

Rural Primary Care Physician Workforce Expansion: An Opportunity for Bipartisan Legislation

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Introduction

The primary care physician workforce crisis has eluded solution for many years. Concerns raised 5 years ago about nadir of interest in primary care careers by medical students are now realized, as the proportion of residency graduates from our nation's teaching hospitals entering primary care careers, particularly to underserved rural areas, has hit an all-time low.^{1,2}

There is an estimated shortage of 16 000 primary care physicians (PCPs) necessary to meet today's needs; this deficit will grow to 52 000 in the next decade.³ An aging population, with an aging population of physicians themselves, will exacerbate this situation. When the Affordable Care Act (ACA) is fully implemented, more than 25 million newly insured Americans will rely not only on the existing deficient physician workforce but also on physicians currently in training. We believe that expansion of primary care graduate medical education (GME) to address this shortage is urgently needed, and represents an opportunity for bipartisan support of GME expansion legislation.

The Physician Workforce Policy Vacuum

Linking ambulatory GME with care for the underserved in community health centers (CHCs) was proposed in 1986.⁴ An Institute of Medicine workshop and study⁵ published in 1989 included many recommendations that, if implemented, could have reduced the primary care access crisis. Legislation establishing the Council on Graduate Medical Education (COGME) was enacted in 1986, and for the past

27 years COGME has served as the principal advisor to Congress on physician workforce issues. COGME has issued 21 reports, most speaking to the shortage of PCPs and physician maldistribution, yet to date has had relatively little impact on GME policy. In 2010, the ACA authorized the creation of a Health Workforce Commission. However, this body remains without funding and has not met,² and the physician workforce policy vacuum persists.

A New Model for Rural Teaching Health Centers

In this article, we discuss the absence of workforce policy, despite more than 25 years of recommended initiatives to address physician shortages, especially for underserved populations. We (1) suggest that teaching health centers (THCs) should be a major component of physician workforce policy and GME expansion legislation; and (2) propose a modification and expansion of the current ACA-funded program of GME payments for THCs (the THCGME program) as an optimal approach to develop rural THCs and thereby expand the rural primary care physician workforce.

As a model for consortia that would facilitate the development of rural THCs, we first propose utilization of a previously described consortium model⁶ that facilitates the creation of community health center and academic medicine partnerships called "CHAMP" THCs. Second, we propose rural THCs as a key component of primary care GME expansion. Finally, we recommend that CHAMP THC and rural THC residency positions should constitute a major percentage of new positions established under GME expansion.

An Opportunity for GME Accountability

Interest in expanding GME funding via proposed legislation presents a new opportunity to train a substantially increased number of PCPs, and achieve greater GME accountability for meeting the nation's primary care workforce requirements. For more than a decade, the Balanced Budget Act of 1997 has frozen Medicare GME at 26 000 first-year positions.⁷ Recognition that this cap is no longer tenable, particularly in view of an estimated domestic output of 27 000 medical students annually in the next 5 years, has resulted in interest to expand GME via proposed legislation. Recent studies^{2,8,9} suggest that

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without more specific guidance from and accountability to Congress, this expansion may serve the needs of hospitals rather than those of patients and communities. The timing of proposed GME expansion efforts coincides with the potential expiration of an important ACA feature, the THCGME program. This program is built upon the experience of family medicine in the development of THCs in community health centers, with excellent outcomes regarding trainee satisfaction and pursuit of primary care careers, often focusing on care for underserved populations.¹⁰ The THCGME program is small and faces significant funding challenges, and its outcomes have yet to be evaluated. However, early reports from the first THCs have been highly favorable.¹⁰

The CHAMP THC—A Modification and Expansion of the Current CHC Teaching Model

Community health centers are growing at a rapid rate and 1200 CHCs currently provide care for more than 22 million patients in all 50 states.¹¹ These centers have doubled their capacity over the past decade, and between now and 2019 will need to do so again to reach more than 40 million underserved children and adults, many of whom will be newly insured through the ACA. Expansion of CHCs, a crucial element of the nation's primary care infrastructure, will be severely constrained by an insufficient primary care workforce and an inadequate primary care pipeline. To address this problem, we have previously proposed that academic medical centers (AMCs) partner with CHCs to develop a unique type of THC.⁶ This partnership, termed CHAMP, could be developed with CHCs that desire integration with an AMC to strengthen access to subspecialty care and assure better coordination of care among providers and settings. Teaching health centers could enhance medical student interest in primary care careers because of their unique curriculum, combined with the existing incentive of educational debt repayment via the National Health Service Corps.¹¹

