July’s installment of the four-part HC Topics Provider Supply Series examined the U.S. physician shortage as it continued throughout the 1990s to the present. The combined effect of the steadily increasing primary care physician deficit, the increasing demand for healthcare services by the elderly, and the aging physician workforce lead to a physician shortage that is predicted to continue and worsen.1 In an effort to counteract the shortage, the Association of American Medical Colleges (AAMC) called for a 30 percent increase in medical school enrollment by 2015, along with an increase in the number of Medicare-funded residency positions to support the anticipated increase in graduates.2 Although medical school enrollment is currently on track with this goal, additional residency positions are needed to accommodate the greater number of graduates, however, these measures may still not be sufficient to offset the impending shortage.3 This final installment of HC Topics’ Provider Supply Series considers current predictions regarding the worsening physician shortage, along with the measures being developed to resolve the continuing problem.

In recent years, various reports have highlighted current physician shortages in a number of specialties, and have predicted growing shortages in the coming decades. Specialties such as cardiology, oncology, neurology, and primary care, all anticipate these significant shortages to be largely attributable to the increased demand for healthcare services by the elderly; the significant portion of the existing physician workforce that is approaching retirement; and, the failure of medical school enrollment and residency program placements to keep pace with changing demand.4 In 2010, the AAMC approximated a shortage of 13,700 physicians across all specialties, 9,000 of which provide primary care services.5 By 2020, the AAMC predicts this shortage will expand to 91,500 physicians, of which approximately half will be primary care providers. Further, the overall shortage across all physician specialties is expected to increase to 130,600 by 2025.6

A number of factors contribute to the AAMC’s 2025 prediction, including: an increase in the utilization of physicians’ services by persons over age 45; decreased work hours by the physician workforce as a result of generational and gender differences; minor to moderate growth in graduate medical education; moderate improvement in productivity through the increased scope of practice of physician extenders (e.g., physician assistants and nurse practitioners); and, the increase in healthcare insurance coverage as a result of the Patient Protection and Affordable Care Act (ACA).7 Although the expanded access to healthcare provided by the ACA (e.g., the individual mandate and optional expansion of the Medicaid program) may place an additional burden on the already shrinking physician supply, recent estimates suggest that the shortage of physicians by 2025 would still have exceeded 100,000 even in the absence of the ACA.8

In addition to the improved access to care mandated by the ACA, several other provisions of the ACA attempt to incentivize growth in the provider supply and more equitably distribute providers across specialties and geographic regions. The ACA mandates that the Medicaid primary care payment rates for 2013 and 2014 be increased and provides funding to train additional physicians in geriatrics and primary care, as well as physicians likely to practice in rural areas.9 In addition, certain physicians who provide primary care services may be eligible for a ten percent Medicare bonus payment, and general surgeons who perform “major surgical procedures” in Health Professional Shortage Areas (HPSAs) became eligible for a ten percent bonus payment starting in 2011, extending over five years.10 Further, a demonstration project, established under the ACA, provides support for low-income individuals who enter training programs in shortage fields and/or high demand professions. The project also provides tuition assistance for direct care workers who agree to practice for at least two years in geriatrics, disability services, long term, or chronic care management.11 The ACA also redistributes 65 percent of unused Medicare-funded graduate medical education positions to hospitals through an application process created by HHS, with priority given to areas with low resident-to-population ratios or that are otherwise characterized as underserved.12 Of those redistributed residency positions, 75 percent must be for primary care or general surgery, and recipients of the redistributed slots may not have a decrease in primary care residencies for the five years following the distribution.13

Several provisions of the ACA allot funding to study and enhance the healthcare workforce. The National Center for Health Workforce Analysis has been created to study issues such as physician shortages and make
appropriation-level recommendations for various programs. Additionally, *Health Workforce Development Grants* are being offered to states to fund an analysis of their respective health care markets; identify their current and projected workforce needs; and, develop strategies to meet those needs.  

The ACA also contains numerous provisions to address the education debt incurred by physicians and other providers. The *National Health Service Corps*’ budget will be increased from $320 million in 2010 to $1.15 billion by 2015, which facilitates funding increases in the maximum annual loan repayment amount from $35,000 to $50,000. Revisions to the *Health Resources and Services Administration’s Health Professions Student Loan Guidelines* reduced the required term of service to qualify for loan assistance for primary care to a maximum of ten years (including time spent in training); reduced the non-compliance interest rate penalty from 18 percent to seven percent; and, eliminated the requirement for parental financial information.  

Beginning with loan repayments received in 2009, funds received from a loan-forgiveness, or similar, programs designed to increase access in HPSAs or otherwise underserved communities may be excluded from an individual’s gross income for tax purposes. Pediatric subspecialists who practice in underserved areas are also eligible for loan repayment funds, and so are dentists, when they serve as dental faculty.  

To alleviate the strains of limited physician supply, the AAMC advocates the use of physician extenders, e.g., advance practice nurses and physician assistants, as well as the use of team-based approaches to care, e.g., medical home models and accountable care organizations. In the clinical setting, health information technology (HIT), particularly clinical decision support (CDS) systems, streamline providers’ access to patient information and clinical best practices, and enhances their ability to deliver high-quality care.

To further promote expansion of the healthcare workforce, on August 2, 2012, House bill, H.R.6352, was introduced to create 15,000 additional Medicare-supported residency positions over five years, beginning in 2013. One-third of those positions would serve as cap relief for those teaching hospitals that had accepted more residents than their programs allow. The bill further proposes that at least half of the 15,000 new residency slots must be extended to a defined shortage specialty residency program each year. Qualified teaching hospitals would be eligible to receive up to 75 slots over the five year term, and priority would be given to: “hospitals in states with new medical schools or new branch campuses; hospitals that emphasize training in community-based or outpatient hospital settings; and, hospitals eligible for electronic health record incentive payments.”

Despite all of the measures aimed at growing the supply of physicians and other healthcare workers, recent estimates indicate a significant shortage is still imminent. Declining enrollment in numerous specialties, coupled with aging patient and physician populations and the demand for healthcare services by millions more newly-insured individuals, all bode poorly for a system that has faced challenges with supply and demand for many years. Whether the measures designed to offset the impending shortage will be successful, and the level of impact achieved, remains to be seen.

**Provider Supply Series - Part I - G MEN AC: The Start of Supply Regulation**

**Provider Supply Series – Part II - The Aftermath of G MEN AC**

**Provider Supply Series – Part III - The Primary Care Deficit: Is it Too Late to Fix?**


[5] Ibid.

[6] Ibid.

[7] Ibid.


[12] Ibid., p. 6.

[13] Ibid.

[14] Ibid., p. 3.


[16] Ibid., p. 6.

[17] Ibid.

[18] Ibid., p. 10.


[22] Ibid.


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