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Ongoing Self-review and Continuous Quality Improvement Among Family Medicine Residencies

Peter J. Carek, MD, MS; Stacy E. Potts, MD, MEd

ABSTRACT: Graduate medical education (GME) occurs during and is a crucial step of the transition between medical school and clinical practice. Residency program graduates' abilities to provide optimal patient care, act as role models, and demonstrate excellence, compassion, professionalism, and scholarship are key elements and outcomes of successful GME programs. In order to create and maintain the training environment that leads to such outcomes, programs must continually review and revise their patient care and educational activities. Currently, compliance with accreditation standards as determined by individual specialties such as family medicine serves as a common and significant marker for program quality. Compliance with these requirements is necessary but not sufficient if faculty and residents want to achieve the goal of residency training in terms continually improving and optimizing the care they provide to their patients and communities. For overall program improvement to truly occur, the patient care, scholarship, and community activities of current residents and graduates must be assessed and used in program improvement activities. Appropriately applied to programs and using these assessments, quality improvement principles and tools have the potential to improve outcomes of patient care in residents' current and future practice and improve programs in educating residents.

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Graduate medical education (GME) occurs during and is a crucial period of physician development between medical school and clinical practice. The Accreditation Council for Graduate Medical Education (ACGME) highlights this period as the

“vital phase of the continuum of medical education that residents learn to provide optimal patient care under the supervision of faculty members who not only instruct,

but serve as role models of excellence, compassion, professionalism, and scholarship.”¹

This statement reinforces the importance of this phase of development for physicians and provides the vision for the outcome of GME: the residency program graduate providing optimal patient care in addition to acting as role models, demonstrating excellence, compassion, professionalism, and scholarship.

In order to create and maintain the training environment that leads to such outcomes, programs must continually review and revise their patient care and educational activities. The ACGME Program Requirements establish the importance and requirement of ongoing continuous improvement in residency programs, addressing practice and community needs, as well as training residents to develop competence in assessing and adjusting their professional activities. The education and use of the principles and tools of quality improvement (QI) is a potential method for use in such reviews and revisions. QI using patient, practice, and other data to improve training in GME programs is a core requirement. Appropriately applied to programs, QI has the potential to improve outcomes of patient care in the resident's current and future practice and improve programs in educating residents.

Commonly used in the industrial sector, QI is a common sense method that manages human performance using a systematic, data-driven, and integrated approach to quality and the activity in which improvement is

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being sought. In health care, quality improvement is the

“combined and unceasing efforts of everyone—health care professionals, patients and their families, researchers, payers, planners and educators—to make the changes that will lead to better patient outcomes (health), better system performance (care) and better professional development (learning).”²²

Current Review Process for GME

Residency programs utilize specific yet limited measures to assess the quality of training. For programs to fully utilize and experience the benefit of QI, program directors and faculty will need to increase their use of a wider range of measures and benchmarks. Currently, compliance with accreditation standards as determined by individual specialties such as family medicine serves as a common and significant marker for program quality. Compliance with these requirements is necessary, but not sufficient if faculty and residents want to achieve the goal of residency training in terms continually improving and optimizing the care they provide to their patients and communities. Requirements should be viewed as the “floor” for training and programs should seek to excel and achieve beyond them.

To ensure substantial compliance with these standards, programs have been regularly reviewed by the ACGME since its inception in 1981. Accreditation is achieved through the ACGME peer-reviewed process which has undergone revisions over the years.

In 2014, the specialty of family medicine entered the ACGME’s Next Accreditation System (NAS; Figure 1). The NAS focuses on continuous, ongoing assessment and improvement of residency programs based upon current requirements, and moved away from the intermittent program evaluation in the prior accreditation system making ongoing

program evaluation a critical component. The data used in NAS prioritizes to current program requirements, and how these requirements are being met is the standard upon which a program is assessed and accredited.

To prioritize, requirements in NAS are defined as outcome or process requirements. Process requirements are further delineated as core or detail. Programs must meet substantial compliance with program requirements to maintain continuous accreditation. Programs are reviewed annually in NAS by the ACGME Family Medicine Review Committee and evaluated for substantial compliance. Programs in continued accreditation status may choose to innovate around detail requirements. Programs must still demonstrate substantial compliance with the overarching core requirements but may choose to vary the specific methods. Critical to this approach is rigorous assessment of the innovation by the program over time and to determine whether any improvement has occurred.

Programs, particularly in family medicine, are diverse in size and structure, community, and patient demographics. As previously noted, the requirements are set as a minimum standard for all programs while encouraging flexibility to structure the program’s patient care and educational activities to meet specific resident, patient, and community needs. NAS was designed to encourage this innovation in hopes to identify evidence for best practices and thus improve future requirement iterations and generalize those best practice innovations for programs across the country.