The ACA provides \$230 million over a period of 5 years for a limited number of THC programs.¹⁰ However, the rapidly evolving educational and health care delivery needs of our nation are not fully met by this model, which faces uncertain funding without Congressional appropriation in 2015. Building on the projected success of the THCGME program,¹⁰ we have proposed that a new consortium-based expanded CHAMP THC model is needed.⁶ The CHAMP model possesses a number of advantages, the most prominent of which are (1) concurrent training of residents in all 3 primary care disciplines, facilitating their future integrated practice; (2) funding by a more stable and sustainable federal mechanism; (3) promoting high-quality and cost-effective GME achieved by adding a THC track to

Recommendations

- Rural primary care physician shortage should be addressed by bipartisan support of graduate medical education (GME) expansion legislation.
- Rural teaching health centers (THCs) mandated as major component of resultant new positions.
- Current THCGME model should be modified to facilitate development of rural THCs.
- Modification should be accomplished by utilization of consortium model previously proposed for CHAMP THCs.

existing primary care residency programs, leveraging existing administrative and accreditation infrastructure (FIGURE 1); and (4) facilitating rapid residency accreditation and equitable partnership governance and financial policies. The consortium agreement will be critical to achieving the latter.

Rural THCs Facilitated by a Consortium Model

Rural physician production from GME is now less than 5%. In the long term, this probably cannot sustain a rural physician workforce that makes up 11% of all physicians and provides a significant portion of care for the nearly 20% of the American population who lives in a rural area.² These 62 million Americans have higher rates of mortality, disability, and chronic disease than urban citizens. We believe that the inadequacies of our health care system are especially prominent in rural communities and must be addressed.

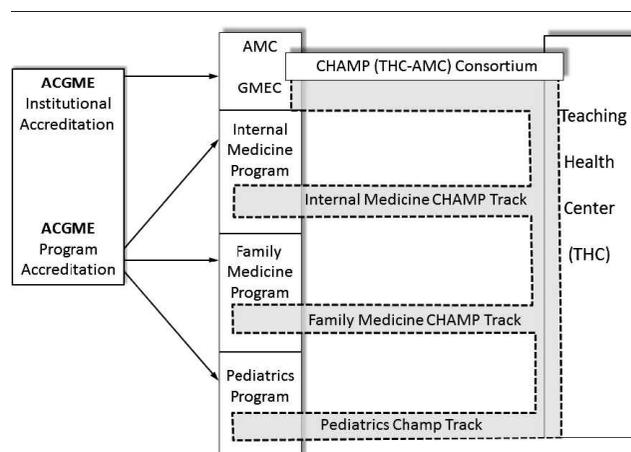


FIGURE 1 THE CHAMP CONSORTIUM MODEL—ACREDITATION IMPLICATIONS

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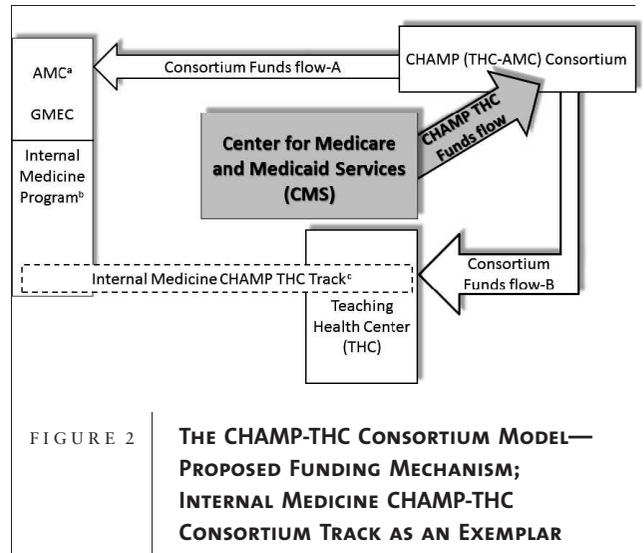
Abbreviations: ACGME, Accreditation Council for Graduate Medical Education; AMC, academic medical center; GMEC, Graduate Medical Education Committee; THC, teaching health center.

