the crisis from a shortage to a demand-capacity mismatch that could be addressed by investing in teambased models of care that integrate behavioral, social, and community services. Primary care capacity, for example, can be greatly increased by empowering licensed personnel, including registered nurses and pharmacists, to provide more care, as well as by allowing medical assistants to function as panel managers and health coaches to address many preventive and chronic care needs. Primary care settings have increasingly become a gateway for many individuals with behavioral health needs — this means, for example, that social workers play an important role in primary care, <sup>23</sup> serving as:

- **Behavioral health specialists:** providing clinical interventions for behavioral health and substance use disorders
- Case managers: coordinating, monitoring, and assessing treatment plans
- Navigators: connecting patients with community resources for transportation, food, housing, employment, etc.

## Bright Spots for Rural Health

While addressing persistent workforce shortages in rural communities may seem an intractable problem, significant momentum exists. Several recent reports have identified ways in which the rural workforce can be strengthened, as well as "bright spots" for the future of rural health. The HRSA Teaching Health Center Graduate Medical Education (THCGME) Program, launched in 2011, has had significant success embedding residency training in community-based, rural and primary care settings. Lestimates suggest that the THCGME program has the potential to yield up to \$1.8 billion in public program savings – an estimated \$1.5 billion in Medicaid savings and \$284 million in Medicare savings – between 2019-2023.

The Rural Training Track Technical Assistance (RTT-TA) consortium, funded through the HRSA Federal Office of Rural Health Policy, supported communities, educational institutions, and others interested in developing rural training tracks — a 2016 review of the RTT-TA consortium found that more than 35% of graduates were practicing in rural areas through seven years post-graduation, demonstrating a stable yield of physicians in rural practice. Building on the RTT-TA strategy, in 2019 HRSA awarded \$20 million in Rural Residency Planning and Development (RRPD) grants to 27 organizations to increase the rural workforce through the creation of new rural residency programs. <sup>27</sup>

Specifically, notable "bright spots" include the Idaho Family Medicine Residency, one of the original 11 HRSA-funded Teaching Health Centers with the mission to "train outstanding broad spectrum family medicine physicians to work in underserved and rural areas," and the Wisconsin Rural General Surgery Residency Track, with the goal of "providing excellent training for surgeons who desire to ... practice in rural or community based hospitals." 29

### Conclusion

As the U.S. health care system presses toward a value-based payment system that addresses health and social care, non-acute care provided in outpatient community and home settings becomes even more crucial to meeting patient needs. Despite this, most health professions training occurs in acute settings. Federal training investments need to shift from acute to community-based settings. Our nation is increasingly <u>focused</u> on paying for value and placing patients at the center of health system reforms.<sup>30</sup> We need to take policy action now to ensure that we derive value from publicly financed workforce investments so that they produce the workforce needed to meet rural health needs.

## Policy Recommendations

## Health workforce investments should be patient-centered and produce value

All too often, conversations about rural health workforce challenges have focused on how many of which specific types of health care professionals are in shortage nationally. This approach has produced more of the same investments in hospital-based GME in urban communities. Instead we need to ask: "what are the essential health care needs of patients and populations in rural communities?" Furthermore, as we press toward a value-based payment system focused on health and social care needs in outpatient care, federal training investments need to shift from acute to community-based settings. Such a patient-centered approach requires better data and better tools to identify the health and social care needs of rural communities. We can build on assessments already conducted by hospitals, community health centers and other stakeholders but these efforts need to be augmented.

To address the expanding disparities in health outcomes and health care access between rural and urban areas, the Council on Graduate Medical Education proposes the following policy recommendations:

✓ Recommended action: COGME recommends federal funding for a comprehensive assessment of rural health needs to identify gaps in essential care. This assessment will serve to update and modify existing programs, such as the National Health Service Corps (NHSC), which targets and recruits physicians matching the needs of rural communities. HRSA's National Center for Health Workforce Analysis (NCHWA) can undertake the data collection and analysis needed to interpret and translate findings on rural community health

and workforce gaps into actionable recommendations to HRSA and CMS regarding future training investments.