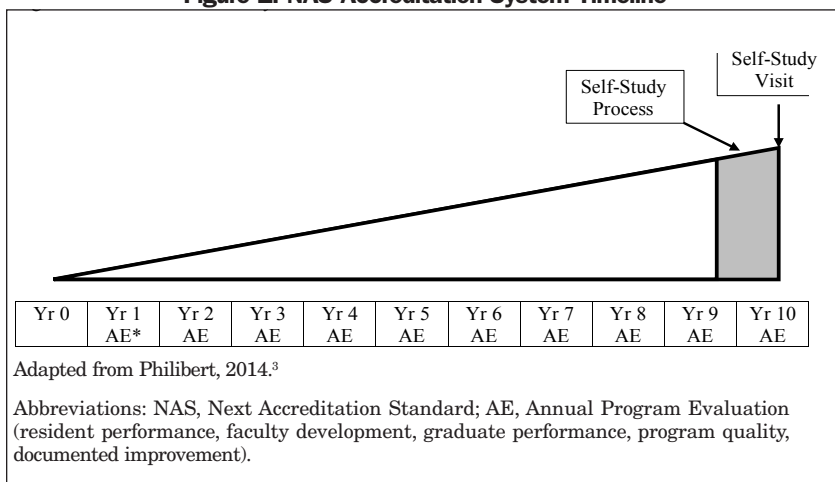
While accreditation itself serves as a QI strategy, a self-appraisal process is critical to ongoing innovation. The Annual Program Evaluation (AE) and periodic self-study process require programs to engage with ongoing improvement beyond the accreditation decision and recommendations (Figure 1). NAS was designed so that programs will learn

to be their best critics and recognize concerning trends before the ACGME Review Committee’s annual review. The AE process provides programs opportunities to recognize and address needs early on and provide reorientation towards mission and goals with response and progress before accreditation decisions are made. The self-study process culminates in a site visit. The site visit and self-study process are intended to focus on a structured improvement process, not on a punitive standard verification process, as programs seek to remain compliant with requirements. The process engages programs, program leadership, and other stakeholders in evaluating strengths and opportunities within the program. The culmination of the site visit allows evaluation of the program improvement process itself by an outside the program organization and recommendations for process and program improvement.³

To assist programs, the ACGME Accreditation Data System (WebADS) facilitates ongoing communication between the program and the ACGME. Programs are expected to maintain faculty and resident rosters, major changes, and response to citations. Annual data reporting by programs is required each summer, including patient volume, demographics, and scholarly activity. The data submitted through WebADS should be used in the QI activities in the residency program, along with other resources available.

The annual review of programs at the ACGME include the program data from WebADS as well as resident and faculty survey data, graduate board pass rates, and program history with citation response and progress reports as required. Program efforts in continuous program evaluation have been described in various specialties.^{4,5} Further study of program QI through the NAS are needed, especially to determine whether improvements are being made and requirements not annually monitored are being met.

Figure 1: NAS Accreditation System Timeline



Integral to the NAS and the process described above, the ACGME uses the submitted program data in Web ADS to identify programs that may be at risk of not meeting requirements that could lead to a negative action against the program. This annual data review is processed first through a data analysis program termed “Spotfire.” The measures used were identified through modeling of what data previously identified programs with short-cycle reviews and what data were most important to individual review committees (Table 1). Thresholds are set to bring these at-risk programs for further review by the committee. Program citations and areas for improvement are identified solely by committee review. The NAS is meant to both identify struggling programs early, and to encourage programs that are doing well to innovate and develop best practices. The ability of this system to use the limited Spotfire measures to predict success of a program on the more in-depth self-study visit or if an improvement in residency training has occurred is not known.

Despite a vast majority of programs meeting substantial compliance with requirements as reflected in a high rate of accreditation, this compliance does not appear to meaningfully translate to residents and faculty based upon the results of a

recent survey.⁶ For instance, a core requirement is that “residents and faculty members must receive data on quality metrics and benchmarks related to their patient populations.”¹ The recent American Board of Family Medicine (ABFM) survey found that a “large majority of residents did not know their panel size.” Furthermore, “about half reported getting feedback on quality or access for their panel of patients, and very few have received feedback on cost or utilization of care for their panel of patients.”³

Compliance with requirements also appears to be poorly translated to faculty as well. In the same ABFM survey, faculty noted the “frequent lack of information about panel size, lack of feedback about quality, access and cost and the relative rarity of patient advisory committees.”⁶ Of particular note, “almost 70% reported

that residents received no systematic feedback on cost of care or referral appropriateness.” As providing optimal and high-quality patient care is a major outcome of residency training, these findings reflect a missed opportunity to emphasize, address, and review the use of patient quality of care measures in residency training.