There is ample evidence that training in a rural area increases the likelihood of physician practice in rural areas following completion of training, with 25% to 50% of physicians who trained in rural health centers and critical access hospitals returning to practice in rural, underserved settings.^{13–15} We believe partnerships with training settings in rural areas would help shore up the rural physician workforce and would have a high return on investment.

There are clear benefits from using the CHAMP THC model to facilitate partnerships between rural health clinics, rural community health centers, critical access hospitals (approximately 1300 hospitals nationally certified to receive cost-based reimbursement from Medicare), and university and community teaching hospitals in the region, thereby facilitating the development of rural THCs. We believe that there is a critical need for this THC model in order to alleviate the rural physician shortage. Teaching health center rural health consortia could provide a new dimension to the training of rural PCPs, with benefits of this model including:

1. Establishing a THC residency track as a component of an already accredited primary care program in the regional teaching hospital, facilitating ACGME accreditation and oversight of quality,⁶ while obviating the need for duplicative administrative infrastructure;
2. Organizing training through a consortium that would ensure all participants receive appropriate and sustainable support for teaching expenses (FIGURE 2)⁶; and
3. Collaboration with a teaching hospital partner in the design and implementation of the rural residency track.

Rural THCs would not need to be in close proximity to an academic medical center, as is necessary for the CHAMP THC model. They could be designed with greater flexibility for the faculty and primary care specialty components in order to provide for variation of patient population in the rural setting. Creation of rural THCs will present opportunities and challenges for GME in rural areas. Options for rural rotations, rural continuity clinics, or rural training tracks will depend on the number of patients and faculty in the given rural sites. Today's environment with electronic health records and distance education technologies, including video conferencing, may create added opportunities for "electronic" participation in a rural THC consortium. Rural THCs also could generate novel, valuable data for community health services research.¹⁶ This type of network has the potential to create a robust program that could not be provided at



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Abbreviations: AMC, academic medical center; CHAMP, community health center and academic medicine partnerships; CMS, Centers for Medicare and Medicaid Services; GME, graduate medical education; GMEC, Graduate Medical Education Committee; THC, teaching health center.

^a AMC accredited by Accreditation Council for Graduate Medical Education (ACGME).

^b Internal Medicine Program Accredited by ACGME.

^c Internal Medicine CHAMP Track approved by RRC, including THC approval as participating site.

Traditional Funds flow-A. CMS direct and indirect GME funds to AMC for existing internal medicine residents.

CHAMP THC Funds flow-B. CMS per resident GME funds flow to CHAMP THC Consortium for incremental internal medicine CHAMP THC residents.

Consortium Funds flow-A. Consortium Funds flow to AMC for direct and indirect expenses of residents, see text for elements covered.

Consortium Funds flow-B. Consortium funds to THC for direct and indirect expenses of residents for time spent in THC, see text for elements covered.

an individual site. The consortium will allow a larger number of learners to be supported, creating an opportunity for greater interdisciplinary and multi-professional education.

Funding of the New Rural THC Models

Enactment of currently proposed bipartisan GME legislation (Training Tomorrow's Doctors Today Act, HR 1201)⁶ could provide a heretofore unavailable opportunity for selective Centers for Medicare and Medicaid Services (CMS) funding of primary care residency positions with specific accounting for workforce outcomes. This legislation, currently sponsored by Senators Nelson, Schumer, and Reid, as well as Representatives Schock and Schwartz, would be more effective if amended to include THCs and specifying allocation of positions to primary care. Initial support of 1500 CHAMP or rural THC first-year residency

positions of the 3000 added positions proposed would be consistent with the goal of expanding our present primary care rural workforce to meet national needs. Current THCGME annual support is \$150,000 per resident per year for the ambulatory training component. A similar amount would be provided by consortia for the ambulatory training block in rural THCs (FIGURE 2). Teaching hospitals would receive their full direct medical education and indirect medical education CMS support per THC resident via the consortium during hospital training. Teaching hospitals with previously capped positions would gain support for an increased number of residents.⁶

Conclusion

We propose a modification and extension of the current ACA-funded THCGME program to facilitate the creation of CHAMP THCs and rural THCs. Our proposal is dependent on amending recently introduced GME expansion legislation to include funding support for both types of THCs. Sustainable CMS funding would create the foundation for significant expansion of the previously described CHAMP THCs and the rural THCs described here. The GME expansion bill would require an amendment to ensure an efficient flow of support to these THCs.