✓ Recommended action: Federal training investments should follow the National Academy of Medicine recommendation to link GME funding to population health needs. Future investments should be targeted toward programs that yield a high return on investment in rural communities, including the NHSC, the Rural Residency Planning and Development, and other training programs funded by HRSA.

This is the first of three issues briefs on rural health from the Council on Graduate Medical Education (COGME), a federal advisory committee.

- Issue Brief 1: Special Needs in Rural America and Implications for Healthcare Workforce Education, Training and Practice
- Issue Brief 2: The Rural Health Care Infrastructure and Workforce: Necessary Investments
- Issue Brief 3: Training Needs to Prepare the Healthcare Workforce for Rural Practice

#### **About COGME**

The Council on Graduate Medical Education (COGME) is a federal advisory council that provides an ongoing assessment of physician workforce trends, training issues, and financing policies, and recommends appropriate federal and private sector efforts to address matters of concern. COGME advises and makes recommendations to the Secretary of the U.S. Department of Health and Human Services (HHS) and to the Senate Committee on Health, Education, Labor and Pensions, and the House of Representatives Committee on Energy and Commerce.

### Reference List

### Rural Health Disparities

- 1. United States Census Bureau, America Counts Staff. (August 9, 2017). One in five Americans live in rural areas. Retrieved from <u>US Census Bureau What is Rural America</u>.
- 2. National Public Radio, Robert Wood Johnson Foundation, the Harvard T. H. Chan School of Public Health. (2018). *Life in rural America*. Washington, D. C.: Author.
- 3. Moy, E., Garcia, M. C., Bastian, B, Rossen, L. M., Ingram, D. D, et al. (January 13, 2017). Leading causes of death in nonmetropolitan and metropolitan areas United States, 1999-2014. *MMWR Surveillance Summary; 66* (No. SS-1): 1–8. DOI: CDC and Prevention Morbidity and Mortality Weekly Report 01/13/2017
- 4. Kozhimannil, K. E., Interrante, J. D., Henning-Smith, C., Admon, L. K. (2019). Rural-urban differences in severe maternal morbidity and mortality in the US, 2007-15. *Health Affairs, 38*, 2077-2085. doi:10.1377/hlthaff.2019.00805
- 5. Schroeder, S., & Rural Health Research Gateway. (2018). Rural communities: Age, income, and health status. Retrieved from Rural Health Research Gateway RECAP November 2018

- 6. Hoffman, A., Holmes, M. (2017). Regional differences in rural and urban mortality trends. *North Carolina Health Research Program*. Retrieved from NC RHRP Findings Brief Regional Differences in Rural and Urban Mortality Trends August 2017
- 7. Centers for Disease Control and Prevention. (2020). Coronavirus (COVID-19). Retrieved from CDC and Prevention COVID 19 Get the Facts
- 8. Iglehart, J. K. (2018). The challenging quest to improve rural health care. *New England Journal of Medicine, 378*, 473-479.
- 9. Fraher E, Brandt B. (2019). Toward a system where workforce planning and interprofessional practice and education are designed around patients and populations not professions. *Journal of Interprofessional Care, 33*, 389-397. doi:10.1080/13561820.2018.1564252.