Finally, compliance with requirements on a program level achieves accreditation and places that program on par with other accredited programs. One could argue that the incentive for programs to excel in any current requirement or to innovate in some manner are neither clearly delineated nor systemically recognized.

Additional levels of supervision and monitoring are present to assist and augment the work done on the programmatic level. The sponsoring institution provides oversight of programs as well through the graduate medical education committee (GMEC). The GMEC provides oversight of learning and working environment as well as of the quality of educational experiences in associated residency programs. The GMEC and sponsoring institution are expected to work with and monitor programs and their improvement activities.

As a key component of the NAS, the ACGME established the Clinical Learning Environment Review (CLER) program. The aim of this program is to promote safety and quality of care by focusing on six areas important to the safety and

Table 1: Spotfire Indicators

<ul style="list-style-type: none"> • Program attrition • Program changes • Scholarly activity • Board pass rate • Clinical experience • Resident survey • Faculty survey • Milestones completion • CLER visit data

Abbreviation: CLER, Clinical Learning Environment Review.

quality of care in teaching hospitals and the care residents will provide in a lifetime of practice after completion of training.⁷ The six areas encompass engagement of residents in patient safety, quality improvement and care transitions, promoting appropriate resident supervision, duty hour oversight and fatigue management, and enhancing professionalism. The impact of this program on specific residency training in particular family medicine is not yet well studied.

Residency Program Assessment and Improvement: Additional Measures are Needed

For residency programs to achieve their full mission and social responsibility of training residents for their current and future practices, four components of the training environment need to be used to assess and improve the overall quality of the program: resident education, faculty development, clinical practice, and community (Figure 2). In addition and just as vital as using data from the residency program, the practice and community activities of the program graduates need to be assessed and used to further enhance the residency training environment. Both the current activities of the residency program and the activities of program graduates must be used in the QI plan-do-study-act cycles used in program improvement.

Resident education is fundamental to GME and needs to include assessments of knowledge, skills, and performance. The ACGME developed milestones for the formative and developmental improvement of individual learners and the ongoing development and continuous quality improvement of the education programs and specialty. The milestones evaluation system provides a roadmap for continuous improvement and development of individual learners' knowledge and skills. Longitudinal milestone ratings provide educationally useful, predictive information to help individual residents

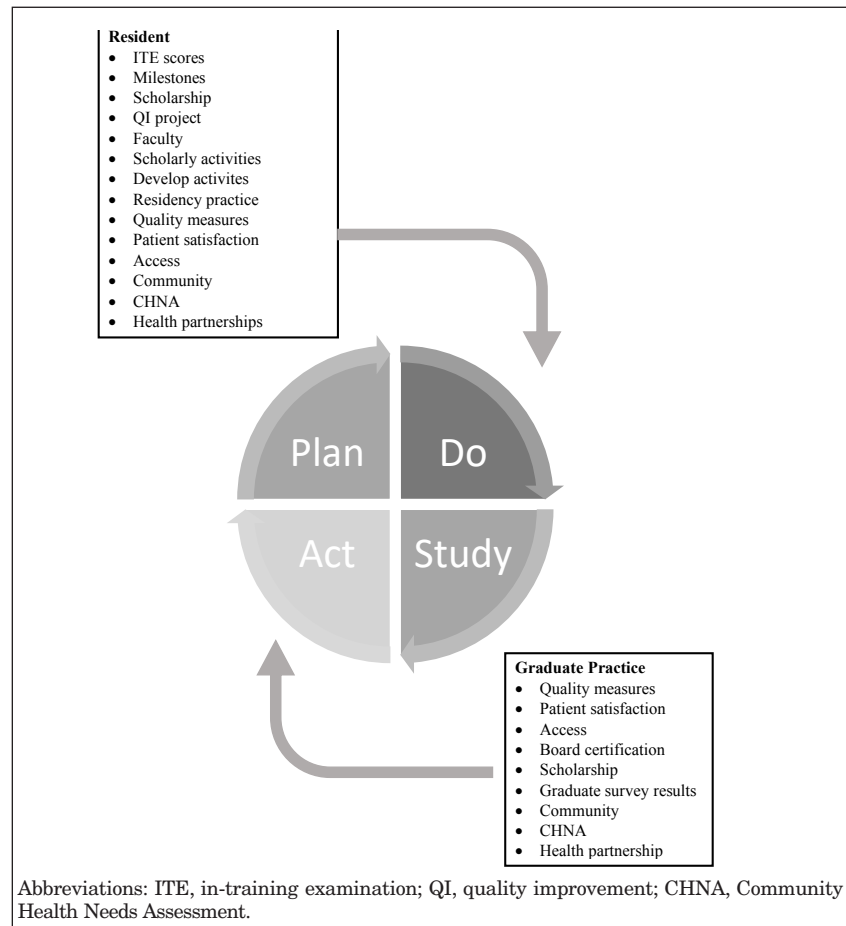
address potential gaps.⁸ Assessment of performance in terms of specific quality of care metrics are not as well integrated into the overall evaluations of residents and their use in an overall evaluation is vital. These quality of care metrics should also be part of the overall program evaluation and serve as an example for the residents of both personal and team-based activity assessment.

