

Innovations in Graduate Medical Education

Background

Maryland's All-Payer Hospital Rate Setting System

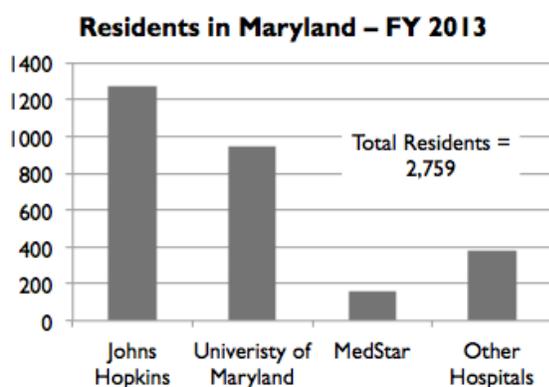
Effective January 1, 2014, the State of Maryland and the Center for Medicare & Medicaid Innovation (CMMI) entered into a new initiative to modernize Maryland's unique all-payer rate-setting system for hospital services. This initiative, replacing Maryland's 36-year-old Medicare waiver, allows Maryland to adopt new and innovative policies aimed at reducing per capita hospital expenditures and improving patient health outcomes. Success of the new All-Payer Model will reduce cost to purchasers of care – businesses, patients, insurers, Medicare, and Medicaid – and improve the quality of the care that patients receive both inside and outside of the hospital.

Maryland, in close partnership with providers, payers, and consumers, is already making significant progress in this statewide modernization effort. As we look toward the future, we understand that success depends not only on modernized payment systems, but also on developing and empowering a physician workforce that is well prepared to serve the health care needs of the population of Maryland in this new population-based environment.

Therefore, in Maryland's modernized all-payer rate setting model agreement with CMMI, Maryland agreed to convene medical schools and schools of health professionals in Maryland to develop a five-year plan that will, "serve as the blueprint for improvement elements necessary to sustain health transformation initiatives in Maryland." Further, Maryland committed that the plan will be generalizable to other states. Maryland confirmed with CMMI that our State's efforts should address reforms to graduate medical education (GME) with an understanding that multidisciplinary training must be a component of a successful physician workforce. Our State committed to submitting this plan to CMMI by January 1, 2016.

Graduate Medical Education in Maryland

Graduate medical education is medical training following the completion of undergraduate medical education (post-baccalaureate medical school). This training, preparing physicians to practice medicine in a specialty through both clinical and didactic training, is referred to as *residency training*. Subspecialty training, referred to as *fellowship training*, is also a component of GME.¹



Source: HSCRC, 2015

Maryland has a proud history of training physician leaders to serve our nation's health needs. Maryland is home to the University of Maryland School of Medicine, the nation's oldest public medical school, and the Johns Hopkins University School of Medicine, the home of the first residency program in the United States. Today, as a total number of graduates, the University of Maryland and the Johns Hopkins University programs train

the largest number of Maryland resident physicians in more than 40 ACGME (Accreditation

¹ From the Accreditation Council for Graduate Medical Education (ACGME).

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Council for Graduate Medical Education)-approved GME programs. With these, along with MedStar hospitals and several other hospitals, Maryland had 2,759 residents² in 61 types of residency specialties in state fiscal year 2013. Most residency programs in Maryland are located in urban areas.

Maryland Funds GME Within Our All-Payer System

The Health Services Cost Review Commission (HSCRC) founders saw GME as a public good and thus a core component of hospital costs that should be funded on an all-payer basis. GME costs include both the direct medical education costs (DME) and indirect medical education costs (IME). DME costs are those directly incurred in the operation of teaching activities and include actual salaries and benefits of residents, faculty supervisory expenses, and allocated overhead. IME expenses are the additional costs incurred because of the teaching function, such as higher costs for ancillary services and other treatment inefficiencies that occur as part of residency training, higher costs of staff and supplies resulting from higher acuity of patients treated at teaching hospitals, and higher costs for early adoption of new technology to support teaching and research.

All payers—including private insurers, Medicare and Medicaid—reimburse Maryland hospitals using HSCRC’s rate structures. This means that all payers contribute to GME through the hospital reimbursement rates. The funding provided to hospitals for GME (both DME and IME) is “baked in” to unit rates at the time of a full rate review³ and then rolled forward annually as hospital budgets are adjusted for things such as inflation, volume/population changes, and quality program payments. Some hospitals have not received a full rate review since the initiation of the hospital rates nearly 40 years ago. Therefore, in this prospective rate system, the amount of funding for GME in rates today is not necessarily the same as the current actual GME costs—it could be more or less.⁴ However, hospitals must budget for their GME programs within their prospective rate structures.

To alter the amount of GME in a hospital’s rate, hospitals need to undertake a full rate review with the HSCRC. Full rate reviews open the hospital to rate base adjustments across the full spectrum of costs, not only the costs of GME. Because this may involve risk to the hospital, it is unlikely that a hospital would engage in a full rate review exclusively for the purposes of requesting additional funds for GME.

Currently, the HSCRC collects data on the costs of DME through its financial reporting system and estimates the costs of IME using an empirically determined regression model. In state fiscal year (FY) 2013, hospitals reported

**Estimated Maryland GME Costs Realized
FY 2013**

	Total	Cost Per Resident
DME	\$306,182,780	\$110,996
IME	\$545,237,171	\$197,621
Total	\$851,419,951	\$308,597

Source: HSCRC, 2015

² From HSCRC data, State Fiscal Year 2013. Maryland’s state fiscal year runs July 1 – June 30.

³ A full rate review evaluates the entire rate structure of a hospital to determine whether the underlying costs of a hospital (including DME and GME) are reasonable and that the rates that are established are such that an efficient and effective hospital can remain solvent. Such a review can be initiated by either a hospital or the Commission, and they are relatively infrequent.

⁴ In addition to the full rate reviews, historically HSCRC’s reasonableness of charges methodology was applied to hospitals. This methodology provided for peer group based scaling which accounted for DME and IME costs. This provided potential rate adjustments, received through the annual update factor, which may have accounted for cost changes in GME programs.

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total DME costs of \$306,182,780. In FY 2013, the HSCRC estimated IME costs to be \$545,237,171.⁵ In total, both DME and IME accounted for \$851,419,951 or 6.1% of total inpatient and outpatient hospital revenue.

In addition to supporting GME through hospital rates, the HSCRC also supports other workforce initiatives, most notably Maryland's Nurse Support Programs. Through the collaborative efforts of hospitals, payers, and nursing representatives, the Nurse Support Program I focuses on sustaining the number of bedside RNs through educational opportunities, improved working environments, and retention initiatives. Understanding that nursing workforce growth is dependent on nursing faculty capacity, the HSCRC also supports the Nurse Support Program II, which focuses on increasing the nursing faculty capacity and diversity.

GME Funding Nationally Differs from GME Funding in Maryland

The funding of GME under the Maryland all-payer model agreement differs from GME funding elsewhere in the United States. Throughout the rest of the country most subsidized resident positions are funded through Medicare direct and indirect payments to hospitals. In the other 49 states, other payers contribute little to nothing to GME financing.

Until the 1997 Balanced Budget Act placed a cap on the number of Medicare-supported resident positions, Medicare support for residents was open-ended. Hospitals increased their resident complement as they felt was required to meet patient care needs. The total number of Medicare-supported positions has been capped at the 1996 level since then, though some movement of unfilled positions, or from hospitals that have closed, has been allowed.⁶ Resident and fellow positions in excess of the cap must be supported entirely by the training site. The Affordable Care Act has recently redistributed some residency slots to underserved areas, especially for primary care and general surgery training.

Outside of Maryland, Medicare support for graduate medical education is provided using direct and indirect payment calculations. DME support is intended to reimburse training sites with a per-resident-amount (PRA) for trainee stipends, faculty compensation and other expenses. The PRA for a given hospital or training site is established depending upon an individual hospital's direct training costs with modifications made periodically and annual updates to account for inflation. The full PRA is provided for residents in their initial residency period, while 50% of the PRA is provided for trainees beyond that initial residency. DME funded by Medicare totals approximately \$2.8 billion annually. IME support is allocated by Medicare using a formula that involves the resident-to-bed ratio and is intended to account for the additional patient care costs associated with sponsoring residency programs.

⁵ The IME regression model is a two variable model that accounts for both teaching intensity and poor share. HSCRC measures teaching intensity by the number of trainees (residents and clinical fellows) per risk-adjusted discharge. Currently, the data on the number of full time equivalent residents and interns is obtained from Medicare's Intern and Resident Information System. Poor share is measured as the percentage of a hospital's inpatient and outpatient charges where the primary payer is Medicaid, self-pay or charity care, or Medicare is primary and Medicaid is secondary payer (dual eligible). The model coefficient for teaching intensity quantifies the per-discharge effect of the resident per case mix adjusted discharge on the hospitals total adjusted charges.

⁶ Medicare exempts certain categories of providers from these caps, such as podiatric medicine and dental residency slots.

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Developing Maryland's GME Innovation Plan

The Maryland all-payer system is being modified in an effort to improve health care and health, and simultaneously reduce cost. Under the new model, Maryland hospitals are committing to achieve specific improvements in quality measures (e.g., 30-day hospital readmission rate and hospital-acquired conditions), to limit per capita hospital growth, and to shift hospital revenue to global payment models. This will require a dramatic shift in attention towards population health, which prior to these new incentives had not been the primary focus of hospitals in the state.

In recognition of the need to align the focus of GME with the focus of this new all-payer hospital system, Maryland gathered a group of GME leaders to develop the State's GME Innovation Plan. With a strong desire to be inclusive and gather broad-based input, the Maryland Department of Health and Mental Hygiene (DHMH) composed the Innovation in Graduate Medical Education (IGME) Workgroup in early 2015. The group, chaired by leaders from the University of Maryland and Johns Hopkins Medicine, brought together a diverse group of senior leaders from across the health care community. Leaders represented both large and small teaching programs from a variety of specialties. Workgroup membership included a current resident physician. Tables in the Appendix A provide a list of the IGME workgroup members as well as a project management team that facilitated the workgroup efforts.

As its first charge, the IGME workgroup developed a guiding document, the *Principles of Redesign*, to articulate the proposed goals of Maryland's GME innovation plan. To gain a wider range of perspectives on this important topic, the IGME workgroup convened a broader group of health care leaders to engage in the discussion.

Creating a Leadership Forum to Inform, Validate, and Comment

The IGME workgroup invited a cross-section of community, government, and industry leaders to discuss the current state of GME, the proposed Principles of Redesign, and to provide future direction and vision. The all-day event, held on May 20, 2015, attended by over 100 individuals, entitled "Maryland Summit on the Future of Graduate Medical Education," included several keynote speakers—including a representative from CMMI. Breakout sessions by topic provided opportunities for workgroup members to elicit feedback from participants. Through a series of robust discussions, the Summit confirmed and refined the Principles of Redesign, and solidified the areas for which the IGME workgroup should engage and focus ongoing efforts.

