

Investing in a Health Workforce that Meets Rural Needs

Council on Graduate Medical Education (COGME)

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INTRODUCTION: The Rural Health Crisis

Approximately 19% of the country's population lives in rural areas.¹ While most rural Americans report being satisfied with their quality of life,² rural populations are less healthy than their urban counterparts and face an increasing gap in life expectancy.³ A previous [Issue Brief](#) from the Council on Graduate Medical Education (COGME) highlighted disparities in rural health outcomes in the U.S., unmet health needs in rural areas, and the geographic and specialty maldistribution of the nation's physician workforce.⁴ In this second of three issue briefs, COGME calls for immediate policy action to advance sustainable financing of rural training and practice to build a more flexible, interprofessional health workforce that meets rural needs.

The federal government invests in many programs that support the education and training of the health workforce, with the goal of increasing access to care and improving population health outcomes across the nation. However, at present only 1% of investments in physician training go to rural areas.⁵ Rural communities have more fragile health ecosystems, and an inadequate supply of physicians and other health professionals to serve a widely dispersed populace. Rural clinicians often practice in isolation and face the burden to always be "on call," increasing their risk for burnout.^{6,7} In addition to these longstanding issues, the COVID-19 pandemic has further stretched already thin rural health resources and exacerbated rural health disparities.⁸

The evidence is clear: **the current payment structure for educating physicians and other health care professionals in rural settings is inadequate**, and has worsened over recent decades, despite growing disparities in rural health outcomes.⁹ Training investments are disproportionately targeted to urban areas, and focus on individual professions rather than interprofessional, team-based practice models of care. COGME calls for immediate policy action to advance a more dynamic and interprofessional rural physician and health care workforce to:

- Expand and extend successful place-based training initiatives that promote access to care.
- Identify and eliminate regulatory and financial barriers and create incentives for expansion and innovation.
- Develop a set of measures to ensure value and return on investment in rural health education.
- Support and test alternative payment models that enhance team-based interprofessional practice.

Overview: Rural populations are less healthy than urban populations, and face an increasing gap in life expectancy. One contributing factor is a chronic shortage of doctors and other health care professionals to serve rural areas. Addressing this workforce disparity requires redesigning the rural health infrastructure. In this second of three issue briefs, COGME calls for immediate policy action to advance the sustainable financing of rural training and practice, and develop strategic planning to build a more flexible, dynamic, and interprofessional rural workforce that meets rural needs.

COGME Recommendations

- **Expand and extend successful place-based training initiatives that promote access to care.**
- **Identify & eliminate regulatory and financial barriers and create incentives for expansion & innovation.**
- **Develop a set of measures to ensure value and return on investment in rural health education.**
- **Support and test alternative payment models that enhance team-based interprofessional practice.**
- **Authorize the creation of a Strategic Plan for Rural Health Workforce Financing Reform.**

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Brief Overview of Current GME Financing in the United States

Educating a doctor is both intense and expensive. In the U.S., students pursuing a career in medicine must complete, at minimum, a four-year baccalaureate degree, and another four years of medical school. Upon completion, new physicians begin their medical careers with a *mandatory* phase of training known as *residency* or *graduate medical education (GME)*, before they can enter independent practice.

Under the premise that a strong physician workforce is a vital public good, the federal government has supported a substantial portion of the cost of GME since 1965.^{10,11,12} The Centers for Medicare & Medicaid Services (CMS) provide most federal GME spending through direct graduate medical education (DGME) payments to hospitals with medical residency programs to cover the costs of training, and indirect medical education (IME) funds to cover ancillary expenses. In fiscal year (FY) 2018, the Congressional Budget Office estimated that total federal GME spending exceeded \$15 billion.¹³ Teaching hospitals also receive funding from other federal agencies, including the Health Resources and Services Administration (HRSA), the Department of Veterans Affairs (VA), and the Department of Defense,⁹ as well as from state governments and private sources.