The second component of the program for use in ongoing improvement necessary for high quality residency training is faculty development. Faculty development in QI and how to use its principles and tools to enhance resident education and patient care appears underdeveloped. Specifically, a major and common challenge to training residents in QI is the availability of faculty with the expertise to teach and

mentor QI curricular initiatives.⁹ Faculty are key contributors to resident knowledge of QI, and this role modeling will engage learners in the process as well.

The third component of ongoing improvement is the clinical practice of the residency program. The program must provide residents and faculty members data on quality metrics and benchmarks related to their patient populations. This information should be included in inter-professional QI activities and should be regularly monitored so as to evaluate the success of any improvement efforts. Initiatives and activities such as patient and family advocacy committees must provide input to the practice efforts in improvement to provide patient-centered approaches to education and care.

Figure 2: Quality Improvement Drivers for Residencies



The health of communities around the residency program is another component for use in improvement activities. The formal community needs assessments such as the Community Health Needs Assessment (CHNA) must provide input for practice settings to drive the residency to serve the specific needs of the community and larger populations. Community needs and outcomes can serve as additional measurements of program effectiveness.

For example, the University of Florida Department of Community Health and Family Medicine used geocoding to determine hotspots for hospital readmissions. This information was used in a QI project that led to a significant decrease in the readmission rate to an inpatient family medicine team.¹⁰

For overall program improvement to truly occur, the patient care, scholarship, and community activities of graduates need to be assessed and used in program improvement activities. Currently programs are only required to monitor board pass and certification rates of graduates. Feedback from a program's graduates is vital feedback for program improvement. Currently the ABFM conducts a survey of graduates of family medicine residency programs and this information has been used in several studies. If and how these data are used by individual programs is not well studied. Graduate surveys conducted by numerous family medicine residency programs have provided invaluable information and assessment about the work and activities of these graduates.¹¹

Going Forward— Recommendations for the Future of Residency Training

As recently noted by members of the ABFM,

“We must construct a system of family medicine residency education across the country that will more successfully and continually adapt to the needs of society and improve outcomes of care and

education while preserving the enduring core of knowledge, skills, and attitudes essential to the practice of family medicine.”¹³

More succinctly, “family physicians leave residencies equipped to address these problems and lead the changes society needs in health and health care.” The benchmarks we use to evaluate and improve family medicine residencies go beyond compliance with ACGME requirements and must include practice and community activities of family physicians as well as specific patient care and community health outcomes.

In family medicine, as in other disciplines, the markers or measures of a high-quality residency training program and the outcomes that training produces in graduates are not clearly and consistently defined nor agreed upon. For family medicine residency programs, these measures should continue to use compliance with ACGME requirements. Though these requirements currently include addressing the health care needs of the greater community served by program and sponsoring institution, specific measures need to be included in the revised requirement language so as to be used as a benchmark for success in this area. For instance, the measures of requirement compliance and program quality should include an assessment regarding community health, such as the CHNA. Programs should be required to explain how they use community-oriented data to address specific health care needs noted in the practice and surrounding community.

To highlight the importance of patient care during residency training, resident and residency-specific quality of care measures need to be reviewed and used as an evaluation tool. For instance, each resident and faculty should know their compliance with the following measures as the reflect significant health care issues and problems for our country: rate of tobacco use, blood pressure control in patients with hypertension, lifestyle

activities (particularly diet and exercise pattern) of patients, blood sugar control in patients with diabetes mellitus, depression screening, alcohol and other substance of abuse screening, and immunization status. These statistics should be included in the annual program evaluation and the current results and benchmarks the program is using for improvement should be included.

Furthermore, measures of a residency program graduate beyond the training period needs to be included in the overall assessment and improvement activities of a residency program. The ABFM graduate survey is an important tool in this area.¹² This tool has been used in the literature to further assess family medicine residency training.¹⁰ The discipline needs to go beyond this graduate survey and include patient quality of care measures, patient satisfaction surveys, and community activities of graduates.