Workgroup Report Development

The IGME workgroup met regularly during 2015 to develop this report. Workgroup meeting agendas are posted online and meetings were open to the public. DHMH posted the draft workgroup report on their website and also emailed the draft recommendations to all attendees of the Summit. The IGME workgroup received public comment letters, discussed the comments, and incorporated comments into this final version of the report. Comment letters are available in Appendix B of this report.

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Principles of Redesign

Five Goals Guided IGME Workgroup Recommendations

Based upon input from the Summit, the IGME workgroup recommends that the State of Maryland advance innovations in medical education to achieve the follow five goals:

1. Achieve the three-part aim
2. Focus on population health
3. Provide equitable and efficient funding
4. Augment what is good about GME in our current GME system
5. Optimize workforce distribution

Achieve the Three-Part Aim

The three-part aim is a framework developed by the Institute for Healthcare Improvement, and advocated for by the Centers for Medicare and Medicaid Services (CMS) and CMMI, that describes an approach to optimizing health system performance. Specifically, its objectives are:

- Improving the patient experience of care (including quality and satisfaction)
- Improving the health of populations
- Reducing the per capita cost of health care

The US health care system is under pressure to deliver greater value for the resources expensed on health care. Health care spending in the US continues to rise (currently 17% of GDP and projected to approach nearly 20% by 2020), yet the US continues to lag behind most of the developed world in population health indicators. The combination of aging populations, increased longevity and expanding chronic health problems has created a challenge that puts new demands on health care and social services. Furthermore, patients report decreased satisfaction with the health care they receive despite continuing increased health care costs.⁷ Urgent changes are needed in our health care system to support the three-part aim. Maryland is beginning to drive this change through refocusing hospital reimbursement on the health of the community.

Physicians emerging from GME programs now and in the future will serve as managers of health resources, charged with partnering in coordinating care and navigating an increasingly complex health care environment. While the ACGME has committed to enhancing physician understanding of the importance of meeting the three-part aim—with added attention to communication and interpersonal skills, achieving value through good stewardship of health care resources, and emphasis on quality, safety and reduction of health disparities—the IGME workgroup also sees a role as a State to lead and contribute to developing a physician workforce ready to deliver the three-part aim.

Focus on Population Health

Population health focuses on the health outcomes of a group of individuals as a community with a goal to improve the health of that community. Improving health includes:

⁷ <http://www.theacsi.org/news-and-resources/press-releases/press-2015/press-release-utilities-shipping-and-health-care-2015>

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- Leveraging health care resources to provide the right services to the right people to provide efficient and effective care such that the health of the entire community improves
- Recognizing the importance of social determinants of health and impact on health outcomes
- Reducing preventable hospitalizations and decreasing “inappropriate volume” (a term to used to describe hospital admissions that are more appropriately cared for in an ambulatory setting or hospital admissions that could have been avoided with more appropriate use of resources)

While improving health of populations is a component of the three-part aim, the IGME workgroup noted the importance of this aim to the success of the all-payer model agreement and, therefore, developed this as a separate goal. Focusing on population health is a new paradigm of care. Population health requires an even greater reliance on team-based care than is currently used, including a reliance on multiple professions such as social workers and important partnerships between the community, public health, and health care providers. These teams must recognize and address broad issues including the social determinates of health. This requires that physicians be effective team members and leaders of new care teams that are emerging.

Population health incorporates data and data tools to assess population needs and direct care resources. Physicians in training will need to understand the skills and insights that will make them effective in a population health model. GME will need to incorporate the teaching of these skills and insights into training programs, including addressing broad health care needs and social determinants of health as core educational initiatives. In addition, as provider reimbursement follows more population-based reimbursement models, success in population health will also lead to physician economic success.

Provide Equitable and Efficient Funding

One of the cornerstones of Maryland’s hospital rate setting system is to provide for equitable financing of hospitals among all payers. Successful implementation of GME reform in Maryland must take into account this foundational goal. Equitable financing is a cornerstone of Maryland’s all-payer hospital model because it distributes the costs across all payers and results in a fair allocation of costs.

As described earlier in this report, GME costs are divided between Direct Medical Education (DME) and Indirect Medical Education (IME) expenses. The direct expenses include the salaries and benefits of residents and partial support for their supervising physicians. The indirect expenses are an estimate of the additional costs associated with providing care to patients in a teaching environment. These expenses may include the additional costs of diagnostic testing, the reduction in productivity inherently associated with teaching and the added care required to treat sicker and more complex patients drawn to teaching environments whose acuity is not otherwise captured through standard case mix/severity measurements.

GME costs, as with all other components of a hospital’s rate base, are subject to evaluation by the HSCRC during a full rate review. Because this is a prospective rate system, once the DME costs are incorporated into a hospital’s rate order, they are adjusted each year only by the overall change in rates approved for that hospital. Thus, over time, the amount included in rates

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in any one year may not bear any direct relationship to the actual costs for that year incurred by the hospital for that same time period.

The amounts included in rates for residency programs are reflected in the unit rates for the particular residency. Thus the costs of medical residents are included in the rates for the medical surgical units, pediatric residency costs included in the pediatrics rates, and so forth.

Augment What is Good about GME in Our Current System

Revising and reforming today's GME system aims to train a physician workforce prepared to accomplish the goals of a changing health environment. However, Maryland has a long history of training world premier physicians and physician leaders. We recognize that any discussion of GME reform must include a recognition of the good components of our current GME system and seek to augment that system.

For example, Maryland's current GME environment provides a clinical training grounded in scientific research for graduates of medical schools that is nationally standardized by accreditation requirements and ongoing program and institutional review, including frequent assessment of performance across the six ACGME Core Competencies and related specialty-specific milestones required for completion of training.

GME today employs evidence-based educational methods to assure quality of training including incremental increases in the responsibility for patient care under the supervision and guidance of experienced and knowledgeable faculty in order to develop clinical judgment and autonomy while ensuring patient safety. Programs assign senior residents responsibility for managing inter-professional, multi-disciplinary inpatient teams to provide experience as a leader and team member.

The GME system engages trainees in the care of hospitalized patients with complicated and sometimes unusual conditions leading to skill and confidence in managing the care of critically ill and complex patients. Maryland trains world-class specialists and sub-specialists with high proficiency in procedural and cognitive skills that are a resource for the state, region, nation, and world. Moreover, residency training also provides opportunities for trainees to engage in scientific research and discovery in an effort to generate new knowledge and improve medical care in the future.

Optimize Workforce Distribution

Having the right number and right type of physicians is essential to meeting the health care and health needs of the population of Maryland. Determining the optimal number of physicians is challenging, and the topic of significant debate on the state and national level. Although a thorough analysis of the adequacy number and distribution of physicians in the state is beyond the scope of this work, the IGME workgroup acknowledged that this must be an element of workforce planning for Maryland. Among the challenges in this regard is developing an accurate accounting of the number of physicians in practice, how they practice, and their practice plans for the future. In addition, the current and projected numbers of nurse practitioners and physician assistants must be taken into consideration when determining optimal numbers and types of practicing physicians.

Even in the absence of precise physician counts, there is little doubt that changes in the demographics of the US population—and by extension the population of Maryland—will create a

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greater need for primary care physicians and physicians in certain other specialties. The changing demographics, characterized by an aging of the population, are anticipated to produce a greater number of Americans living with multiple chronic conditions.

Contributing to changing needs is also geographic and racial/ethnic population shifts. The location at which physicians train may influence where they ultimately practice and we should understand this as we look to developing a workforce to serve currently underserved areas. Physician race and ethnicity is another important aspect of workforce distribution. Race-concordant office visits are longer and have higher ratings of patient positive affect.⁸ In addition, race-concordant patient-physician relationships are characterized by greater trust, respect, and patient satisfaction. There is evidence that a more diverse physician workforce results in improved access to care. Patients who are ethnic and racial minorities or who live in traditionally underserved communities are more likely to be treated by minority physicians.⁹ Optimizing our Maryland physician workforce must include efforts to develop and retain an ethnically and geographically diverse workforce with a focus on primary care.

Current Challenges, Gaps and Barriers to Achieving Our Goals

Today's GME environment contains a number of challenges, gaps and barriers. Some of our challenges are unique to Maryland, but many are not. As Maryland's new payment models provide our State incentives to modify GME to produce a physician workforce proficient in meeting the objectives of Maryland's new reimbursement model, Maryland may serve as a testing ground for GME revisions that could be developed later on a national scale. Maryland's model has the strong potential to serve as a national test case for a new GME funding and training paradigm.

To revise Maryland's GME model, we must overcome the following challenges, gaps, and barriers:

- *GME is Primarily Hospital Based*

As in the rest of the United States, funding of GME in Maryland is currently hospital-based. Maryland funds GME through the State's all-payer rate setting system, which could lead to some challenges unique to our State. Consistent with Maryland's commitment to equitable financing, all payers contribute to GME financing in Maryland. This broad financing has advantages, but it makes shifting financing to non-hospital settings more complex.

GME training occurs predominately in inpatient hospital settings and tends to focus on medical specialty and subspecialty training. Although many residency programs now have required outpatient components, there are concerns with how that commitment can be achieved when residents are often simultaneously responsible for hospitalized patients. Hospitals have come to depend on residents for the care of increasingly complex inpatients. In addition, emphasis on hospitals as main sites of training, the clinical training material is skewed toward more severe and acute disease states and

⁸ Cooper, et al. Patient-centered communication, ratings of care, and concordance of patient and physician race. *Ann Intern Med* 2003; 139:907-15.

⁹ Groman, et al. Racial and ethnic disparities in health care: A position paper of the American College of Physicians. *Ann Intern Med* 2004; 141:226-232.

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clinical entities. This does not develop a physician workforce focused on population health, chronic disease management, and prevention.

In addition, most rotations are in episodic care settings (hospital inpatient or sub-specialty rotations) where there is no longitudinal view of health. Even in primary care programs, most residents practice in “clinics” that have limited hours of operation and in settings that do not provide time or opportunity for reflection on the health outcomes or process measures for the population of patients served by the clinic.

- *Lack of Understanding of GME Funding Mechanisms*

As an all-payer system, Maryland’s funding of GME across all payers—public and private—is arguably far more equitable than GME funding nationally. However, the unique features of Maryland’s model can be challenging to understand and may contribute to a perceived lack of transparency. Maryland’s HSCRC sets hospital reimbursement rates. DME expenditures by the hospital are known and reported to the HSCRC on publicly available hospital financial schedules. Discussion at the Summit made it apparent that GME program directors within hospitals did not feel they had access to this information.

IME in Maryland’s rate setting system is more difficult to quantify and assess. At the beginning of the all payer system, now almost four decades ago, IME for each hospital was reviewed and included as a factor in the rates. However, these rates have been updated annually over the last four decades and disentangling the current portion of hospital rates associated with IME has challenges. The HSCRC does estimate IME through a regression model; but, similar to DME, GME program directors did not feel they could access this information. This contributes to a general lack of understanding of how HSCRC sets hospital reimbursement rates and how much is included in hospital rates in any year for the cost of medical education.