Congress imposed a legislative cap on federal funding for GME in 1997. However, since that time the number of residents in training has increased by approximately 27%.¹¹ The growth of medical residency programs appear to have been driven more by consideration of hospital based training programs than national or population health needs. Thus, most new residency positions have been located in urban areas of northeastern states, and focus on expanding medical specialty programs in urban hospitals. Despite this investment, there has been little increase in rural training.¹⁴ The resultant geographic and specialty maldistribution of physicians limits access to health care for many rural communities.

The huge investment of federal financing for hospital-based GME does not evenly address the needs of all Americans and leaves rural areas in a state of persistent shortage. In a [2009 letter](#) to the Secretary of the Department of Health and Human Services (HHS Secretary) and Congress, COGME noted that “financial concerns have affected the majority of teaching hospitals’ decisions about selection of training positions.”¹⁵ To counter this trend, COGME calls for immediate policy action to advance the sustainable financing of rural training and practice, and develop strategic planning to build a more flexible, dynamic, and interprofessional rural workforce.

Expanding and Extending Successful Place-Based Training Initiatives

Studies have indicated that many physicians choose to practice in settings near where they completed their residency training.¹⁶ Place-based training initiatives that provide more residency training positions in rural hospitals and community health facilities have demonstrated the ability to produce graduates who remain in rural areas. We highlight below several of these initiatives as GME ‘bright spots.’ These programs could be expanded and scaled to promote better alignment between rural needs and public GME financing, but they need sufficient, predictable, and sustainable funding in order to grow.

Teaching Health Centers Graduate Medical Education

Created nearly a decade ago through funding from HRSA, the Teaching Health Centers Graduate Medical Education (THCGME) program supports primary care medical and dental residencies. Most THCGME training sites are located in rural or other underserved areas, and provide training to medical residents in primary care specialties – including family medicine, internal medicine, pediatrics, and obstetrics and

gynecology. Early analyses suggest that residents who train at THCGME sites are more likely to remain in primary care and work in shortage areas such as rural communities than their non-THCGME peers.¹⁷

Furthermore, an initial review indicated that the THCGME program has the potential to generate health system savings far beyond its costs.¹⁸ However, this program has faced ongoing sustainability issues in terms of both the adequacy of its payment per resident and the length of its Congressional appropriation.¹⁹ In a [2017 letter](#) to the HHS Secretary, COGME referred to the THCGME program as an “unqualified success” and called for it to receive “consistent, reliable, long-term funding ... to meet the healthcare workforce needs of our nation, and to improve access to primary care for all.”²⁰

Rural Residency Planning and Development

The new Rural Residency Planning and Development (RRPD) program, a grant program from HRSA, addresses the physician workforce challenges in rural communities by promoting new rural residency positions in generalist disciplines such as family medicine, internal medicine, public health and preventive medicine, psychiatry, general surgery, and obstetrics and gynecology. The focus is on producing physicians who will practice in rural communities. Residents train in rural sites for greater than 50 percent of their residency time.²¹ While it is too soon to evaluate the long-term outcomes of RRPD program graduates, evidence suggests that many RRPD graduates will remain in rural communities.^{22,23}

One common model is the 1+2 Rural Training Track (RTT), where the first year of training takes place within a larger program, often in an urban hospital or academic medical center, and the final two years are completed in a rural health facility.²¹ HRSA has funded some RTTs in an attempt to train and support more rural practitioners; in FY 2018, a \$15 million appropriation provided for the development of new tracks, with an additional \$10 million appropriation in FY 2019.¹¹ Among one group of residents graduating from an RTT program in Spokane, Washington, 80% went on to provide rural care.²⁴

Other Initiatives and Programs

To address the care needs of Veterans in rural communities and other shortage areas, the VA MISSION Act of 2018 provided funding for GME expansion, along with other grants aimed at increasing the number of rural health care professionals.²⁵ The MISSION Act addresses one of the most challenging environmental barriers to rural training expansion by supporting start-up costs, including those associated with faculty recruitment, accreditation, and curriculum development.²⁶