In summary, the principles and tools of QI can be valuable as the discipline of family medicine seeks to continually improve residency training and provide our society with family physicians who meet the needs of patients and communities. To do so, meeting ACGME program requirements is necessary, but not sufficient. Our discipline needs to expand the measures and benchmarks we use to assess programs and provide the support needed for the programs to improve to meet the health care needs of a diverse and growing population.

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Social Accountability and Graduate Medical Education

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ABSTRACT: Because graduate medical education (GME) is largely publicly funded, it should be judged on how well it addresses the public's health needs. However, the current system distributes GME resources inequitably by specialty and geography, and neglects to focus on training physicians adequately in the care of populations while reducing health disparities. Instead, GME continues to concentrate training in hospital-based academic centers and in subspecialties, which often exacerbates disparities in health outcomes and access to care. GME can be more socially accountable by shifting incentive structures to support primary care, creating more equitable distribution of residency slots and funding, and promoting training programs that focus on social and structural determinants of health.

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Social accountability is the measure of institutional response to society's needs. It is often used to frame government accountability to its citizens, but it is also highly applicable to institutions of medicine. For health care to be socially accountable, it must be equitably accessible to everyone and responsive to patients, community, and population health needs.¹ For graduate medical education (GME) to be socially accountable, institutions must commit to training graduates who can work collaboratively with communities, governments, health systems, and the public to address health disparities and contribute to adapting the health system to better meet community needs. Bold and expansive thinking and transformational change in GME will not occur if we only tinker with the existing GME structure. We can meet this challenge by aligning all components

of GME. In this paper, we specifically discuss how GME can become more accountable to community needs by addressing GME funding systems, institutional and residency-level accreditation systems, and family medicine residency programs.

Medicare Funding for GME

In order to have substantial and sustainable change toward social accountability, the funding system must incentivize medical education that meets community health needs. Current policies and practices of funding for GME are poorly aligned with community needs, although most GME funding is public. Funding the most needed specialties in the most medically underserved areas has not been a priority. Since 1965, Medicare and Medicaid have been the largest source of financial support to residency programs nationwide followed by Veterans

Affairs (VA) and Health Resources and Services Administration (HRSA), all costing the public billions of dollars annually. The most recent estimated cost was nearly \$19 billion—\$12.5 billion from Medicare, \$4.2 billion from Medicaid, \$1.75 billion from the VA, and \$451 million from HRSA.² Taxpayers have a right to scrutinize the outcome of their investment. However, Medicare GME payments are hospital-centric, formula-based, and not tied to local or national community needs. The requirement that residency programs be accredited in order to receive this public funding is one of the few accountability mechanisms that currently exist.³ The 2014 Institute of Medicine report, *Graduate Medical Education that Meets the Nation's Health Needs*, called for both transparency in where GME funds were spent, and accountability as to how funds were targeted.³ Unfortunately, these recommendations were mostly ignored, and current federal policy makes changing the focus of GME funding challenging.

Compounding the problem, the Balanced Budget Act capped the number of Medicare-funded residency positions in 1997. Hospitals can expand residency programs beyond

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the cap but will not receive additional Medicare payments for these trainees. Thus, clinical departments must self-fund residency positions exceeding the cap. This leads to a disproportionate growth of better-funded subspecialties compared to currently less profitable specialties such as primary care. In a 5-year period after the passage of the Balanced Budget Act, subspecialty training grew at a ratio of 5:1 compared to primary care.⁴

Such cost control measures do not necessarily support improved community health outcomes. An increased ratio of primary care physicians to specialists in a community increases overall health, decreases cost,⁵ and is associated with increased life expectancy.⁶ Still our current GME system does not train enough primary care physicians, nor does it train them in the places where they are most needed. In 2019, only 9% of residents in all Accreditation Council for Graduate Medical Education (ACGME) training programs nationwide were training in family medicine.⁷ Family medicine is the specialty that most closely mirrors the rural/urban distribution of

the general population. Significantly, family physicians represent the largest proportion of primary care physicians in rural areas.⁸ While internal medicine does provide some primary care physicians, the vast majority of internal medicine residents subspecialize.⁹ Pediatrics follows a similar trend.¹⁰

Currently, Medicare-funded GME resources are also disproportionately concentrated in the northeastern states (Figure 1). These states have more physicians, more Medicare-funded GME slots, and more funding for those slots per 100,000 population. For example, Montana has 1.63 Medicare-sponsored residency slots per 100,000 population while New York has 77.13. Similarly, Louisiana's residents are funded at \$63,811 per resident per year, while Connecticut's are funded at \$155,135.¹¹

This maldistribution of training positions and funding leads to inequitable distribution of physicians. New York and Massachusetts not only have some of the highest numbers of Medicare-funded GME slots in the nation but also have the highest physician density per 100,000