Some revisions to GME call for moving additional resident training experiences outside of hospitals. The IGME workgroup recognizes that hospitals provide an ideal environment for training residents. The opportunities for residents to see many sick patients with complex medical conditions and the availability in one location of conference space, many faculty teaching physicians, interprofessional teams, and advanced technology create an environment of unparalleled educational value. However, the workgroup realizes that under the new Maryland system that limits all-payer per capita hospital growth, some patient care that is currently hospital-based will shift to the outpatient setting and there will be a great focus on prevention and population health. Given this, it seems appropriate that even with the advantages of the hospital setting for residency training, some additional training experiences will have to be created that are not hospital-based. In addition to the complexities of disentangling funding from a hospital’s rate base, movement of residents and the funding associated with those residents outside of hospitals may leave significant budget pressures in hospitals that have come to rely on GME funding as an integral component in the hospital charge rates. In addition, movement of residents to sites outside of the hospital may create staffing gaps within the hospitals. And finally as pointed out in public comments, strong accounting and clear oversight will be extremely important as money

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is moved to outside of the hospital for community based training. These issues will need to be addressed as we strive for equitable and efficient GME funding.

- *Unique Aspects of Maryland's Hospital Rate Review Process Make it Difficult to Seek New Funding to Establish or Make Changes to Residency Program*

Currently the only method available to hospitals that seek increased financial compensation for changes or additions to their residency programs, or that wish to introduce a residency program where one does not currently exist, is to file a full rate review application with the HSCRC. In a full rate application, the HSCRC evaluates the entire rate structure of a hospital to determine whether the underlying costs of a hospital (including DME and GME) are reasonable and whether the rates that are established are such that an efficient and effective hospital can remain solvent. As a hospital's entire rate base is under scrutiny and at risk during a full rate review, hospitals infrequently request full rate reviews.

Concerns that program innovations may not be reflected in productivity and reimbursements may also stymie residency program innovations. Changes to better educational practices and produce a stronger workforce are long-term efforts and may not always result in improved productivity or lower aggregate cost in the near term. As Maryland's model agreement with CMMI places strict limits on the rate of growth in per capita hospital costs and ultimately the total cost of care, hospitals are carefully assessing impacts on their global budgets.

- *Current Physician Payment Models Encourage A Specialized Workforce*

Health systems—including business and reimbursement models, organizational culture, and training programs—are still in an early phase of a shift to value-based models. The current reliance on fee-for-service physician reimbursement models stimulates career goals that emphasize specialization and procedural-based fields. A workforce composed of these specialists is likely not the workforce needed to achieve the goals of the three-part aim and support population health.

To date, Maryland's payment reform modes have largely focused on hospital payments. There are commercial Primary Care Medical Home initiatives and other innovative initiatives; however, large-scale efforts to align hospital and physician payment models are still taking hold. Even when value-based payment models become more widespread, it is likely that it will take time for these changes to affect the culture of residency programs and training strategies.

- *Growing Cost of Medical Education Encourages Individuals to Seek Specialty Training*

Decisions to seek specialty and subspecialty training are also driven by the growing debt associated with medical education and the higher levels of compensation for procedure based specialties in contrast to primary care. Medical students entering residency in the U.S. have a median educational debt of \$150,000 if they attended a publicly-funded medical school and \$176,000 if their medical school was a private institution.

- *Training Does Not Provide Tools and Skills to Lead in a Population-Based Health System*

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Training programs have naturally evolved from their hospital-based environments. Generally, they have not tended to emphasize team-based models of care, especially teams that extend beyond the traditional hospital-based staffing. Residents frequently leave training with insufficient competencies in interdisciplinary teamwork, care coordination, cultural sensitivity, social determinants of health, health economics, the appropriate use of diagnostic tests and treatments, quality improvement, telehealth, other care continuum sites, and health information technology. In addition, there is limited collaboration with other professionals and organizations necessary to address the health of a population. Most residency training curricula do not include adequate education in working with community agencies to improve health and healthcare.

The ACGME has recently introduced the Next Accreditation System, with the goal of allowing for greater flexibility in training programs and for more innovation than has been possible in the past. Outcomes of training and acquisition of specific competency milestones are emphasized, and the expected outcomes include proficiency in team-based care, coordination of services, and advocacy for optimal patient care systems; however, the methods for achieving these outcomes and the criteria to be used in assessing competence are not stipulated.

With the emphasis on hospitals as main sites of training, the clinical training material is skewed to less common and more severe disease states and clinical entities. There is no deliberate and explicit exposure of trainees to the general health needs of a majority of the population. Training curricula do not emphasize clinical epidemiology and the ability to evaluate evidence related to populations.

The gathering, integration, analysis, and implementation of activities related to health care datasets are not currently a consistent element in training programs. Many residency programs lack education in continuous performance improvement, another gap in the ability to maximize efficiency and optimize health outcomes. The ACGME's Clinical Learning Environment Review (CLER) program encourages engagement of residents in assessing and improving quality of care, addressing system defects, and reducing health care disparities; however, the focus of that program is on the hospital as the sponsor of the training programs.

- *Incomplete Data on Health Care System Needs and Performance*

Optimization of workforce is hampered by a lack of clarity and agreement on the number of physicians and workforce needs. Focused attention on a precise understanding of numbers and needs has stymied past workforce initiatives in Maryland. However, the need for larger numbers of primary care providers, particularly in rural areas, is a consistent theme. Barriers to optimal workforce are far broader than training programs and involve both reimbursement policies and a culture of medical education that values specialty training.

- *Factors Outside of Education Contribute Significantly to Attracting and Retaining an Optimal Workforce*

Many factors contribute to the training and job selection decisions of the physician workforce. There are multiple considerations for physicians when choosing where to live and practice, the types of facilities at which they seek employment, and the populations they serve. Factors such as professional support and community cohesion have a great

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influence on where they train and practice. In developing workforce solutions, it is important to understand that many of these factors may be unrelated to GME policy or structure.

IGME Workgroup Solutions and Recommendations

With an understanding of these goals and barriers, the IGME workgroup, with input for Summit participants, have developed several recommendations. While many of the IGME recommendations are also elements of the current ACGME training program requirements, we acknowledge that the challenge is how to implement and facilitate these within our current and evolving health care system. This is especially true for areas in which these elements have not been previously recognized as essential components of training and the outcomes of this added emphasis in graduate medical education are still pending.

The IGME workgroup suggests the following recommendations to the State of Maryland:

1. *Continue statewide coordination and engagement*

The Innovation in Graduate Medical Education taskforce convened a broad set of stakeholders and initiated discussions on the modernization of GME in Maryland. Many of the solutions and recommendations discussed within the Workgroup and at the Summit will need careful review and long term planning to develop, initiate, and evaluate. The IGME workgroup recommends that the State continue an on-going process to address GME innovation in training, including as specifically discussed in Recommendation 7 the source of funding for GME innovation. To approach GME from a broad perspective, the workgroup recommends that Department of Health and Mental Hygiene coordinate and lead ongoing efforts. While the initial effort has focused on GME, multidisciplinary training is important and a broader workforce planning effort is needed. Several organizations including Area Health Education Centers, Maryland Academy of Family Physicians, Maryland Learning Collaborative, and Maryland Rural Health Association have indicated interest in continuing engagement based on public comment letters to this report.

2. *Adapt training programs to support physicians in a changing environment*

The IGME workgroup recommends that residency programs adapt their training curriculum to provide GME programs/trainees with the tools to succeed in a health care system focused on population health, something necessary to respond to the changing demographics of the population and the shift to global payment models.

GME programs should come together through the continued engagement efforts discussed in Recommendation 1 to develop best practices, model training programs, patient safety best practices, and other shared educational resources. This suggestion is aligned with ACGME program training requirements. The IGME workgroup builds upon these requirements to emphasize that these training elements should cross inpatient, ambulatory, and other non-clinical settings and that these elements be applied longitudinally.

The IGME workgroup and Summit participants discussed many concepts that would need to be augmented or added to current GME training programs in order to achieve

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the three-part aim. These suggestions and recommendations preserve the strengths of our current GME system while enhancing population health and broadening trainee experiences. In addition, the suggested principles incorporate safe patient care goals in all aspects of training. Suggestions include:

- Teaching continuous quality improvement skills to residents and have primary care residents work in teams with faculty preceptors who are well versed in managing the health of the population. Residents need experience in the environment they will serve with accountability during their careers. Residents should learn to work in environments such as:
 - Patient aligned teams
 - Health homes
 - Accountable care organizations
 - Population health centers within outpatient clinics
- Focus on interprofessionalism communication and team leadership skills.
- The IGME workgroup encourages connecting residents to communities and developing skills needed to address the needs of these communities. This should now be an essential component of GME.

The IGME workgroup also highly encourages training programs do develop training and competencies in data-driven population health analytics to focus on cost consciousness/high value care. These include in the use of:

- Publicly-available population health metrics (e.g., standard health metrics such as mortality, diabetes, obesity, and substance use disorders)
- Data metrics available through provider-based electronic health records, including specialty health metrics
- Shared information resources, such as data tools available through hospital systems and statewide efforts such as the Chesapeake Regional Information System for our Patients (CRISP), Maryland's regional health information exchange

3. *Encourage community-based training venues, including non-clinical sites*

The IGME workgroup recommends that residency programs develop strategies to encourage training outside of hospitals, connecting GME programs and their trainees to the communities they serve. The workgroup recommends that GME funding should follow the resident as they move into non-hospital and even nonclinical settings such as schools, health departments, and others social service settings to support the faculty and other resources that will be needed to provide training in those sites. These settings provide a greater opportunity for residents to be exposed to the needs of different populations and the importance of understanding socio-economic factors and coordination with community-based services. It will be important for reimbursement for services in community clinical sites to recognize the time needed for care coordination, so that residents learn in an environment that models the medical home. The IGME

Innovations in Graduate Medical Education

workgroup, while recognizing that this recommendation is more applicable to certain types of residency programs, emphasizes that nearly all specialties will have a greater ambulatory focus in the future and will best serve trainees with some additional community-based training venues. Residency programs may develop these programs independently or in conjunction with a statewide engagement effort as discussed in IGME Workgroup Recommendation 1.