Another legislative initiative is the Health Careers Opportunity Program (HCOP), first authorized in 1972. HCOP funds the National HCOP Academies, which offer a range of academic and social assistance programs to individuals from disadvantaged backgrounds that provide them with the resources to compete for entry into health professional programs, including medical school. One goal of HCOP is to promote community-based health profession training in primary care, emphasizing training in rural and underserved communities. HCOP is a proven and successful program to bolster the rural health workforce and improve workforce diversity. In 2020, COGME [submitted a letter](#) to the HHS Secretary and Congress recommending continuation of and increased funding for HCOP.²⁷

Two other HRSA programs, the National Health Service Corps (NHSC) and the Nurse Corps, continue to demonstrate value through placing primary care providers in Health Professional Shortage Areas (HPSAs). Both programs award scholarships as well as loan repayment in return for service in areas with limited access to health care. Half of participants working in NHSC positions have remained in a HPSA-designated area ten years after completing their service commitment.²⁸

Identify & Eliminate Regulatory and Financial Barriers and Create Incentives

Regulatory barriers, often unintended, hinder the development of rural residency programs. As an example, the 2003 *Medicare Prescription Drug, Improvement, and Modernization Act (MMA)* redistributed approximately 3,000 residency positions across U.S. hospitals in an attempt to increase both primary care and rural training. Between 2004 and 2008, the net increase in primary care positions was 1,585, compared to 3,433 for non-primary care positions. Of the hospitals receiving new positions, only 12 were rural, and they received only 3% of the new positions.²⁹ The relative lack of growth in primary care and rural residency positions indicates that this legislation failed to fulfill its intended outcome.

Meanwhile, financial barriers persist between urban and rural areas. A 2013 analysis by Mullan, Chen, and Steinmetz highlighted large geographic disparities in the amount of Medicare-funded training received by different states. In the State of New York, the average Medicare GME payment per capita was \$103.63, with an average payment per medical resident of \$139,126; in the State of Wyoming, Medicare GME payment per capita was only \$2.91, with an average payment per medical resident of \$43,908.³⁰ Similarly, residency sites that train primary care physicians receive far less Medicare funding for their programs; the institutions that produce the lowest percentage of primary care physicians (6.3%) received \$842.4 million in Medicare payments annually from 2006 to 2008, whereas those that produce the highest percentage (41%) received only \$292.1 million.³¹

CMS should act to **eliminate** regulatory barriers that inhibit expansion and flexibility in rural training programs and to **craft specific regulations and incentives** to increase rural access to essential health care services. CMS could offer cap flexibility to sponsoring institutions that develop new programs, such as RTTs, that focus on specialties facing workforce shortages in rural areas. This flexibility would allow small, developing residency programs with limited capacity and resources more time to increase the number of slots funded through CMS and to build a sustainable GME program.^{10,14,32} On the financial side, CMS and other agencies could create other incentives that permit rural hospitals to establish fair ‘total resident amounts’ for GME funding and decrease the disparities between urban and rural funding.

Develop & Implement Outcome Measures that Align GME Investment with Rural Needs

Addressing rural health disparities requires developing and implementing outcome measures that encourage better alignment between residency training investments and the needs of rural areas.⁴ These measures must cover all GME financing, not just funding targeted toward rural programs. They would aim to identify workforce gaps to ensure value and return on investment of public funds directed toward training. Building on the health systems research and analytics expertise of the Agency for Healthcare Research and Quality and lessons learned from evolving initiatives such as the Children’s Hospital GME Quality Bonus System, these metrics could serve as goals for residency training programs, and might also be incorporated into the GME accrediting process and financing models.³³

Measures should focus on outcomes that ensure the appropriate geographic distribution and mix of health professionals needed to meet the diverse health needs of rural communities. They should also address workforce diversity and cultural competence, so that the local workforce reflects the communities being served. The measures should focus on processes that address the competencies specific to rural practice locations such as generalism, comprehensive practice, care coordination, community engagement, and team-based health care.³⁴ The ultimate goal is to develop and implement measures that assess whether federal investments in training increase the capacity of the rural healthcare workforce to provide needed care, improve access to services, and enhance quality of care and population health.

