# Impact of GME

RTT Collaborative Annual Meeting April 16-17, 2020

# Background

- The healthcare environment is changing at an increasingly rapid pace, and there is an increasing number of new hospital and healthcare system leaders who may not be familiar with the role how GME programs support the mission of healthcare and meeting future physician recruitment needs.
- It was determined that a tool should be developed to assist programs in articulating the complexities and benefits of GME.
  - Impact of GME: A Primer for Hospital Leadership

### Process

- Guides Covering GME Basics and Investment were reviewed:
  - AAMC Guide to Becoming a Teaching Hospital
  - Planting TREES in Rural Places
  - ACOFP Guide to Starting a Family Medicine Residency
  - AAFP Conference Presentation on Demonstrating the True Value of Your Residency Program
  - The Benefits of Physician Training Programs for Rural Communities: Lessons Learned from the Teaching Health Center Graduate Medical Education Program
- Initial list of topics to include in a guide were determined: basics, finance, interviews, recruitment, curriculum, mission alignment, community benefit, relationship with Sponsoring Institution.

### Process cont.

- Input on the initial list was received at 2019 Annual Wisconsin Family Medicine Program Directors Forum
- Roundtable and large group discussions resulted in the following topics being identified as priorities for hospital leadership:
  - Financial Investment
  - Mission Alignment
  - Community Benefit
  - Physician Recruitment and Retention

### End Product – Quick Reference Guide for Leaders



Impact of GME: A Primer for Hospital Leadership

# **Quick Reference - Areas of Focus**

- Financial Investment
  - CMS Funding
  - Downstream Revenue
  - Market share and referral capture
- Mission Alignment
  - Educational infrastructure
  - Quality Outcomes
  - Patient Access
- Community Benefit
  - Care for Underserved Populations
  - Population Health/Community Wellness Initiatives
  - Economic Impact
- Physician Recruitment/Retention
  - Reduced Recruitment Expense
  - Medical Staff Retention
  - Recruitment of Advanced Practice Providers

# Questions

Lori Rodefeld, Medical Education Coach, SSM Monroe Clinic, 608-324-1518 lori.rodefeld@monroeclinic.org

Jennifer Crubel, Rural GME Coordinator, WCRGME, 608-643-1050 jcrubel@rwhc.com



# Impact of GME: A Primer for Hospital Leadership

This document was developed following discussions with Residency Program Directors and Hospital Administrators in Wisconsin. The content was prepared by Lori Rodefeld, Medical Education Coach at SSM-Monroe Clinic, and Jennifer Crubel, Rural GME Development and Support Coordinator at WCRGME.

11-15-2019

#### Impact of GME: A Primer for Hospital Leadership

"The work of an institution in which there is no teaching is rarely first class. There is not that keen interest nor the thorough study of the cases nor amid the exigencies of the busy life is the physician able to escape clinical slovenliness unless he teaches and in turn is taught by assistants and students. It is, I think, safe to say that a hospital with students in the wards, the patients are more carefully looked after, their diseases are more fully studied, and few mistakes made." Osler, 1903

#### Introduction

Workforce shortages contribute to limited healthcare access and health disparities. In Wisconsin, there is an expected shortfall of 745 primary care physicians by 2035 which has led to growth in new residency training programs through a "grow your own" philosophy. Establishing and supporting these programs with a goal of recruiting and retaining future physicians in the communities where they train is becoming a priority not only in Wisconsin, but nationwide as physician recruitment becomes increasingly competitive.

In the changing healthcare environment, there are an increasing number of new leaders who may have limited knowledge of the role Graduate Medical Education (GME) plays in addressing workforce needs. From the complex funding system to the community benefit, leaders may not be familiar with how the programs work to support the mission of the hospitals and healthcare systems they serve. This document has been developed as a tool for understanding the impact GME plays in both supporting the mission of healthcare and meeting future physician recruitment needs.

#### **Impact: Financial Investment**

Graduate Medical Education (GME) in the United States receives a significant portion of its funding from Centers for Medicare and Medicaid Services (CMS). The payments received from CMS are divided into two categories, Direct Graduate Medical Education (DGME) payments and Indirect Medical Education (IME) payments.

DGME payments were established for hospitals that have approved graduate medical education programs. CMS will provide payments to the hospital to cover the direct costs of employing the interns and residents. These direct costs include intern and resident salaries, benefits, travel and lodging costs, supervising faculty salaries and fringe benefits, allocated



Resident physicians provide a major component of care for underserved, uninsured, Medicaid, and Medicare populations.

overhead costs and other direct costs. The payments are subject to legislated limits.

IME payments were established to provide hospital compensation for the anticipated higher cost of patient care due to the perceived notion that teaching institutions care for a more complex case mix than non-teaching hospitals. The IME payments also provide compensation for higher costs incurred by interns and residents as they potentially order more diagnostic tests than experienced clinicians order and are less efficient in their patient management skills.