Training in non-hospital settings will also provide residents an opportunity to practice population health skills:

- Use of health care system-level metrics in the care of individual patients and populations of patient (Quality Improvement)
 - Improved training in cost control / cost reduction / cost conscious care
 - Enhanced education about health promotion and preventive care
 - Increased ability to lead teams to coordinate care
 - Improved competency working in inter-professional teams
 - Focus on role of health beyond health care (e.g., school nutrition, smoking cessation).
 - Develop mechanisms needed to address and encourage patient compliance
 - Define population health for specialized groups (e.g., aging, individuals with behavioral health needs)
 - Develop experiences that provide broader experiences in communities
 - Focus quality initiatives on what is best for patients while acknowledging care settings outside of the hospital
 - Train in a way that fosters adaptability so that physician can adapt to changing needs of the population they serve, or changing populations served
 - Need for collaboration between the GME programs and population needs
4. *Focus recruitment and retention efforts on strategies that develop the physician workforce necessary to provide population health*

The IGME workgroup recommended that Maryland consider a broad set of strategies to improve the recruitment and retention of the optimal distribution and supply of the physician workforce. The workgroup recognizes that workforce recruitment and retention needs to begin very early. Federal funding of the Area Health Education Centers can play a role in providing leadership in this rural and urban settings and the IGME workgroup recommends increased funding for these types of initiatives to work in close partnership with residency programs. The workgroup also recommends medical schools provide medical student experiences in high-functioning primary care and other community-based venues for early exposure to primary care.

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With an understanding that residents training in underserved areas are more likely to stay and practice in these locations,¹⁰ the IGME workgroup recommends supporting the development and expansion of quality primary care residency programs. The funding component of this recommendation is described in IGME Workgroup Recommendations 6 and 7. To attract quality residents to these programs, the IGME workgroup further recommends pairing loan repayment programs or other types of incentives with the development of these programs.

The IGME workgroup also recommends that the CMS consider strong loan repayment programs for physicians working in primary care (or other general fields) with underserved populations by reviewing the federal loan repayment program requirements. Some federal requirements, such as geographical service areas, may serve as barriers to entry into these programs and do not necessarily align with the needs of Maryland's populations. The magnitude of dollars available in State-based loan repayments programs is small compared to the substantial medical education debt. Therefore, the IGME workgroup encourages the State to review current State-based loan repayment programs with an understanding that educational debt is a significant barrier to attracting and retaining a physician workforce designed to lead efforts to achieve the three-part aim.

In addition, the IGME workgroup recommends supporting physician reimbursement structures that reduce physician disparity in payments both between specialties/procedural fields and primary care and between physicians in urban and rural settings.

5. *Increased transparency and awareness of GME funding and indirect medical education costs*

Hospitals have access to information that provides estimates of both GME spending and GME's contribution to hospital rates. Hospital reimbursement and finance departments report to the HSCRC the DME costs for their facilities and this information is publicly available in hospital finance reports. Using a regression model, HSCRC provides estimates of IME costs to hospitals periodically during the rate setting processes. To estimate the amount of GME in rates, hospitals can find the amount of GME estimated in rates from their last rate review and inflate forward.

Despite the fact that hospital finance leaders have access to information on DME and IME from the HSCRC, based on discussions led by the Innovations in Graduate Medical Education workgroup leading up to this Report, it is apparent that this information is not widely available or at the least not understood by interested audiences, including residency program directors. The IGME workgroup recommends that hospital finance leaders share information on DME costs and estimate current funding in rates with their residency program directors.

The IGME workgroup recognizes that time, money, and people are almost always needed to achieve innovations, and that the type of innovation proposed here is no

¹⁰ Ernst Blake Fagan, et al. Family Medicine Graduate Proximity to Their Site of Training: Policy Options for Improving the Distribution of Primary Care Access. *Family Medicine*; February 2015.

Innovations in Graduate Medical Education

exception. This may be especially true if innovation involves an increase in the time residents spend outside the hospital, since this may require hospitals to address staffing gaps that result from this shift. The workgroup recognizes that this will require GME leaders to work even more closely with hospital finance leaders. The workgroup hopes that this process can begin with the sharing of information so that GME leaders can better understand GME funding and so that hospital finance leaders can better understand the goals and objectives of change in GME to meet the needs of a changing population and the new All-Payer Model.

The IGME workgroup also recommends that hospital leaders assess the cost drivers of indirect medical education and identify opportunities where these costs could be reduced while maintaining or increasing quality of care and training. To the extent that these costs are associated with case mix and patient severity, the IGME workgroup encourages the HSCRC to continue to develop better ways of measuring these and their impact on costs.

6. *HSCRC partial rate reviews for hospitals seeking funding to make changes to or establish new residency programs*

The IGME workgroup recommends that the HSCRC consider a partial rate review for hospitals seeking new funds to establish or modify residency programs to meet the needs of the population and population health outlined in IGME workgroup Recommendation 2 or to train residents more likely to practice in underserved areas and/or provide care to underserved populations. The workgroup recommends that the review process require hospitals to demonstrate the need for new or modified programs. It would seem reasonable to assist hospitals seeking to develop primary care residency programs, or programs in other areas with a strong need for an increased number of physicians. Hospitals should be encouraged to provide evidence that new programs or modifications to their programs will result in attracting and retaining necessary physician specialties in geographic areas of need. Given that hospitals are under HSCRC's Global Budget Revenue agreements and the State is operating under a fixed cap, the IGME workgroup recommends that the HSCRC consider linking partial rate reviews to dedicated funding for innovation (see IGME workgroup Recommendation 7 below).

7. *Dedicate specific funding for innovation in training*

The types of changes needed to transform GME programs will take time and resources to implement. While these investments will contribute to a more efficient and effective health system, the IGME workgroup recognizes that the investments in infrastructure changes will mature over time and accrue to the general public health and well being. To encourage innovation, the IGME workgroup recommends that the HSCRC consider creating competitive funding opportunities with processes to review and evaluate the proposed innovations.

Due to the State's revenue growth constraints under our agreement with CMMI, the IGME workgroup understands that this recommendation would need to support the development of a new GME funding model through:

Innovations in Graduate Medical Education

- Redistribution of current funding either out of current GME funding already built into hospital rates (including DME and/or IME), or
- Reallocation of other existing funding among hospitals. As there are global efficiencies across the hospital system, some dollars may be reinvested in targeted GME innovations, or
- Funding streams outside of hospital reimbursement to fund innovations in GME programs.

Depending on the amount of funding for innovation, this recommendation could potentially have significant redistribution effects. Ongoing planning efforts should carefully consider this impact, especially for hospitals with current GME programs. Any suggested changes in residency programs should be consistent with the goals of the new all payer model. Efforts to further develop and implement this recommendation will require greater discussion with providers, payers, consumers, and the State. The IGME working group believes that it is in the State's interest to facilitate these changes, and that financing models must therefore be developed, to incentivize, at least in the short run, the participation of hospitals with GME. Without this, these changes in GME are not likely to occur. The IGME workgroup expects this ongoing effort will be a component of the statewide coordination and engagement discussed in Recommendation 1, in conjunction with the HSCRC.

Conclusions

At the initiation of the IGME workgroup effort, the workgroup set forth five goals for GME reform defined in the principles of redesign:

1. Achieve the three-part aim
2. Focus on population health
3. Provide equitable and efficient funding
4. Augment what is good about GME in our current GME system
5. Optimize workforce distribution

The IGME workgroup believes that the seven recommendations proposed in this report collectively represent a starting point for Maryland to address the goals of GME reform. These recommendations were developed through our collaborative workgroup process with input from over 100 GME leaders who attended the GME Summit. However, the IGME workgroup and State of Maryland recognize that additional work is needed to implement these recommendations, and there needs to be continued conversations on the improvement elements necessary to sustain health transformation initiatives in Maryland and beyond.

Aligning education, training and workforce development is a long term endeavor and national in scope. The IGME workgroup recognizes the importance and scale of this challenge and is hopeful that our Maryland efforts can be supported and bolstered by a larger national effort.

Innovations in Graduate Medical Education

Appendix A

IGME Workgroup	
<i>Purpose</i>	<i>Co-Chairs</i>
As part of a Health Services Cost Review Commission recommendation, the IGME workgroup was formed as one of four broad-based convening bodies following approval of the All-Payer Model. The Workgroup met six times in 2015 to guide plan development and approve recommendations presented to the Centers for Medicare and Medicaid Services.	<p>Anthony F. Lehman, MD, MSPH, Senior Associate Dean for Clinical Affairs, University of Maryland School of Medicine</p> <p>Roy C. Ziegelstein, MD, MACP, Vice Dean for Education, Johns Hopkins University School of Medicine</p>
<i>Members</i>	
<p>John B. Chessare, MD, President and Chief Executive Officer, GBMC HealthCare System</p> <p>John M. Colmers, Senior Vice President, Health Care Transformation and Strategic Planning, Johns Hopkins Medicine</p> <p>S. Orion Courtin, MD, MHS, Medical Resident, Johns Hopkins Bayview Medical Center</p> <p>Howard Haft, MD, Deputy Secretary, Public Health Services, Maryland Department of Health and Mental Hygiene</p> <p>Nicolette Highsmith-Vernick, MPA, President and Chief Executive Officer, Horizon Foundation, Columbia, MD</p> <p>Michael R. Jablonover, MD, Senior Vice President and Chief Medical Officer, University of Maryland Medical Center</p>	<p>Jane M. Kirschling, PhD, RN, FAAN, Dean, University of Maryland School of Nursing</p> <p>Bernadette C. Loftus, MD, Associate Executive Director for the Mid-Atlantic States, The Permanente Medical Group</p> <p>Mary J. Njoku, MD, Designated Institutional Official for Graduate Medical Education, University of Maryland Medical Center</p> <p>Jamie S. Padmore, MSC, Associate Dean for GME & Educational Scholarship, MedStar Health</p> <p>Maria Tildon, Senior Vice President of Public Policy and Community Affairs, CareFirst BlueCross BlueShield, Maryland</p> <p>Padmini D. Ranasinghe, MBBS, MD, MPH, Director, Hospitalist Education Programs, Johns Hopkins University School of Medicine</p>

Project Management Team	
<i>Purpose</i>	<i>Representation</i>
The project management team was assembled to support the IGME workgroup – providing project management, conducting research and preparing key deliverables to advance plan creation. The team met routinely throughout 2015 to advance plan development and finalization.	Comprised of representatives from Burton Policy Consulting LLC, Johns Hopkins University, Maryland Department of Health and Mental Hygiene, The Maryland Health Services Cost Review Commission, and University of Maryland

Summit Agenda:

Innovations in Graduate Medical Education

- Opening Welcome
Paul B. Rothman, Dean of the Medical Faculty and Chief Executive Officer, Johns Hopkins Medicine
- Introduction From Co-Chairs
Anthony F. Lehman, MD, MSPH, Senior Associate Dean for Clinical Affairs, University of Maryland and Roy C. Ziegelstein, MD, MACP, Vice Dean for Education, Johns Hopkins University School of Medicine
- GME in Maryland: Waiver Overview and Description GME Funding
Donna Kinzer, Executive Director, Maryland Health Services Cost Review Commission
- Innovations in GME: The Accreditation Council for Graduate Medical Education Perspective
Eric Holmboe, MD, Senior Vice President, Milestone Development and Evaluation, ACGME
- GME in the Accountable Care Era: The Kaiser Permanente Experience
Bruce Blumberg, MD, Director of Physician Education and Development, Kaiser Permanente Northern California
- Planning for a New GME Model
John M. Colmers, Senior Vice President, Health Care Transformation and Strategic Planning, Johns Hopkins Medicine and Chair, Maryland Health Services Cost Review Commission
- GME Under the New Maryland All-Payer Model Agreement
Ankit Patel, JD, Senior Advisor, Center for Medicare and Medicaid Innovation
- Closing Commentary
The Honorable Van T. Mitchell, Secretary, Maryland Department of Health and Mental Hygiene