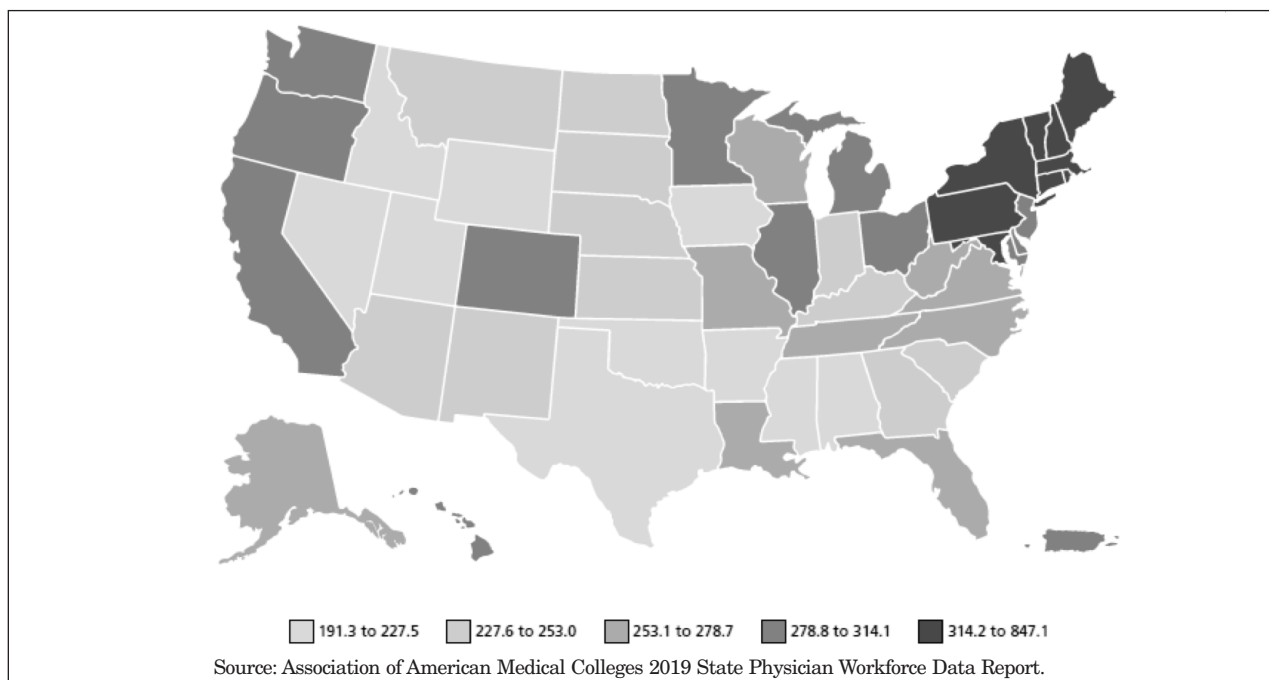
population. This contrasts with Wyoming and Idaho that have some of the fewest GME slots per 100,000 population as well as the lowest physician density in the nation.

In addition, only DME (Direct Graduate Medical Education funding), not IME (Indirect Graduate Medical Education funding), funds GME in community settings, even though this is where most health care takes place. Full funding, including both DME and IME, only applies to training in teaching hospitals or at teaching hospital-affiliated clinics.³

Medicaid Funding for GME

In 45 states and the District of Columbia, over \$4 billion of Medicaid funds are spent to support GME annually. Unfortunately, Medicaid GME is largely directed in a manner similar to Medicare GME, with a formula-based, hospital-centric distribution of funds. Only a few states direct all or some of these payments to address primary care shortages or underserved communities.¹² States can utilize Medicaid to create community-based GME programs that meet community needs.^{13,14} In order

Figure 1: Active Physicians per 100,000 Population, 2018



to do this, state governments need to uncouple Medicaid GME dollars from Medicare GME allocation formulas. States have more direct control of how these funds are spent and thus can create state-based, socially-accountable GME programs in their own communities while directing these funds toward the greatest health care and workforce needs of the state.¹²

Recommendation 1

Congress should act to direct the Centers for Medicare and Medicaid Services (CMS) to address the lack of social accountability that exists in the current funding method of graduate medical education. They must utilize the reports available to them such as the 2014 National Academies of Medicine (previously Institute of Medicine) report *Graduate Medical Education That Meets the Nation's Health Needs*. Congress should direct CMS to build a new GME financial infrastructure with focus on these recommendations:

Recommendation 1a

CMS should offer clear guidelines regarding budgetary accountability for how GME funds are spent that are consistent with the use of public funding to meet community needs.

Recommendation 1b

CMS should set national goals to incentivize primary care, particularly family medicine, to address community needs nationwide.