#### Example – General Hospital

#### **Direct Graduate Medical Education (DGME)**

In this example, General Hospital is a community-based hospital with total costs of \$60,000/resident and has 40 residents in various programs:

- 1. Start with cost/FTE resident. This is calculated based on what costs the hospital can demonstrate plus inflation. For this example, General Hospital is claiming costs of \$60,000 per resident. During this past year, 46% of patients were Medicare patients.
- Calculate total GME costs: Cost/resident X Number of Residents = Total Program Costs \$60,000 X 40 = \$2,400,000
- Calculate Medicare Share of Costs
   Total Program X Medicare Utilization Rate = Direct Medical
   Costs = Education Reimbursement
   \$2,400,000 X 0.46 = \$1,104,000

In this example General Hospital received \$1,104,000 from Medicare in DGME payments. It is important to note that final payment depends on the proportion of Medicare patients was in your hospital each year. This will change to some extent yearly and varies somewhat by hospital.

#### Indirect GME

In this example, General Hospital received a Diagnosis Related Group (DRG) payment of \$10,000 for a hospitalization.

- Calculate the resident/bed ratio 40 residents/130 beds = 0.3
- Refer to the Federal Government Chart to calculate that at this ratio, the add-on to the DRG is 15.1% \$10,000 X 15.1% = \$1,510 in indirect costs



This example illustrates that General Hospital receives an additional \$1,510 in IME because there is a GME program at the hospital. In

this case, each Medicare DRG has an extra 15.1% added for IME costs. The general rule of thumb is that indirect reimbursement is 1 ½ to 2 times direct reimbursement to a hospital. In this example, General Hospital would be receiving between \$3,600,000 and \$4,800,000 for indirect GME for the "added costs to the hospital." The indirect funding is not allocated to the GME department, but instead is used to support hospital operational costs.

In addition to the funding provided by Medicare and Medicaid for residency training, hospitals benefit from the "Contribution margin" and downstream revenue to hospitals. Data shows that an average of \$6 flows through a health system for every \$1 that enters through a residency program. This equates to approximately \$30,000,000 per year for an average size residency training program.

Hospitals and health systems can also grow their market share through creation or support of residency programs. Often residents will attract patients to institutions while creating opportunities for improved

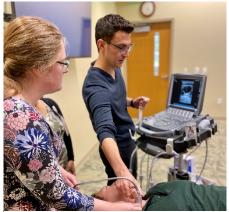
patient access, including underserved patient populations. Residents and faculty often pursue training in new procedures and service lines which also generate revenue for the organization. Finally, residency programs can enhance their in-system referral capture as residents are loyal to their institutions, hospitals, and health systems during training and after graduation.

#### **Impact: Mission Alignment**

Residency programs align with the mission of hospitals and health systems to provide access to the highest quality of health care for the local community. Residency programs support a larger educational infrastructure which keep medical staffs sharper with a renewed emphasis on staying current with medical literature and practices. Hospitals with residency programs offer a broader scope of training and teaching; examples of this include grand rounds, didactics, and workshops that would be otherwise more difficult to arrange and support without an educational infrastructure. Additionally, this infrastructure allows for training programs to expand the role of teaching both medical students and other allied health professionals.

Developing a reputation as a teaching hospital provides benefits to the community as patients perceive the quality of care is increased with medical school partnerships and additional physicians overseeing their care. Data also shows that teaching hospitals have overall higher quality metrics as programs involve their residents and faculty in quality improvement projects and other innovations that benefit patient care. Hospitals can utilize residents to introduce, problem-solve, and polish clinical guidelines and pathways makes quality improvement activities substantially easier to accomplish.

The resident workforce provides a community benefit to the hospital through increased patient access and support for hospital services. Resident physicians also provide broad institutional patient care coverage including inpatient and outpatient care, emergencies, Joint Commission-mandated rapid response teams, and acute and chronic health problem management. Residents have the flexibility to work additional hours or assist with coverage of additional services without the need to hire additional staff or pay for overtime.



"Physicians learn when they teach. Students ask provocative questions. Physicians who teach engage in self-evaluations, selfassessment, critical reflection and selfimprovement, all of which are key principles of total quality management." Gordon Moore, MD, Harvard Medical School

#### **Impact: Community Benefit**

The community benefit of GME programs extend far beyond the walls of the teaching hospital. Through service to individuals and the community at large, these programs contribute positively in ways that may not be evident in a typical hospital revenue and expense report. GME programs spread value to the local and extended communities and these benefits are seen both socially and financially.

One of the most common training opportunities for residents is to provide health care access for medically underserved populations. More than 50% of the nation's health care "safety net" is provided by residency programs. Individuals who are not covered by health insurance or do not have access to quality medical services face challenges managing their healthcare and many times resident physicians are the providers who fill this gap by helping them understand their health conditions and participate in managing their care. The experience resident physicians gain working with underserved populations often leads to future community involvement including advocacy issues related to the patients they serve.