May 20, 2015 | Maryland Summit on the Future of Graduate Medical Education
Mt. Washington Conference Center, Baltimore, MD

Participating Organizations	Those Represented
<ul style="list-style-type: none"> • Adventist HealthCare • Amerigroup Corporation • Anne Arundel Medical Center • Accreditation Council for Graduate Medical Education • Barbara Marx Brocato & Associates, Inc. • Burton Policy Consulting • CareFirst BlueCross BlueShield • Centers for Medicare and Medicaid Services • Charles County Health Department • Cornerstone Montgomery, Inc. • Erickson Living Retirement Communities • Greater Baltimore Medical Center • Health Care for the Homeless, Inc. • Health Facilities Association of Maryland • Howard County Health Department • Johns Hopkins Medicine • Kaiser Permanente Northern California 	<ul style="list-style-type: none"> • Chief Medical / Health Officers • Designated Institutional Officials for Graduate Medical Education • Deputy Secretary for Behavioral Health • Chairs, Deans, Directors and Professors (including Associate and Assistant) <ul style="list-style-type: none"> - Academic Affairs / Clinical Affairs / Medical Staff Service - Education / Graduate Medical / Medical - Education / Physician Education - Medicine (including Emergency,

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<ul style="list-style-type: none">• LifeBridge Health / Sinai Hospital• LifeSpan Network• Maryland Academy of Family Physicians• Maryland Citizens' Health Initiative• Maryland Department of Health and Mental Hygiene• Maryland Health Care Commission• Maryland Health Services Cost Review Commission• Maryland Hospital Association• Maryland Podiatric Medical Association• Maryland Rural Health Association• MedChi Network Services• Medstar Health• Meritus Health• Peninsula Regional Medical Center• Primary Care Coalition of Montgomery County• Sinai Hospital of Baltimore, Inc.• St. Agnes Hospital• The Horizon Foundation• UnitedHealthcare Community Plan• University of Maryland• U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration• U.S. Department of Veteran Affairs – VA Maryland Health System	<ul style="list-style-type: none">Internal and Primary Care)<ul style="list-style-type: none">- Quality and Health System Research- Residency Program• Health Care, Health Policy, Population Health and Quality Consultants• Medical Students• Resident Physicians• Senior Administration Executives, Directors, Secretaries and Support Professionals<ul style="list-style-type: none">- Government Affairs / Policy- Finance / Revenue Management / Data Analytics- Health Insurance- Hospital Administration- Outreach- Strategic Planning
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Appendix B: Public Comment Letters

1. Victoria Bayliss, President and CEO, Anne Arundel Medical Center
2. Barry Meisenberg from Anne Arundel Health System
3. Maryland Healthcare Commission
4. Richard Colgan, University of MD SOM, Program Director Maryland Area Health Education Center
5. David Steward. University of MD Chair of Family and Community Medicine
6. Maryland Academy of Family Physicians
7. Justin Diebel, CFO at Mercy
8. St. Agnes
9. Maryland Rural Health Association
10. Niharika Khanna, Associate Professor Family and Community Medicine, UM SOM
11. Charles Silvia at Peninsula Regional Medical Center

Letter 1

November 16, 2015

Dr. Anthony Lehman, Co-Chair
Dr. Roy Ziegelstein, Co-Chair
Innovations in Graduate Medical Education Workgroup

Submitted via email to Alyson Schuster, Associate Director, Performance Measurement, HSCRC

Dear Sirs,

On behalf of Anne Arundel Medical Center, we have the following comments regarding the draft report for the committee's consideration. We make these comments as a health system that has recently received approval from the ACGME to sponsor residency programs. After a positive assessment by the Residency Review Commission, we plan to begin a general surgery residency in July 2017. These approvals were achieved after a multiyear process of assessment and subsequent Board of Trustees support to sponsor multiple residency programs over the next several years. Our Board, management and physician leaders believe Anne Arundel Medical Center to be an ideal environment to train physicians of the future, not only because of the complexities of clinical care both in the acute and ambulatory setting, but to enable them to understand team based care, process improvement methodology, and the multifaceted skills that will enable us to achieve the Triple Aim.

First, we support the opportunity for new program development by other healthcare organizations throughout the state. Innovative programs that not only address a modern curriculum steeped in community-based training of population health methodologies but also address the statewide gaps in physician needs are critical to the ultimate success of the evolving Maryland All-Payer system. We believe a statement within the Workgroup report describing a consistent and predictable funding source that could be supported by both Maryland global efficiency savings and by specific innovation pool funding would be appropriate. However, we also believe that the funding for new programs should consider the latest per capita efficiency measurement metric (currently under redesign by the HSCRC) of the requesting organization in the determination of the level of that GME funding request. Furthermore, we believe that the direct medical education component of the funding should be funded at 100% but in no case more than some specific funding ceiling percentage (perhaps 120%) above the statewide average. We would recommend that the indirect medical education component of the funding be based on a modified cost regression that attributes a specific percentage less than 100% (perhaps 75%) of unexplained costs to IME/DSH coefficients. This IME funding methodology would better adjust for movement of volumes to outpatient settings and reduced residency workload hours. The funded IME percentage could move in relation to the latest per capita efficiency measurement metric of a particular requesting organization.

Second, we would recommend the periodic assessment of GME program improvements and performance for the state of Maryland based on the Workgroup recommended development of certain program assessment criteria

Thank you for the opportunity to provide our thoughts for the Committee's consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria W. Bayless", with a long, sweeping horizontal line extending to the right.

Victoria W. Bayless
President & CEO

Letter 2

Letter from Barry Meisenberg from Anne Arundel Health System

Dear Colleagues,

Thank you for the opportunity participate in the process and review this draft.

I think the document is very well written, mostly free of jargon and informative (I learned a lot from reading the background on GME financing).

But observations on weaknesses are more useful than compliments so here are some.

I am concerned that the document is stronger on identifying the mismatch between the State's goals on population health and geographic and specialty distributions than it is on suggesting innovative solutions. The report should note that many of the solutions can be implemented right now; indeed a large portion of the recent annual meeting of the Association of American Medical Colleges (AAMC) was content on exactly these issues: how to best teach quality and patient safety science, interdisciplinary team care and involving residents beyond episodes of care. These are increasingly becoming requirements of the CLER reviews.

The report correctly points out that the imbalances in primary care are beyond the capacity of the GME programs to fix and that partial solutions lie in the reimbursement structure as well as the broader medical culture which values and honors specialization more so than primary care. Recommendation four (4) points out the important role of others in addressing the primary care imbalance: State, CMS, Federal funding of AHEC, payers and medical schools.

I would recommend therefore that this report should explicitly call for a primary care task force to address the multiple and complex issues that have lead to this imbalance. It could be lead by the Maryland chapter of the American Association of Family Practitioners and include representatives of the GME programs in primary care (broadly defined), payers, and other stakeholders.

The document also describes well the financial consequences of pulling residents out of inpatient duties to give them more outpatient and neighborhood experiences. But it is short on solutions to address that issue. This was noted by Ms. Kinzer herself at the first summit meeting. In retrospect, it now appears an unfortunate that funding for the increased complexity of care seen at teaching hospitals is attached to GME programs. I think this document should clearly call out the fact that if residents were to leave the inpatient setting in pursuit of a better understanding of population health, this pattern of referrals would continue...but not be funded.

I would like to see the report call for a de-coupling of these two programs...part of the transparency that is much commented upon.

Barry Meisenberg

Letter 3

STATE OF MARYLAND



Craig P. Tanio, M.D.
CHAIR

Ben Steffen
EXECUTIVE DIRECTOR

MARYLAND HEALTH CARE COMMISSION

4160 PATTERSON AVENUE – BALTIMORE, MARYLAND 21215

TELEPHONE: 410-764-3460 FAX: 410-358-1236

November 16, 2015

John M. Colmers
Chairman
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, MD 21215

Re: Comments on the IGME Workgroup Solutions and Recommendations

Dear Chairman Colmers:

Thank you for the opportunity to comment on the IGME workgroup recommendations. The Workgroup is an important first step in beginning to better align Graduate Medical Education with the Triple Aim and the new all payer hospital model. Attached are the MHCC's comments on the draft recommendations.

MHCC considers IGME recommendations 1, 4 and 5 to be very important and warrant special consideration.

- Particular emphasis should be placed on directing residents into underserved Maryland communities and in retaining residents who receive undergraduate or graduate medical education in Maryland. This challenge is particularly important for Johns Hopkins, given the very low retention levels.
- As Maryland embarks on a “money follow the residents into community” model of medical education, establishing strong accounting and clear oversight will be extremely important. The health care system is generally subject to increased transparency and the success of the new model of training will dependent on the ability to demonstrate equity and a return on investment.

Thank you for your leadership on this important workgroup. Please let MHCC know if you require our assistance on these important issues.

Sincerely yours,

Ben Steffen
Executive Director

Attachment

cc: Craig Tanio, MD, Chair MHCC

Frances B. Phillips, RN, MHC, Vice-Chair MHCC

MHCC Comments on Draft Recommendations 11-16-2015

1. Continue statewide coordination and engagement

MHCC agrees that the recommendations presented in the report will require a long-term commitment to planning for Maryland health care workforce needs. Improved workforce planning is an important pre-condition for better targeting GME funding. DHMH is the appropriate convening authority for these planning activities as it brings together multiple organizations with interests in building and sustaining an adequate health care workforce and monitoring allocation of GME funding, both inside and outside the hospital setting. MHCC believes there is now general agreement on the size of the physician workforce engaged in patient care. Much less is known about the disposition of the non-physician workforce. While the health occupation boards, working in collaboration with the Governor's Office and the MHCC, have aligned and expanded the information collected through license renewal activities, effectively using the information for planning has not yet started. Resources will be needed to convert the data obtained through licensure and licensure renewals into a data systems that can characterize the non-physician health care workforce and forecast future needs.