#### Rural Disparities in Access to Care

- 10. Kaufman B. G., Thomas, S. R., et al. (2016). The rising rate of rural hospital closures. *Journal of Rural Health,* 32(1), 35-43.
- 11. Troske, S., Davis, A. (2019). Do hospital closures affect patient time in an ambulance? *Rural and Underserved Research Center*. Retrieved from <u>Rural & Underserved Health Research Center Policy Brief February 2019</u>
- 12. United States Government Accountability Office. (2018). Rural hospital closures: Number and characteristics of affected hospitals and contributing factors. Retrieved from <a href="GAO Report to Congressional Requesters Rural Hospital Closures August 2018">GAO Report to Congressional Requesters Rural Hospital Closures August 2018</a>
- 13. Kozhimannil, K. B., Hung, P., Henning-Smith, C. (2018). Association between loss of hospital-based obstetric services and birth outcomes in rural counties in the United States. *JAMA*, 319, 1239–1247. doi:10.1001/jama.2018.1830
- 14. Anderson, B., Gingery, A., McLellan, M., Rose, R., Schmitz, D., & Schou, P. (2019). NRHA Policy Paper: Access to Rural Maternity Care. Retrieved from National Rural Health Associate Policy Brief Access to Rural Maternity Care
- Heath Resources and Services Administration, Bureau of Health Workforce. (2020). Second quarter or fiscal year 2020 designated HPSA quarterly summary. Retrieved from <u>HRSA Bureau of Health Workforce HPSA</u> Quarterly Summary June 30 2020
- 16. Germack, H. D., Kandrack, R., & Martsolf, G. R. (2019). When rural hospitals close, the physician workforce goes. *Health Affairs*, *38*, 2086-2094.
- 17. Martsolf, G. R., Baird, M., Cohen, C. C., & Koirala, N. (2019). Relationship between state policy and anesthesia provider supply in rural communities. *Medical Care*, *57*, 341-347.
- 18. Rural Health Research Gateway. (2019). Rural obstetric services: Access, workforce, and impact. Retrieved from Rural Health Research Gateway RECAP Access, Workforce, Impact April 2019
- 19. Shi, L. (2012). The impact of primary care: A focused review. *Scientifica, 2012*, doi: Retrieved from <u>Scientifica 2012</u> Article

### Rural Health Workforce: The Demand-Capacity Mismatch

- 20. Goodfellow, A., Ulloa, J. G., Dowling, P. T., & Talamantes, E. (2016). Predictors of primary care physician practice location in underserved urban and rural areas in the United States: A systematic literature review. *Academic Medicine*, *91*, 1313-1321.
- 21. Fagan, E.B., Finnegan, S. C., Bazemore, A. W., Gibbons, C. B., Petterson, S. M. (2013). Migration after family medicine residency: 56% of graduates practice within 100 miles of training. *American Family Physician*, 88(10), 704.
- 22. United States Government Accountability Office. (2018). Physician workforce: HHS needs better information to comprehensively evaluate graduate medical education funding. Retrieved from GAO.gov 18 240 Mar 9 2018
- 23. Fraser, M. W., Lombardi, B. M., et al. (2018). Integrated primary care and social work: A systematic review. Journal of the Society for Social Work and Research, 9(2), 175-215.

### **Bright Spots for Rural Health**

- 24. Chen, C., Chen, F., Mullan, F. (2012). Teaching health centers: A new paradigm in graduate medical education. *Academic Medicine*, *87*, 1752-1756. doi: 10.1097/ACM.0b013e3182720f4d
- 25. Chen, C., Ku, L., Regenstein, M., Mullan, F. (2019). Policy Issue Brief #58: Examining the cost effectiveness of teaching health centers. *Geiger Gibson/RCHN Community Health Foundation Research Collaborative*. Retrieved from Geiger Gibson RCHN Community Health Foundation Policy Brief #58
- 26. Patterson, D. G., Schmitz, D., Longenecker, R., Andrilla, C. H. A. (2016). Family medicine Rural Training Track residencies: 2008-2015 graduate outcomes. *WWAMI Rural Health Research Center, University of Washington*. Retrieved from Rural Training Track Technical Assistance Program Policy Brief February 2016
- U.S. Department of Health and Human Services. (July 18, 2019). HHS Awards \$20 million to 27 organizations to increase the rural workforce through the creation of new rural residency programs. Retrieved from <a href="https://example.com/html/>
  HHS.gov July 18 2019">HHS.gov July 18 2019</a>
- 28. Family Medicine Residency of Idaho. (2019). 2019 annual report. Retrieved from <u>2019 Annual Report Family Medicine of Idaho</u>
- 29. University of Wisconsin School of Medicine and Public Health. (n.d.) Rural general surgery residency track. Retrieved from <u>University of Wisconsin-Madison Department of Surgery</u>

#### Conclusion

30. U.S. Department of Health and Human Services. (2019). HHS to deliver value-based transformation in primary care. Retrieved from <a href="https://example.com/hHS.gov">HHS.gov</a>