Many residency programs require their residents to participate in local community-based projects and pursue support of community organizations to address health disparities. Often, community organizations have missions aligned with medical education and welcome support in implementation of community wellness projects. Examples of such projects include community health fairs, health screenings, presentations to local schools, and giving nursing home support. Additionally, an equally important outcome is many communities see resident physicians serving as role models and mentors to youth, inspiring and encouraging them to become future health care professionals.

The impact of training programs extends to economic benefits of a community when residents decide to settle and practice locally. According to the Robert Graham Center for Policy Studies, the placement of one primary care physician in Wisconsin results in an economic impact of over \$1 million dollars to the local community on an annual basis. Physicians provide employment, purchase goods and services, and even generate income to other health care organizations such as hospitals and nursing homes.

#### **Impact: Physician Recruitment and Retention**

One of the first questions asked regarding a residency program is, "Does the hospital or health system save money on recruiting physicians?" Hospitals and health care systems with GME programs have

realized the capacity to retain residency program graduates within their systems which can substantially reduce recruitment costs.

Wisconsin Council on Medical Education and Workforce (WCMEW) 2017 study demonstrates retention rate of 86% when instate students complete both undergraduate medical education and graduate medical education in Wisconsin. Since the average cost to recruit one family physician is \$250,000, many hospitals and health THE AVERAGE COST TO RECRUIT ONE FAMILY PHYSICIAN IS \$250,000

systems are capitalizing on this retention rate through developing and supporting residency training programs.

A major benefit residency programs can provide to organizations is an extended multiple-year interview with a potential staff versus a short term interview with someone unknown to the organization. Retaining program graduates allows hospitals to hire an individual of known quality who is already familiar with the local health system's procedures, resources, and facilities.

Residency programs also tend to boost physician recruitment to a region through the addition of faculty positions. Oftentimes, the presence of a GME program provides a recruitment incentive since many physicians want to teach and be affiliated with an academic program. Recruitment for Advanced Practice Providers and allied health professionals can be increased due to the enhanced educational infrastructure.

#### Conclusion

Residency program development and support require both significant time and investments from hospitals and health systems. The benefits to local communities can be substantial, especially in communities where there may be underserved populations facing healthcare disparities and workforce shortages. GME programs have the potential to increase the size of the health workforce, improving the

ability to overcome challenges in the recruitment and retention of medical providers. These programs can also lead to strengthened partnerships between facilities, practices, and other organizations—as well as other tangible benefits to the community. Overall, having GME residency program can result in improved access to high quality health care, cost savings in recruitment, and have a meaningful impact on community health.

#### **References:**

Douglass et al. Demonstrating the true value of your residency program [power point slides]. Retrieved on August 2, 2019 from <u>https://www.aafp.org/dam/AAFP/documents/events/rps\_pdw/handouts/res-45-douglass.pdf</u>

Economic impact of family physicians in Wisconsin. Retrieved on August 2, 2019 from <a href="https://www.graham-center.org/content/dam/rgc/documents/publications-reports/reports/Wisconsin.pdf">https://www.graham-center.org/content/dam/rgc/documents/publications-reports/reports/Wisconsin.pdf</a>

Lee et al. The benefits of physician training programs for rural communities: lessons learned from The Teaching Health Center graduate medical education program. J Health Care Poor Underserved. 2016;27(4a): 83-90

Longenecker R, Schmitz D. Planting TREES in rural places. Retrieved on July 31, 2019 from <u>https://rttcollaborative.net/wp-content/uploads/2019/01/TREES-2019-Optimized.pdf</u>

Mapping our way to success: Wisconsin's physicians workforce. Retrieved on July 31, 2019 from <a href="https://static1.squarespace.com/static/5a3ac16af14aa15aede6d0ed/t/5b69ebb28a922d59c48f6d37/1533668280">https://static1.squarespace.com/static/5a3ac16af14aa15aede6d0ed/t/5b69ebb28a922d59c48f6d37/1533668280</a> <a href="https://static1.squarespace.com/static/fa3ac16af14aa15aede6d0ed/t/sb69ebb28a922d59c48f6d37/1533668280">https://static1.squarespace.com/static/5a3ac16af14aa15aede6d0ed/t/sb69ebb28a922d59c48f6d37/1533668280</a> <a href="https://static1.squarespace.com/static1.squ

Mostashari et al. JAMA 2014;311(18):1855-1856

Pugno et al. The direct, indirect, and intangible benefits of graduate medical education programs to their sponsoring institutions and communities. J Grad Med Educ. 2010 Jun;2(2): 154-159

Schneeweis et al. JAMA 1989;262(3):370-375