Work force planning methodologies are evolving and need to grow in sophistication. Simply benchmarking the current workforce against national supply levels is no longer particularly useful. Expanded information should provide additional incentives for refining these new supply estimation methodologies that take into account characteristics of populations and associated disease burdens of communities. The State will need to work closely with Health Resources and Services Administration (HRSA) in advocating for planning methodologies that accurately reflect current and future workforce needs in Maryland. MHCC is supplying the Workgroup with the "Maryland Health Workforce Study, Phase Two Report: Assessment of Health Workforce Distribution and Adequacy of Supply", a study jointly sponsored by the Governor's Office of Health Care Reform, the Governor's Workforce Investment Board and MHCC that used a more sophisticated model developed by a team of researchers at IHS Global Inc. to estimate current needs for primary care and behavior health professionals based on demographics and underlying health risk factors in Maryland counties.

2. Adapt training programs to support physicians in a changing environment

MHCC strongly supports aligning GME program goals with improving population health and delivering care under global payment models, while continuing to meet ACGME program training requirements. The next generation of health professionals will be well served if they are exposed in their graduate medical education to more accountable forms of delivery system reform, including those referenced in the report. MHCC supports a new emphasis on population health, health metrics, interprofessionalism, and team based care. However, these requirements need to be carefully integrated as adding new requirements can compromise basic clinical training.

The primary care environment is inherently chaotic, posing an additional impediment to learning and potentially discouraging residents from remaining in the field. If health homes and accountable care organizations are to be "learning" health homes and "learning" accountable care organizations, these programs must be adequately funded,

consistently organized, and carefully evaluated and refined based on the research findings.

A strength of specialty care residency programs is that procedures and practices are highly standardized. Procedures and practices learned in the residency shape the way that specialist delivers care throughout his/her career. The primary care environment is inherently more complex and new delivery models implemented by one entity seldom align well with the model adopted by another. This variability may be necessary, perhaps desirable, as the growing body of impartial evaluations have not yet identified a model that works best for all populations. If these new models are to serve as learning environments, there must be continuing evaluations to identify those that are consistently able to achieve the Triple Aim. These are the models that should be the given greater emphasis as foundations for broadly enhancing primary care and fostering primary care medical education.

3. Encourage community-based training venues, including non-clinical sites

MHCC supports the IGME Workgroup recommendation that residency programs develop strategies to encourage training outside of hospitals. Connecting residents more directly with the communities they serve is an important first step toward moving GME programs beyond the hospital. MHCC agrees that GME funding should follow the resident as he/she moves into non-hospital and even nonclinical settings such as schools, health departments, and other social service settings to support the faculty and other resources that will be needed to provide training in those sites.

MHCC encourages the Workgroup to consider how GME funds could be allocated beyond the hospital setting and how these funds would be monitored. A key question the Workgroup could consider is what role will hospitals and organized community providers play in developing the programs? Who will determine funding levels? Community settings are less structured, but no less complex, than hospital settings. Configuring the training program and identifying appropriate faculty will not be an easy process, especially if these programs aim to cover multiple communities across Maryland. Designating an appropriate oversight organization within DHMH is critical to ensuring that high quality accountable programs develop to meet the needs of residents.

MHCC applauds the Workgroup's efforts in cataloging the population health skills that residents will need to acquire in the course of their graduate medical education. Further refinement of the population health skills list is needed and it may be most appropriate to segment the list into additional core competencies valuable to all residents and other competencies that are mainly appropriate for residents in primary care, medical, or surgical specialties.

4. *Focus recruitment and retention efforts on strategies that develop the physician workforce necessary to provide population health*

MHCC agrees that residents training in underserved areas are more likely to stay and practice in these locations if they have links to those communities. It is also true that large numbers of ALL residents remain in the community where they are trained for after the residency program ends. Many put down economic and social roots, they buy homes, marry, and have children. This more general trend makes for an even more

compelling reason to ensure that underserved communities receive a fair allocation of residents that may be willing to make long-term commitments to those communities.

There is evidence that Maryland medical schools could do better in directing students to work in Maryland. Although hard empirical data is not available on the number of residents that remain in state, data from the AAFP's Robert Graham Center for Policy Studies in Family Medicine and Primary Care's "Medical School Mapper" (<http://www.medschoolmapper.org/>) shows that only about 14 percent of Johns Hopkins School of Medicine undergraduates remain in the state. By comparison, 25 percent of Harvard undergraduates remain in Massachusetts, 23 percent of University of Pennsylvania medical school graduates remain in Pennsylvania, and 50 percent of Stanford medical school graduates remain in California. Johns Hopkins draws a highly qualified, geographically diverse applicant pool, but measured against its peers, 14 percent of graduates staying in state is low. About 38 percent of Maryland SOM graduates practice in state, which is more in line with high performing public programs.

One strategy for addressing these questions would be for Johns Hopkins and University of Maryland to form a local committee on diversity and inclusion in medical education that examines opportunities for expanding the physician workforce. Workforce recruitment and retention needs to begin very early. Expanding the pool of applicants to medical school may be a means of achieving what the Workgroup referred to as an "optimal physician workforce." Post-baccalaureate programs aimed at preparing less well-prepared minority and economically disadvantaged students for the rigors of undergraduate medical education may be a means to meeting that goal. Currently, Johns Hopkins, Goucher College, and American University in DC offer such programs. These programs are aimed at career "switchers" whose goals may not differ significantly from other more traditional applicants. Approximately 20 medical schools around the US offer post-baccalaureates programs that specifically address needs of minorities and disadvantaged students. The principal aim of these programs is to accommodate minorities or economically disadvantaged students. Evidence from the post-baccalaureate premedical programs geared to minority and disadvantaged students have found that students matriculating from these programs have increased likelihood of succeeding in medical school. Given that Johns Hopkins offers a post-baccalaureate program, it could be appropriate if both organizations collaborated to align the program to the needs of populations that are currently underrepresented in medicine in Maryland. This committee on diversity and inclusion in medical education might be the appropriate convener for planning and launching the effort.

MHCC recognize that the IGME workgroup also recommends that CMS consider strong loan repayment programs for physicians working in primary care (or other general fields) with underserved populations by reviewing the federal loan repayment program requirements. Some federal requirements, such as geographical service areas, may serve as barriers to entry into these programs and do not necessarily align with the needs of Maryland's populations. The magnitude of dollars available in State-based loan repayment programs is small compared to the substantial medical education debt. Therefore, the IGME Workgroup encourages the State to review current State-based loan repayment programs with an understanding that educational debt is a significant barrier to attracting and retaining a physician workforce designed to lead efforts to achieve the three-part aim.

5. *Increased transparency and awareness of GME funding and indirect medical education costs*

MHCC supports efforts to increase transparency in GME funding. Any program that implements a “money follows the resident program” would, by necessity, require greater transparency in GME and IME. Recognizing that this transformation would take time, MHCC support initiatives established by HSCRC to make information on GME and IME costs available to residency directors and to members of the public. MHCC is open to the idea of publicly sharing these data via the MHCC’s Health Care Quality Reports website (<http://mhcc.maryland.gov/mhcc/consumer.aspx>)

6. *HSCRC partial rate reviews for hospitals seeking funding to make changes to or establish new residency programs*

MHCC does not have specific comments on the six or the seventh recommendation. We assume that most of these applications would be requests for increased GME funding, therefore HSCRC should be specific with regard to the innovations and investments that could be the basis for a partial rate review. We would also note that for programs in which the funding follows the resident, it may be appropriate to designate an intermediary organization to disperse funding and monitor progress.

Letter 4



November 16, 2015

www.medschool.umaryland.edu/familymedicine

Anthony F. Lehman, MD, Co-Chair
Senior Associate Dean for Clinical Affairs, University of Maryland School of Medicine

Roy C. Ziegelstein, MD, Co-Chair
Vice Dean for Education, Johns Hopkins School of Medicine

RE: Innovations in Graduate Medical Education Report

Dear Drs. Lehman and Ziegelstein,

Thank you for convening the IGME workgroup and allowing me to personally address your members in mid-September. I appreciate the comments found in the draft version of your report as to the role which the MAHEC might play in improving medical education in Maryland. I would like to offer some additional suggestions for your consideration as you prepare to complete the final report.

Recognizing that the majority of trainees practice within one hour of where they train, and that there is a maldistribution of primary care providers particularly in the undeserved regions of our state, the Maryland Area Health Education Center requests that consideration be given to exploring solutions to increase the relatively small number of medical students and residents who train in rural communities. We ask that attention be given to:

1. The creation of one or more rural based primary care residency training programs.
2. The establishment of rural training tracks within current training programs.
3. Increased support of preexisting community based training sites, such as those coordinated by Maryland's Area Health Education Centers.
4. AHEC initiated and supported establishment of regional partnerships between public health, clinical practices, behavioral providers, community residency training sites to create an interdisciplinary environment to train primary care residents to lead interdisciplinary teams.
5. AHEC led development of a curriculum in 'physician lead team's' role in addressing social determinants of health in rural regions.

The MAHEC looks to be part of the solution in providing innovation to improving medical education in Maryland. Thank you, Drs. Lehman and Ziegelstein, and your workgroup for your leadership on this important issue which critically impacts the health care of the underserved in our state.

Respectfully,

Richard Colgan, M.D.
Professor
University of Maryland School of Medicine
Program Director Maryland Area Health Education Center
Vice Chairman of Medical Student Education and Clinical Operations
Department of Family and Community Medicine



Letter 5



UNIVERSITY of MARYLAND
SCHOOL OF MEDICINE

Chairman
Department of Family and Community Medicine

29 South Paca Street
Baltimore, MD 21201
410 328 2580 | 410 328 8726 FAX

www.medschool.umaryland.edu/familymedicine

November 16, 2015

Anthony F. Lehman, MD
Co-Chair IGME Workgroup
Senior Associate Dean for Clinical Affairs
University of Maryland School of Medicine

Roy C. Ziegelstein, MD
Co-Chair IGME Workgroup
Vice Dean for education
Johns Hopkins School of Medicine

RE: Innovations in Graduate Medical Education Report

Dear Drs. Lehman & Ziegelstein:

Thank you for giving me the opportunity to provide input to the IGME report. My comments are attached. I am available to respond to any questions.

Sincerely,

David Stewart, MD, MPH
Associate Professor & Chairman
Department of Family and Community Medicine



DENTISTRY • LAW • MEDICINE • NURSING • PHARMACY • SOCIAL WORK • GRADUATE STUDIES

Davidge Hall is the historical symbol of the **University of Maryland School of Medicine** - America's oldest public medical school, founded in 1807.

Comments

I would like to offer the following comments regarding the provision of equitable and efficient funding of GME specifically related to the uniqueness of a primary care family medicine residency program located at a large academic medical center in an urban area. Our Medical Center has the full spectrum of residency training program versus a community based hospital program where family medicine may be the major or only training program. We also have the mission of educating medical students in primary care and thus insuring that our residents have adequate teaching skills. I offer the following two comments.

