

## The Community Benefits of Graduate Medical Education

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### Abstract

Graduate Medical Education (GME) can have far-reaching benefits to improve the health of a community. Most directly, GME increases the pipeline of physicians who consider careers in areas close to where they train. Indirectly, improvements in patient care outcomes, decreases in physician burnout, and implementation of innovative programming are also seen. In this article, we highlight some of the key benefits of developing GME in the context of the current healthcare landscape of Delaware.

### Introduction

Graduate Medical Education (GME) can improve the health of a community by adding a pipeline of physicians, improving quality of care, and piloting unique initiatives to meet the specific needs of the community.

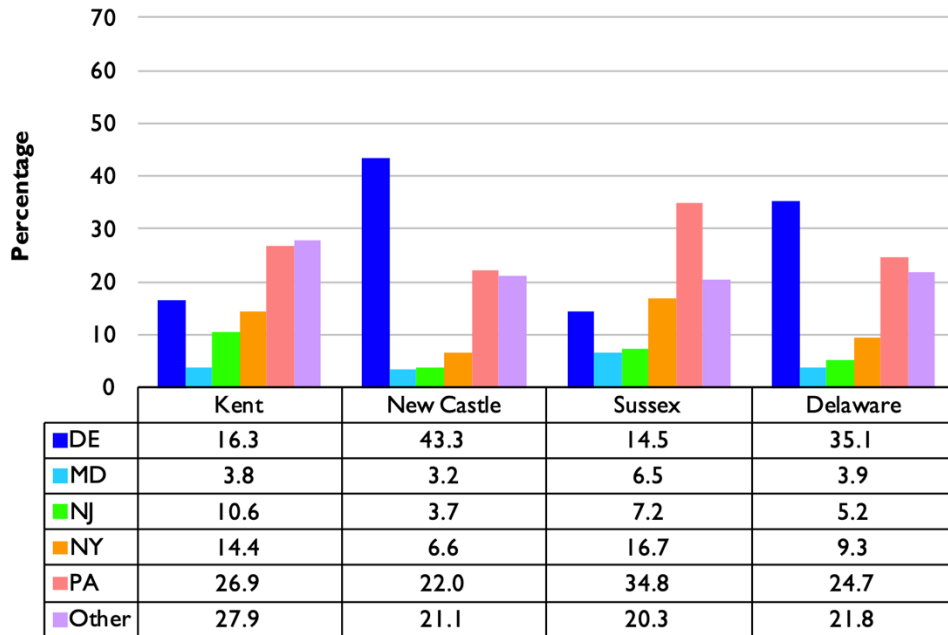
As the physician shortage grows in the United States, access to high quality medical care becomes one of our greatest public health needs. In Delaware, Kent and Sussex counties are already designated Health Professional Shortage Areas (HPSAs) with less than one primary care physician for every 2000 people.<sup>1</sup> The increasing imbalance between the number of new physicians moving to Delaware and those leaving or retiring, compound the issue.<sup>2</sup> The availability of physicians who are accepting new patients varies greatly by region, and the number of patients seeking a new physician is only increasing as more physicians shift to a concierge or VIP model of care due to lower reimbursement in traditional models.<sup>2</sup> With the recent announcement of the closure of the Dover Airforce Base medical facilities to families and retired service members, even more physicians will be needed.<sup>3</sup> Patients feel this deeply, with long wait times for appointments and the inability to find a primary care physician accepting new patients. As our population grows and ages, new strategies are needed to meet the primary care needs of our community.

GME can be part of a strategic plan to grow the physician workforce. A 2013 study found that 56% of family medicine residents practice within 100 miles of their residency program, with 39% practicing within 25 miles.<sup>4</sup> This finding is consistent with trends seen in Delaware, where a majority of primary care physicians have a strong tie to the region (Delaware, Maryland, New Jersey, New York, or Pennsylvania). In fact, 61% of primary care physicians went to high school in the region, 53% attended medical school in the region, and 78% completed residency in the region.<sup>1</sup>

The only residency programs that currently exist in Delaware are in New Castle County, so it is no surprise that that this is reflected in the geographic distribution of residency graduates. As seen in Figure 1, only 14.5% of primary care physicians in Sussex County completed a residency in Delaware, compared to 16.3% of those in Kent County, and 43.3% in New Castle County.<sup>1</sup>