Recommendation 1c

CMS should utilize data on residency program graduate specialty, practices, and location to target funding toward meeting societal needs for specific specialties where they are needed.

Recommendation 1d

CMS should allow nonhospital venues (Federally Qualified Health Centers, Rural Health Clinics, Indian Health Services) access to GME funding to train residents in

community settings where the majority of care takes place.

Recommendation 2

States should utilize Medicaid to create state-based GME funding designed to meet community needs.

Recommendation 2a

State governments should uncouple Medicaid GME dollars from Medicare GME allocation formulas in order to accomplish this.

Accreditation of GME Institutions

In addition to realigning GME funding toward needed specialties in underserved areas, changes are also needed in accreditation policies for training institutions and residency programs to improve social accountability. The ACGME's concern is predominantly focused on quality in education of and service by residents within hospital and clinic walls. But how is quality defined? Advanced models do exist in other countries. Canada, for example, has developed a set of guiding principles for medical education that explicitly includes social accountability. This model, endorsed by all Canadian faculties of medicine, focuses on community health and social determinants of health equity. It is part of a global movement supported by the World Health Organization.^{15,16}

In the United States, similar efforts have not been as strongly endorsed. In 2010, Mullan et al published medical school rankings on social responsibility; by aligning metrics with global social accountability efforts, the report upended traditional methods of ranking medical schools.¹⁷ Key criteria defining social ranking included number of graduates in primary care, working in underserved communities, and representing underrepresented minorities. Many of the usually top-ranked medical schools fell toward the bottom in social responsibility rankings. The authors faced great criticism, especially from leaders of institutions accustomed to high

rankings on traditional measures of research grants, selectivity, national board scores, and peer recognition, all of which correlated poorly with the degree to which graduates serve in the most needed specialties in the communities with most need. While these new rankings were applied to undergraduate medical education, a similar model could be adapted to assess social accountability in graduate medical education. The ACGME has made some progress in addressing social accountability in medical education, although it does not as fully embrace the social accountability principles that the Canadian model does.¹⁸

The ACGME's diversity initiative includes common program requirements that have the potential to address social accountability. These requirements include that programs address recruitment and retention of a diverse and inclusive workforce, that program directors create an environment that facilitates residents' ability to raise concerns without fear, that programs address evaluation so as not to rely on first-time board pass rates as a measure of program excellence, and that programs and sponsoring institutions create a professional and respectful environment.¹⁹ These requirements speak to the need to think critically about program and institutional cultures to ensure inclusivity and support for diversity in general, but they do not directly address the inclusion of groups that represent the communities they serve. The ACGME does provide resources and forums for sharing program-specific initiatives, but specific requirements remain vague. Thus, they are insufficient to fully support increased diversity of the physician population.

In addition, through the Clinical Learning Environment Review (CLER) program's Pathways to Excellence, the ACGME provides a framework for achieving health care quality. One of the components of the framework is a recommendation that residents, fellows, and faculty members engage in clinical site initiatives

to eliminate health care disparities.²⁰ However, the 2016 and 2019 *CLER National Reports of Findings* cited that few clinical learning environments were engaged in comprehensive efforts to identify and eliminate health care disparities. It was uncommon for residents, faculty members, or program directors to be involved in these efforts.^{21,22} The efforts the ACGME is taking to address health disparities must be sustained and strengthened as health care disparities persist.

The ethnic distribution in the US population is shifting rapidly, such that within two decades, a majority of our population will be Hispanic/Latino, African American, Asian, Native American and mixed ethnicity. However, the ethnicity of medical students and thus, residents, has not kept pace. This ethnic disparity between physicians and patients portends a negative health impact.²³ Ethnic minority physicians are five times more likely to see ethnic minority patients than are non-Hispanic white physicians,²³ and the concordance of race/ethnicity between physicians and patients leads to better health outcomes.²⁴ In addition, underrepresented minority physicians are more likely to work in underserved communities.²⁵

Equally alarming is the fact that as the nation's wealth is increasingly concentrated in the top 1% of the population, the vast majority of Americans have made far fewer economic gains in real terms. Yet, incoming US medical students' family income has remained steadily in the upper income quintiles, further distancing the socioeconomic life experience of future physicians from that of their patients and communities.²⁶ This disparity could further exacerbate the geographic maldistribution of the physician workforce in the future. To be socially accountable, we need to train physicians that reflect the demographic mix of the communities they serve.

The ACGME must expand current competencies to more fully address the community forces, assets,

and challenges that affect the health of individuals and communities. The ACGME, as an accreditor, can play an important role building social accountability in GME by requiring monitoring of the impact of GME on community health.²⁷ ACGME should set standards for and require measures of social accountability in institutional accreditation standards, specifically focusing on the following recommendations.