- 1) The family medicine residency training curriculum mandates that during the 3 year training there is a progressive shift from inpatient to outpatient experiences. This shift to care in the ambulatory setting fosters focused learning in patient centered medical homes, population health strategy integrated care, and community health. At the University of Maryland, the progression toward ambulatory care progresses is as follows:

Residency Training in Ambulatory Setting

Year 1	7%
Year 2	47%
Year 3	93%

This progression in outpatient training requires that methodology used to determine financial support from the tertiary care center to the residency training program be modified. This methodology must include more than a bedside support calculation and must consider non-hospital based metrics. Additionally, the methodology must ensure the IME dollars are tracked to the ambulatory setting. This is counter to the traditional model based on tertiary care metrics more focused on inpatient services performed by all trainees and questions support of efforts by family medicine trainees which are not hospital based. The effect on the family medicine residency program is that resources needed for essential components required for compliance with CMS or the family medicine RRC are difficult to attain or not available. Examples include faculty support to maintain the required faculty to resident ratio, acquisition and maintenance of computers for residents who are not on a hospital ward or hospital based clinic, or family medicine RRC required space for a resident library and lounge which are not located in the hospital.

I encourage the committee to understand and support a mechanism for GME funds to go directly to the training program which has been an early adapter of community based education for trainees. Such a line of financial resources is essential to allow the training program with major challenges to remain in CMS or RRC compliance to be addressed in a controlled, strategic manner which improves the overall training program. The current

method supports confusion and contentiousness between the training program and the hospital. In many cases resolution occurs only when the program is faced with probation which affects recruitment of trainees and perception of the program by the hospital.

- II) The ongoing transition of our training program into communities throughout Maryland for training opportunities with physician preceptors, outpatient community hospital efforts, and federally qualified health centers has highlighted the following challenges to quality and equitable experiences for our residents:
- A) A belief that residents are a clinical service that is inexpensive and needs little supervision much like when the supervisor of the resident was in training years ago.
 - B) Many clinicians / practices are not in total alignment or do not have full knowledge of the rapid transitions occurring in health care in Maryland. Often the physician's approach is to do what is deemed necessary by the insurance company or CMS for a payment.

The above two items bring to the forefront the need for faculty development, faculty rewards, and faculty oversight when faculty are not based at the home base of the training program. If more graduate medical education is to occur in the community, there is need for a defined structure responsible for generic faculty development and collaborative education of physicians / practices regarding health care reform in Maryland.

I would encourage the committee to recommend engagement of the existing Maryland Statewide Area Health Education program and Maryland Learning Collaborative which was involved in practice transformation for the Maryland Patient Centered Medical Home Pilot Project. Both of these entities have track records in the medical communities of Maryland and an existing infrastructure to engage professional organizations and clinicians. The committee should also support the investigation of innovative reward models for community preceptors such as tax credits for preceptors, off-setting the cost of continuing education for preceptors when done by a state supported health professional school, or encouraging integrated systems to utilize graduated medical educational experiences as a strategic method of work force recruitment .

Historically, the health care financing structure in Maryland produced a volume driven health care system , which was focused on a highly hospital based GME training program, especially at academic health systems where the full complement of training programs exists. The result is that early adapters of community based training experiences such as the Department of Family and Community Medicine at the University of Maryland do not receive the full complement of funding needed for training of future primary care doctors. The compliance requirement by external forces for accreditation in family medicine and the state waiver with CMS are encouraging more community experience with trainees. There is much which can be learned from the historical experiences of family medicine with GME funding and the transition into the current health care reform environment and community based GME in Maryland. The Department of Family and Community Medicine at the

University of Maryland School of Medicine is fully available to the committee for further engagement in any way with these matters.

Letter 6



MARYLAND ACADEMY OF FAMILY PHYSICIANS

ABLE, RESPONSIVE FAMILY PHYSICIANS SERVING THEIR COMMUNITIES

November 30, 2015

Anthony F. Lehman, MD, MSPH
Senior Associate Dean for Clinical Affairs
University of Maryland School of Medicine

Roy C. Ziegelstein, MD, MACP
Vice Dean for Education
Johns Hopkins University School of Medicine

Dear Co-Chairs Dr. Lehman and Dr. Ziegelstein,

This comes on behalf of the officers and members of the Maryland Academy of Family Physicians (MAFP, www.mdafp.org), the 1400-member chapter of the national 120,000-member American Academy of Family Physicians (AAFP, www.aafp.org). The vision of MAFP is “Able, Responsive Family Physicians Serving Their Communities.” Our mission, as we aspire to that vision, is “To support and promote Maryland family physicians in order to improve the health of our State’s patients, families and communities.”

MAFP was pleased to participate in the Innovation in Graduate Medical Education Summit in May of this year, and we appreciate the opportunity to respond to the IGME workgroup’s draft report. We applaud the workgroup’s efforts to address the challenges in reforming Graduate Medical Education (GME) in Maryland in light of the State’s unique Medicare reimbursement structure. The MAFP Board met on November 15, 2015 and reviewed the report in detail. The Board fully supports the workgroup’s stated 5 priorities and 7 recommendations.

However, we found the draft report noticeably lacking a discussion of the importance of primary care physicians, specifically family physicians, in addressing many of the challenges addressed in the document. Don Berwick

Kisha N. Davis, M.D.
President

Patricia A. Czapp, M.D.
President-Elect

Ramona G. Seidel, M.D.
Treasurer

Matthew A. Hahn, M.D.
Secretary

Yvette Oquendo-Berruz, M.D.
Immediate Past-President

Esther Rae Barr, CAE
Executive Director



MARYLAND ACADEMY OF FAMILY PHYSICIANS

ABLE, RESPONSIVE FAMILY PHYSICIANS SERVING THEIR COMMUNITIES

notes the importance of a strong primary care workforce in meeting the Triple Aimⁱ. Education on population health management, team-based care, and cultural sensitivity (which in the report are noted to be deficient in the training for many residents) are core competencies for family physicians in training. One of Maryland's strengths is its ability to train specialist physicians, but we have a lack of primary care physicians. In order to meet the Triple Aim it is imperative to expand training in primary care.

Family physicians in practice work in community health centers, prisons, school-based health centers, and other non-traditional practices in addition to traditional private practice. Having more exposure to community-based programs is essential to helping meet the needs of our state especially in our Western and Eastern rural areas. As this report highlights, Maryland is limited more than other states, in its ability to expand Family Medicine residencies (currently there are 3- Franklin Square, Prince George's Hospital, University of Maryland) because GME funding has to be tied to hospitals. We strongly agree with the report's suggestion that funding should follow the residents if they train in a community program. However, we recommend the report go further in recommending that primary care residency programs in Maryland expand beyond the current model to allow the creation of community-based residency programs. We refer the workgroup to the Teaching Health Center GME Programⁱⁱ which is instrumental in increasing access to health care services for people who are geographically isolated, and/or economically or medically vulnerable. Teaching Health Center GME funding pays for direct and indirect medical education expenses for training residents in new or expanding community-based primary care residency programs. Clinical training sites include federally qualified health centers (FQHCs) and FQHC Look-Alikes, community mental health centers, rural health clinics, Indian Health Service or Tribal clinics, and Title X clinics (family planning clinics).

Further we encourage the IGME workgroup to explore the creation of structured educational programs and learning collaboratives amongst residents and faculty in Maryland to disseminate the suggested aims of the report.

Kisha N. Davis, M.D.
President

Patricia A. Czapp, M.D.
President-Elect

Ramona G. Seidel, M.D.
Treasurer

Matthew A. Hahn, M.D.
Secretary

Yvette Oquendo-Berruz, M.D.
Immediate Past-President

Esther Rae Barr, CAE
Executive Director



MARYLAND ACADEMY OF FAMILY PHYSICIANS

ABLE, RESPONSIVE FAMILY PHYSICIANS SERVING THEIR COMMUNITIES

In addition to this written response, we would like to offer ourselves to testify before the appropriate body to provide additional comments on how the Maryland Academy of Family Physicians can work with crafters of the new model of Graduate Medical Education in Maryland.

Sincerely,

Kisha N. Davis, MD, MPH, FAAFP
President

ⁱ Health Aff May 2008 vol. 27 no. 3 759-769

ⁱⁱ For information: web site "US Department of Health and Human Services, Health Resources and Services Administration".

(<http://bhpr.hrsa.gov/grants/teachinghealthcenters>(bhpr.hrsa.gov))

Kisha N. Davis, M.D.
President

Patricia A. Czapp, M.D.
President-Elect

Ramona G. Seidel, M.D.
Treasurer

Matthew A. Hahn, M.D.
Secretary

Yvette Oquendo-Berruz, M.D.
Immediate Past-President

Esther Rae Barr, CAE
Executive Director

Letter 7

November 16, 2015

Ms. Alyson Schuster
Associate Director, Performance Measurement
Health Services Cost Review Commission
4160 Patterson Avenue
Baltimore, Maryland 21215

Re: Innovations in Graduate Medical Education

Dear Ms. Schuster:

Thank you for the opportunity to comment on the workgroup recommendations. Mercy would like to acknowledge the efforts of the workgroup and offer general support of the recommendations, which appear reasonable and well-constructed.

In addition to general support, Mercy offers the following comments:

- Further study and deliberation is warranted given the potential significant impact on resident training and the perception of training
- Expansion of community-based training should be implemented in a way that does not dilute the core specialty training competencies
- Fully support incentives to promote expansion of quality primary care programs
- While promoting innovation in training, it is important to assess the likelihood of practical success when considering funding

Again, thanks for the opportunity to provide comments.

Sincerely,



Justin Deibel
Senior VP and CFO

cc: Thomas R. Mullen, President and CEO
Scott A. Spier, M.D., Senior Vice President, Medical Affairs



Letter 8

Comments Regarding the Maryland IGME Work Group Draft Report

Submitted by: St. Agnes Hospital, 900 S. Caton Ave., Baltimore, MD 21229

Contact: Richard M. Pomerantz, MD, Chairman, Dept. of Medicine.

rpomeran@stagnes.org

410-368-8723

St. Agnes residents traditionally have provided many of the primary care specialists for an already underserved and distressed southwest Baltimore community. Our trainees already are deeply involved in providing care to underserved patients in West Baltimore through their longitudinal outpatient clinical experience at Baltimore Medical Systems, the FQHC located on the St. Agnes campus and in our new primary care residency. FQHC's will be an instrumental part of the population health based initiatives of the West Baltimore Health Collaborative, and along with our other community based primary care providers, will be essential to the success of these population health programs. Many of the primary care providers currently located in this west Baltimore area trained in the St. Agnes residency programs and have chosen to remain to practice in these underserved communities.

While we are in agreement with many of the points and initiatives in the Innovation in Graduate Medical education document, we remain very concerned about the implications of point #7 which recommends creating competitive funding opportunities to encourage innovation, but speaks to redirecting existing GME funding to support these grants. While innovation in medical education will be extremely important in the coming years, we remain concerned that GME training resources, currently helping to fund an effective west Baltimore community based program like St. Agnes, are not redirected to larger University based training programs (who traditionally train many tertiary care subspecialists) because of their significant advantage in obtaining grant funding due to their existing large competitive grant writing infrastructures. Any plans to redirect existing funds away from the community based training programs like St. Agnes, will only further exacerbate the problems of patient access and health disparities for some of the city and county's neediest residents in some of our most distressed communities. Indeed, funding for community based training programs, whose residents choose to stay and practice in the underserved communities in which they trained, should be strengthened.