Support and test sustainable alternative payment models that enhance the delivery of team-based interprofessional education and practice in rural areas

Making rural residency programs both attractive and sustainable, and rural practices more financially viable, requires creating new, innovative, value-based funding streams. CMS directs its GME financing almost exclusively through hospitals. However, many of the place-based training programs described above offer care in community-based clinics or other outpatient settings.³⁵ Also, in the current health care system physicians and other clinicians are most often reimbursed based on the number of services they perform, without regard to patient health outcomes.³⁷ This volume-based model fails to accommodate the circumstances of rural training, meet the needs of rural populations, or reward the efficient population-based care employed by many rural practices.

There have been calls to update the GME financing models, including trials of alternative payment models (APMs) that link payment to the value of the care provided, and take into account local need and availability of resources.³⁸ Noting that current models discouraged training in community based settings, the Institute of Medicine called for a GME overhaul to move toward outcomes-based payment, and for the creation of a ‘Transformation Fund’ capable of financing innovative payment models and pilots.³⁹ There was specific mention of increased funding for educational entities such as community health centers and regional workforce consortiums, which allow multiple community stakeholders to adopt shared ownership for education that meets community need and permits distribution of the benefits associated with residency training across multiple community settings.^{40,41}

Working collaboratively with public (i.e. Medicare and Medicaid) and commercial payers, CMS should develop innovative population-based health payment strategies for rural training. An example might be a model designed on a capitated Per Member Per Month (PMPM) basis.⁴² This transformation in payment mechanisms for rural team-based practices would provide sustainable revenue streams and help these practices to leverage technology (e.g. telehealth, telephone, e-mail, and text messaging) to enhance access to care and quality of care, while maximizing health outcomes and controlling healthcare costs. Team-based, capitated, population-based health payment models will also create a pathway towards practice viability, promising to improve well-being and lower burnout for rural health professionals.

Opportunities for immediate agency action could involve CMS tasking its Center for Medicare and Medicaid Innovation (CMMI) to develop and deploy pilot testing for APMs to support team-based rural interprofessional training and practice, along with enhanced coordination between HRSA, the Veterans Administration, and state governments.

Create a Strategic Plan for Rural Health Workforce Financing Reform

The recommendations in this brief outline a series of short-term actions needed to enhance health workforce capacity in rural communities. However, COGME believes that a longer-term strategic plan is needed for investing in health workforce training across the professional continuum for rural populations. Its development should include key rural stakeholders, non-physician professionals, and international medical graduates. Furthermore, it would need to build on “bright spots” and expand the programs already underway to address rural health needs, such as the THCGME program, RRPD, HCOP, and the Nation Health Service Corps and Nurse Corps. Some rural regions have multiple federal programs that operate independently with no coordination with each other or between other related programs and entities. A strategic plan could spearhead greater integration between federal and state efforts to promote lasting innovation in health professional education for rural populations.

The U.S. Government Accountability Office has issued several reports recommending such a national plan.^{14,43,44} The National Health Care Workforce Commission, authorized in 2010 under the Affordable Care Act but never financed, could serve as a potential pathway to gain expert input into design and oversight from federal and public stakeholders.⁴⁵

New financing or financing reforms should focus on promoting a more generalist, dynamic, and flexible health workforce. Vital elements to consider include team-based care to address the specific health needs of rural populations, and infrastructure development to enable access to and use of cutting-edge technology and communications. Practicing in teams promises to improve access to care while promoting provider resilience and reducing burnout. Reforms should include strategies for implementation, accountability, sustainability, and governance. The health workforce training needs in rural areas will be discussed in greater detail in COGME's third rural health Issue Brief.

COGME previously recommended a national strategic plan for GME to build a dynamic and agile GME system that better addresses the nation's physician workforce needs.⁴⁶ This new recommendation would build on a national plan by specifically focusing on increasing access to essential health care services for rural areas and improving the health of rural populations.

[Note: At the time of the preparation of this Issue Brief, several items of legislation had either recently passed or were under consideration related to the COVID-19 pandemic, including the [CARES Act](#), and [PL 116-260](#), specifically sections 126 and 131. While parts of these legislative actions address health care training and GME financing and thus affect the rural health workforce and rural health care, COGME has not had time to fully review these actions and evaluate their impact. The Council plans to communicate its evaluations and recommendations in future correspondence.]