Figure 1. State of Medical Residency of Primary Care Physicians by County, Delaware, 2018<sup>1</sup>

**State of Medical Residency of Primary Care Physicians  
by County, Delaware, 2018**



Source: Delaware Department of Health and Social Services, Division of Public Health, Delaware Primary Care & Specialist Physicians Survey 2018

The addition of Bayhealth's primary care residency programs to Kent and Sussex counties will bring 74 new primary care physicians in the residents alone, with additional core faculty. Their exposure to central and southern Delaware increases the likelihood that they develop a tie to Delaware and continue to practice in these areas after graduating. With the greatest need for primary care workforce development located in Kent and Sussex counties, it follows that new GME programming in these counties would help to meet this critical need. Teaching itself has been positively linked to combatting burnout and more physicians are seeking opportunities to be involved in GME. The development of GME in Kent and Sussex programs creates these opportunities for existing physicians to increase joy in practice, and can be helpful in attracting new physicians to the area.

It is important to note, however, that GME in itself is not a definitive solution to the physician workforce dilemma. While nationwide the in-state retention rates of residents are 47.5%, Delaware currently ranks amongst the lowest at only 28.6% retention.<sup>5</sup> Additional strategies, such as loan repayment and primary care reimbursement, need to be implemented to make the practice of medicine in Delaware more attractive to new physicians.

GME has benefits for the community beyond growing the workforce. Teaching hospitals tend to have an overall higher quality of care than nonteaching hospitals in metrics such as length of stay and cost.<sup>6</sup> This is particularly pertinent in Delaware, which was ranked the 35<sup>th</sup> healthiest state by America's Health Rankings in 2019.<sup>7</sup> The presence of learners drives the use of the latest medical evidence in clinical decision-making, leading to better outcomes. For attending physicians, modeling excellence in practice and participating in critical review of cases leads to fewer adverse outcomes.<sup>6</sup> Teaching physicians have found that the presence of learners gives an

added incentive to keep up with the latest guidelines and the resources, such as continuing medical education offerings, which allow them to do so. The addition of residents also improves interdisciplinary communication and teamwork, which can improve care and also decrease burnout.<sup>8</sup>

There is opportunity for synergy between efforts to meet GME requirements and efforts to improve outcomes for the healthcare system. Research, for example, is a requirement for residents and faculty, which can help emphasize the importance of quality improvement within the healthcare system. By joining hospital teams focused on commonly seen clinical challenges, such as reducing hospital acquired infections, reducing readmission rates, or improving metrics of chronic diseases, residents can help create solutions which directly improve the health of their patients. Wellness is another GME requirement that is also an area of focus for most healthcare systems. At Bayhealth, we plan to share ideas and resources between GME programs and the physician wellness program. By coordinating efforts from physicians who are just beginning their careers and those who have been practicing for decades, we hope to improve wellness in some creative ways.

GME programs also have the freedom to try new approaches which directly address the needs of the particular community served.<sup>6</sup> For example, over the past 3 years, Delaware saw a 61% increase in drug related deaths, an increase in frequent mental health distress, and an increase in obesity.<sup>7</sup> Bayhealth's new family medicine residency outpatient practice will address these needs directly by providing Medication Assisted Therapy for addiction, embedding a behavioral health provider in the practice to facilitate team-based care with residents, and focusing on diet and exercise as key drivers of health.

Finally, GME adds the opportunity to develop social consciousness in resident physicians by giving them opportunities to treat populations who are underserved.<sup>6</sup> Bayhealth's family medicine residency program takes a community-focused approach by partnering with FQHCs, homeless shelters, free clinics, and a nursing home for veterans. These sorts of efforts at building social capital early have been shown to create better health for the community and lower healthcare costs.<sup>6</sup> They also expose residents to a variety of practice needs and opportunities within the state.

GME programs create physicians who understand the resources and needs of the community where they have trained. By growing GME in Kent and Sussex counties, we can create a pipeline of physicians to mitigate our growing physician shortage, improve quality of care, and implement new programming to address the needs of our community.

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