We view our proposal as an opportunity to improve accountability for the public investment in health profession education and for solving worsening shortages of PCPs for rural underserved populations. There should be little question about the urgency of expanding these effective training models,⁶ and we believe this can be accomplished by amending the recently introduced bipartisan legislation described above, avoiding the difficulty of revising the THCGME program in the present political climate. This rare opportunity for legislation associated with bipartisan enthusiasm is shored up by the longstanding support of CHCs.¹⁷ This would represent a significant first step in the alignment of national GME effort with national health care needs, building on the combined strengths of academic medical centers and the community health center infrastructure—as intended by Congress and called

for by the Association of American Medical Colleges in 1965.¹⁸

References

- Hauer KE, Durning SJ, Kernan WN, Fagan MJ, Mintz M, O'Sullivan PS, et al. Factors associated with medical student's career choices regarding internal medicine. *JAMA*. 2008;300(10):1154–1164.
- Chen C, Petterson S, Phillips RL, Mullan F, Bazemore AW, O'Donnell SD. Toward graduate medical education accountability: measuring the outcomes of GME institutions. *Acad Med*. 2013;88(9):1267–1280.
- Petterson SM, Liaw WR, Phillips RL Jr, Rabin DL, Meyers DS, Bazemore AW. Projecting US primary care physician workforce needs: 2010–2025. *Ann Fam Med*. 2012;10(6):503–509.
- Rieselbach RE, Jackson TC. In support of a linkage between the funding of graduate medical education and care of the indigent. *N Engl J Med*. 1986;314(1):32–35.
- Institute of Medicine. *Primary Care Physicians: Financing Their Graduate Medical Education in Ambulatory Settings*. Washington, DC: The National Academies Press; 1989.
- Rieselbach RE, Crouse BJ, Neuhausen K, Nasca TJ, Frohna JG. Academic medicine: a key partner in strengthening our primary care infrastructure via teaching health centers. *Acad Med*. 2013;88(12).
- Iglehart J. Perspective: the residency mismatch. <http://www.nejm.org/doi/full/10.1056>. Published June 19, 2013. Accessed month, day, year.
- Chen C, Xierali I, Piwnica-Worms K, Phillips R. The redistribution of graduate medical education positions in 2005 failed to boost primary care or rural training. *Health Aff (Millwood)*. 2013;32(1):102–110.
- Weida NA, Phillips RL Jr, Bazemore AW. Does graduate medical education also follow green? *Arch Intern Med*. 2010;170(4):389–390.
- Chen C, Chen F, Mullan F. Teaching health centers: a new paradigm in graduate medical education. *Acad Med*. 2012;87(12):1752–1756.
- Rieselbach RE, Crouse BJ, Frohna JG. Teaching primary care in community health centers: addressing the workforce crisis for the underserved. *Ann Intern Med*. 2010;152(2):118–122.
- Neuhausen K, Grumbach K, Bazemore A, Phillips RL. Integrating community health centers into organized delivery systems can improve access to subspecialty care. *Health Aff (Millwood)*. 2012;31(8):1708–1716.
- Phillips RL, Doodoo MS, Petterson S, Xierali I, Bazemore A. *Specialty and Geographic Distribution of the Physician Workforce: What Influences Medical Student & Resident Choices*. Washington, DC: Robert Graham Center; 2009.
- Rosenthal TC. Outcomes of rural training tracks: a review. *J Rural Health*. 2000;16(3):213–216.
- Phillips RL, Petterson S, Bazemore A. Graduate medical education in the safety net: how much, what effect? *Acad Med*. In press.
- Rieselbach RE, Remington PL, Drezner MK, Golden RN. Expanded community health center–academic medical center partnerships. *WMI*. 2011;110(4):168–169.
- Mickey RW. Dr. StrangeRove; or, how conservatives learned to stop worrying and love community health centers. Chapter 2. In: Hall MA, Rosenbaum S, eds. *The Health Care Safety Net in a Post-Reform World*. New Brunswick, NJ: Rutgers University Press; 2012:108–125.
- Coggeshall L. *Planning for Medical Progress through Education: A Report Submitted to the Executive Council of the Association of American Medical Colleges*. Evanston, IL: Association of American Medical Colleges; 1965.