COGME Recommendations:

To address the crisis in access to care for rural populations and develop a health professional education system that increases rural health workforce capacity, COGME recommends that Congress and the Department of Health & Human Services act immediately to:

1. Extend and expand successful place-based training initiatives that promote access to care for rural communities:

- Authorize permanent funding to stabilize and expand the Teaching Health Center Graduate Medical Education program.
- Authorize additional start-up and permanent funding for Rural Residency Training Programs, including HRSA's Rural Residency Program Development Grants and Rural Training Tracks as specified by the HHS Secretary.
- Continue and expand support for other HRSA programs that provide place-based, interprofessional training.
- Encourage and incentivize state and local investment in rural, place-based training programs.

2. Identify and eliminate regulatory and financial barriers and create incentives to health professional education, training expansion and innovation that promote rural population health, to include the following steps:

- Direct CMS to eliminate regulatory and financial barriers that inhibit the development of rural residency programs.
- Enable rural-specific training expansion for disciplines identified as in shortage and offer regulatory flexibility in rural training programs that promote rural health access.
- Offer Medicare GME cap flexibility or exceptions for sponsoring institutions starting new rural-based training programs, such as Rural Training Tracks, in needed specialty and geographic areas.
- Craft regulations that permit rural hospitals to establish fair 'total resident amounts' consistent with their higher costs of training.

3. Direct the HHS Secretary to develop a set of measures that ensure value and return on public investment in GME financing with a focus on rural areas, to include the following steps:

- Utilize workforce measurement and health systems expertise at HRSA and the Agency for Healthcare Research and Quality. Draw on experience gained from the Children's Hospital Graduate Medical Education Quality Bonus System, the Teaching Health Center Graduate Medical Education program, and other programs.
- Develop measures of the diversity and cultural competence of the workforce, to ensure that the workforce is concordant with the communities being served.
- Require CMS to create mechanisms of financial accountability for GME payments, for all GME programs, and link financial accountability to downstream training outcomes including patient outcomes, population health, and health professional wellbeing and resilience.
- These and other measures should be used to ensure that changes to GME financing actually improve care quality in rural and other settings.

4. Support and test sustainable alternative payment models (APMs) that enhance the delivery of team-based interprofessional education and practice by:

- Increasing the number of community and team-based rural training programs receiving public graduate medical education financing.
- Creating pathways for financing innovative GME payment models that support rural health teams and sustainable team-based care models.
 - Design and coordination should be organized at the level of the HHS Secretary to encourage the involvement of all HHS agencies with GME interests, and specifically involve enhanced coordination between HRSA, the Veterans Administration, and state governments across their portfolio of GME funding initiatives.
 - Specific funding should be directed through HRSA, CMMI, and the VA to encourage innovative payment mechanisms to achieve national and community level goals for the health workforce.
 - Mandate coordination between HRSA and CMS to develop and deploy pilot tests of APMs that support team-based, rural interprofessional training and practice.
 - Align CMMI alternative payment models for practices (e.g. the Primary Care First model) with those initiated for rural training
- Engaging GME and other health professions accreditation bodies and key stakeholders to address the needs of new rural training enterprises and their faculty.
- Working collaboratively with public (i.e. Medicare and Medicaid) and commercial payers to develop innovative population health payment strategies, such as per member per month (PMPM) models, that encourage team-based care, enhance provider well-being, and lower burnout.
- Requiring that new APMs encourage interprofessional teams and networks, and contain plans to ensure sustainability.

5. Authorize the Secretary of Health & Human Services to create a *Strategic Plan for Rural Health Workforce Financing Reform*, which will:

- Identify and scale existing “bright spots” that address rural health needs.
- Explore GME financing reforms that incentivize team-based training and generalist practice.
- Create a network and support system for rural clinicians across their career continuum.
- Highlight means of achieving parity in telehealth and telephone visit reimbursements, to promote greater access to care.
- Propose methods for ongoing federal evaluation of the financing, implementation, accountability, wellness, and sustainability of rural health workforce training.
- Coordinate interagency and federal-state efforts to promote long-term innovations in health professional education for rural populations.

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 on these issues.

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.

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