Recommendation 3

The ACGME should further develop its institutional requirements to specifically strive for resident racial, ethnic, and socioeconomic diversity that mirrors the diversity of the community the program serves.

Recommendation 4

The ACGME should strengthen the requirements for institutions to utilize community health needs and demographic data as part of institutional and residency accreditation requirements.

Recommendation 5

The ACGME should strengthen systems-based practice or develop a new competency that specifically addresses health disparities.

Accreditation of Family Medicine Residency Programs

To fully achieve social accountability, family medicine training programs must also respond to the specific community needs where their programs are located. In reality, medical care explains only about 10% of the premature deaths in the United States, whereas social and structural determinants of health account for more than 60%.²⁸ While these determinants of health are common across settings at a macro level, there are local nuances that primary care physicians will need to know in order to effectively address community health needs. However, current training is skewed toward academic teaching hospitals, which limits residents' exposure to the complexity of health equity in communities,

including both its assets and challenges. To fulfill our goal of social accountability, we need to think beyond traditional expectations as to where residents train and who trains them.²⁹ We need to consider a broader array of teachers and role models with expertise and a track record for addressing social and structural factors that contribute to health inequities, from social scientists to community health workers. We acknowledge that there are programs with long histories of doing this type of training, however these models are not yet standard for all training programs.

For example, community health workers have been shown to be effective trainers of social determinants to family medicine residents.³⁰ Health extension agents have made a major contribution in linking community health needs with university resources in education, service and research.¹⁴ Social scientists have played a central role in training physicians to be accountable to their communities and to ensuring that residency programs are outward facing and responsive to community needs.³¹

Just as health professionals learn to interpret and address abnormal vital signs, family physicians must now learn to ask about key social determinants of health and address adverse findings. In one study of a network of university and community health centers, 50% of all primary care clinic patients screened for 11 common social determinants had at least one adverse social determinant. Half of those had more than one; many had five or six. This important data was virtually unknown to the clinic or providers because this vital information is not routinely collected.³² Additionally, when primary care clinics hire community health workers (CHWs) to address social determinants, Medicaid-managed care organizations observed higher quality and lower cost for their enrollees.³³ CHW presence is also a benefit to residents who now learn to

practice with a health team providing more comprehensive care.

Additionally, because family medicine training is so heavily focused upon a hospital-based venue, we must find ways of bringing social accountability to life for residents in the inpatient setting. Residents come face to face with health equity issues experienced by their patients daily—whether this entails inequity in access to clinical services, in educational opportunities, in access to nutritious food, or in available transportation. Further, residents often hospitalize patients whose admissions could have been prevented if we addressed such health inequities. In one program, residents on ward teams learned to identify and address health policy challenges simply by asking about each patient, “How could this admission have been prevented?” The outcome included a range of policy changes from reinstallation of taxi vouchers in the ED to the addition of weekend pharmacy hours for the working poor.³⁴ The Family Medicine Residency Review Committee (FM-RCC) should consider the following recommendations.

Recommendation 6

Family medicine faculty should be broadened to include social scientists.

Recommendation 7

Family medicine training should be broadened to include more contributors to the health care team, including community health workers and health extension agents.

Recommendation 8

Residency curriculum should be relevant to the unique geographic and social context of the communities to which programs are responsible.

Recommendation 8a

Extensive exposure to community-based learning experiences that develop a resident’s understanding of, and ability to act upon, social determinants should be required.

Particular emphasis should be placed on vulnerable populations.

Recommendation 8b

Scholarly activity in residency programs should be directed and inspired by the local community’s health needs.

Recommendation 9

The FM-RRC should require evaluation of the skill sets of graduates applicable to community needs and track locations of graduate practices.

Conclusion

Rethinking and reforming GME to better serve the needs of community health and fulfill the demands of social accountability will require reexamination of the funding, accreditation, and physician training in our graduate medical education system. In order for substantial and sustained change leading to a graduate medical education system that is socially accountable, funding reform must be at the forefront. Congress must direct CMS to reform the current Medicare-GME funding system to produce physicians trained to meet community needs. This new system must be data-driven and transparent.

The physicians produced by this GME system must be adequately prepared to address the inequities that exist in our communities and they must represent the racial, ethnic, cultural, and socioeconomic diversity of the communities they serve. The ACGME must continue and further develop its efforts to promote diversity. It should additionally require accountability in institutional accreditation based on community needs data and further develop competencies that specifically address health disparities. In addition, the FM-RRC should further prepare graduates to address health equity concerns by requiring residency programs to increase their health equity training in community settings, involving experts such as social scientists and community health workers.

We believe this transformation is not only possible, but essential to the future health of the United States.

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