Letter 9



Maryland Rural Health Association
www.mdruralhealth.org
PO Box 41
Oakland, MD 21550
410-693-6988

November 15, 2015

Anthony F. Lehman., MD
Co-Chair Innovations in Graduate Medical Education Workgroup
Senior Associate Dean for Clinical Affairs,
University of Maryland

Roy C. Ziegelstein, MD
Co-Chair Innovations in Graduate Medical Education Workgroup
Vice Dean for Education
Johns Hopkins School of Medicine

Dear Chairman(s) Lehman and Ziegelstein,

We would like to thank you for your leadership on the Innovations in GME (IGME) workgroup developing a five-year plan to advance innovations in medical education as part of our New All Payor Model and the opportunity to provide comments on the draft report. The Maryland Rural Health Association's (MRHA) mission is to advocate and educate to improve the health of rural Maryland. We count over 40 rural health serving organizations in our membership including the rural area health education centers, hospitals, federally qualified health centers, and health departments in the 18 rural counties of our state. Our number one priority for improving the health of rural Maryland has been to eliminate healthcare workforce shortages by creating a rural workforce pipeline. We see the charge of this workgroup as vital to this priority of ensuring and adequate network of healthcare providers in Maryland's rural areas.

We appreciate the report's attention to the inequitable workforce distribution and the need to create a geographically diverse workforce with a focus on primary care in the state. Although the group did not want to specifically look at the data on workforce distribution across the state we do have data to point to severe shortages in rural primary care providers. Ten state-designated rural jurisdictions have partial or full designation as federal primary health care professional shortage areas, meaning that they have less than one primary care provider for every 3,000 residents.¹ The Maryland MEDCHI and Maryland Hospital Association Physician Workforce Study in 2008 found the greatest physician shortages in all specialties, including primary care, were in the three rural regions. Southern Maryland had a critical shortage in 25 of 30 physicians categories (83.3%), Western Maryland 20 out of 30 (66.7%), and the Eastern Shore 18 out of 30 (60%). This report also stated that by this year 2015, because of an aging healthcare workforce, shortages would be worst.²

Over the last several years multiple statewide stakeholder groups have identified increased rural training of medical residents to be a necessary solution to workforce shortages; these include but are not limited to the 2009 Taskforce on Rural Physician Shortages; 2010

¹ <http://hsia.dhbmh.maryland.gov/opca/SitePages/pco-home.aspx>

² <http://www.medchi.org/sites/default/files/Workforce%20Study%20Executive%20Summary.pdf>

Eastern Shore Rural Residency Workgroup; and, most recently, the 2013 Rural Regional Delivery of Healthcare group.

To ensure Maryland has an optimized workforce distribution across all parts of the state and better focused on population health, the MRHA urges the ICGME group to consider:

- **Encourage *rural* community based training programs.** The presence of a rural primary care residency program - regardless of residents' practice location post-graduation - helps to address primary care shortages in rural communities by virtue of having physicians (and their faculty) in training in those underserved communities. The vast majority of these programs will sustain primary care clinics through their resident workforce and also accept public health insurance.
- **Funding for innovation in training should prioritize programs that increase training rotations of medical residents in rural areas.** Rural rotations and other rural curricular elements in residency training are critical to keeping students who have an interest in rural practice from looking elsewhere.³
- **Prioritization of partial rate reviews for new family medicine residency programs in the underserved rural areas of the state.** We know residents who graduate from family medicine rural residency programs are three times more likely to practice in rural areas than those who graduate from urban programs.⁴ Maryland currently has no rurally based residency programs.
- **Implement curricula and incentivize coordinated training in telemedicine across the state.** We have limited training of medical students or residents in telemedicine. More physicians trained in telemedicine may help keep rural physicians connecting them better to our urban hub specialists and improving access to care for patients.

Thank you for your consideration of this information and steadfast efforts to help improve physician training in Maryland. We look forward to working with the IGME workgroup to finalize the report and potentially implement solutions. Please do not hesitate to contact me with any questions. I can be reached at larawilson@mdruralhealth.org or 410-693-6988.

Respectfully Submitted,

Lara D. Wilson

Lara D. Wilson, MS
Executive Director
Maryland Rural Health Association

³ Keeping Physicians in Rural Practice, American Academy of Family Physicians (2002) literature review: retrieved at <http://www.aafp.org/about/policies/all/rural-practice-paper.html>

⁴ Patterson, D. et al.(2013) Rural Residency Training for Family Medicine Physicians: Graduate Early Career Outcomes, 2008-2012.

Letter 10

November 13, 2015

Anthony F. Lehman, MD,
Co-Chair IGME Workgroup
Senior Associate Dean for Clinical Affairs,
University of Maryland School of Medicine

Roy C. Ziegelstein, MD,
Co-Chair IGME Workgroup
Vice Dean for Education, Johns Hopkins School of Medicine

RE: Innovations in Graduate Medical Education Report

Dear Drs. Lehman and Ziegelstein,

Thank you for convening the IGME workgroup and allowing me to provide feedback. The long term goals of the IGME are eloquently presented and I commend the team on a comprehensive approach. However, until such time as the educational curricula in new models of care become entrenched in medical schools and residencies, I appreciate the opportunity to present the Maryland Learning Collaborative as a structured education program to disseminate and implement the IGME proposal to support the Maryland All Payer Program. The Maryland Learning Collaborative proposes to build upon demonstrated success in the state of Maryland in providing training to existing practitioners in multi-disciplinary training forums in rural and urban geographic locations to focus on advanced models of care linked to reimbursement. The Maryland Learning Collaborative is housed at the University of Maryland School of Medicine and has leadership from UMMS/ Johns Hopkins and DHMH through funding from the Million hearts program, the CDC 1305 program and the Howard County Community Integrated Medical Home program.

The Maryland Learning Collaborative has capability to expand to provide a platform for collaborative training for all graduate medical education in the state of Maryland to include residents, fellows and residency faculty. At the start, the Maryland Learning Collaborative proposes to include primary care residencies and their faculty, followed by the stepwise addition of Hospitalists, Emergency Departments, Psychiatry residents and faculty and, later on, add other medical and surgical specialties. This expanded capacity for the Maryland Learning Collaborative would be modeled initially along the lines of the Harvard Medical School Center for Primary Care's Academic Innovations Collaborative and later adapted to the Maryland health care landscape. <https://primarycare.hms.harvard.edu/innovation-in-education-and-care-delivery/>



The Maryland Learning Collaborative offers to support IGME in the following ways:

1. Create a statewide platform for innovations in graduate medical education for all residency faculty, residents and fellows to meet the needs of the All Payer Model and to achieve the three part aim and the fourth aim of practitioner satisfaction
2. Provide informational sessions on population health and the role of physicians leaders in multi-disciplinary teams of care to achieve patient centered care delivery and readiness for value based payment models
3. Train Residency faculty and residents in new models of care specifically:
 - a. Population health
 - b. Patient aligned teams
 - c. Leadership of multi-disciplinary teams
 - d. Health Homes and Patient Centered Medical Homes
 - e. ACO's, population health systems organizations, clinically integrated networks
 - f. Integration of behavioral health into primary care
4. Data utilization for quality improvement, process enhancements, cost containment
5. Optimal use of the CRISP Health Information Exchange
6. Partner with the two rural AHECs in eastern and Western Maryland to develop partnerships with public health, community providers in their jurisdictions
7. Partner with Local Health Improvement Coalitions in other regions modeled along the lines of the Howard County Advanced Primary Care Collaborative to create training opportunities for graduate medical learners and their faculty in the community

Below I bring forward the salient past successes in training primary care practitioners as part of the Maryland Multi-payer Program for Patient Centered Medical Homes Learning Collaborative since March 2011. We have been proud to partner with MHCC/DHMH in education and training in patient centered care for practitioners and their teams in the adoption of new models of care delivery, and reimbursement using value based payment models precursors. In addition we have supported 52 practices in the state of Maryland in transformation to Patient Centered Medical Homes, NCQA recognition, and in achieving quality improvement, patient and provider satisfaction and cost containment. We have pioneered the linkages of primary care practices to the health information exchange, developed practice workflows utilizing care management, and are members of the Population Health Analytics and Reporting committee for CRISP. The Maryland Learning Collaborative was selected as a state program by the AHRQ for mentoring by the state of North Carolina in 2012 and, in 2014 we were selected by the CDC as one of two programs in the country to perform an Enhanced Evaluability Assessment for possible spread to other states. Key achievements are below:

The final evaluation report for the Maryland Multi-payer Program for Patient Centered Medical Homes report can be found at:

http://mhcc.maryland.gov/pcmh/documents/MMPP_Evaluation_Final_Report_073115.pdf

The CRISP Video describing our work with the Encounter Notification System is at:

<https://crisphealth.org/>

I have led the Clinical Leadership team for the Maryland Hospital Association and convened Primary Care, Hospitalists and Emergency Department physicians and stakeholders in developing new models for care transitions that are patient centered. <http://www.mhaonline.org/transforming-health-care/healthy-hospitals-healthy-communities/care-coordination>

The Maryland Learning Collaborative supports the public - private partnership in Howard County under the Community Integrated Medical Home model which convenes the Howard County Health Department, the Howard County Hospital, Healthy Howard, the Community Care teams and primary care practices under the Advanced Primary Care Collaborative to encourage high utilizer patient management supported by Health Information Technology and Community Health Workers. <http://www.healthyhowardmd.org/program/advanced-primary-care-program/>

Below is a link and photograph of one of our practices from the Maryland Multi-payer program that won the national ONC championship in innovations in Electronic Health Records in cardiovascular health. <http://millionhearts.hhs.gov/files/MH-Small-Practice-Champion.pdf>



The Maryland Learning Collaborative looks forward to creating an innovation platform for graduate medical education in Maryland in support of the All Payer Program within the framework set by the Innovations in Graduate Medical Education Workgroup. Letters of support have been requested from several partners and they will follow.

Respectfully,

Niharika Khanna, MBBS, MD, DGO
Associate Professor Family and Community Medicine
University of Maryland School of Medicine
Program Director Maryland Learning Collaborative

Letter 11

Charles Silvia at Peninsula Regional Medical Center:

Peninsula Regional Medical Center is currently evaluating the feasibility of residency programs, starting with primary care medicine/FP. We have had several residents and students do electives with us from several specialties, mostly from the University of Maryland. We are intrigued and interested in these new proposals and how we may play a larger part in GME training to provide more physicians to underserved areas of the State such as our region. This training expansion could take the form of extension of current GME programs or the initiation of non-traditional programs with a primary care/population health focus.