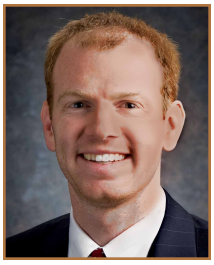

Orthopedic Residents: What Are We Worth?

J. Benjamin Jackson III, MD

The modern age of health care has driven a national interest in quality, health care economics, and proving value. A commonly used definition for quality is value/cost. Defining the value of orthopedic residents is difficult. With changes in the delivery of health care, the implementation of the Affordable Care Act, and an increasing federal deficit, defining the value of orthopedic residents has never been more important.[1]

Funding for graduate medical education (GME) has been a source of recent intense debate.[2-8] From the inception of Medicare and Medicaid services, the value of residents has been recognized, and funding has been provided for resident and fellowship education. In 2012, public tax dollars provided more than $15 billion towards GME, with more than 90% coming from the Center of Medicare and Medicaid Services (CMS).[4] This funding was initially established to:

- support the education of physicians
- provide well-trained physicians for future generations
- account for a disproportion of care provided to underfunded patients at teaching hospitals
- account for specialty services (eg, burn centers, trauma centers, emergency psychiatric services) that can be net revenue negative.

The significant cost of these programs, which are almost exclusively government-funded, has been the subject of cost-cutting discussions in Congress since the Balanced Budget Act of 1997 that froze GME funding.[9] More recently, the National Commission on Fiscal Responsibility and Reform report authored by the Bowles-Simpson Commission proposed decreases in both direct medical education (DME) and indirect medical education (IME) payments that could total $6 billion by 2015 and $60 billion by 2020.[4,7,8] The proposed cuts come on the heels of the Affordable Care Act and the projected significant increase in health care demand.[1] It is important to note that private payers do not support GME despite receiving health care provided by residents and fellows.

Despite a track record of producing well-trained and skilled physicians at the end of GME training, several reports from both the public and private sectors have identified weaknesses in the GME system. These include a mismatch between the specialty composition of physician trainees and the population needs, geographic maldistribution of the physician workforce, and a lack of fiscal transparency of GME fund use by hospitals.[2]

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A recent comprehensive report from the Institute of Medicine (IOM) entitled *Graduate Medical Education that Meets the Nation's Health Needs* highlights the current issues surrounding GME funding.[2] The report made note of several important problems with the current GME system, including:

- The revenue impact and cost savings associated with sponsoring residents are neither tracked nor reported, and they are rarely acknowledged in analyses of GME costs.
- In 1997, Congress capped the number of Medicare-supported physician training slots. Hospitals may add residents beyond the cap but cannot receive additional Medicare payments for those trainees. The cap is equal to each hospital's number of residents in 1996—essentially freezing the geographic distribution of Medicare-supported residencies without regard for future changes in local or regional health workforce priorities or the geography and demography of the US population.[9]
- By distributing funds directly to teaching hospitals, the Medicare payment system discourages physician training outside the hospital, in clinical settings where most health care is delivered.
- Because Medicare GME funding is formula-driven, the payments are essentially guaranteed regardless of whether the funded trainees reflect local, national, or regional

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health needs.
- The system's only mechanism for ensuring accountability is the requirement that residency programs be accredited. The system does not yield useful data on program outcomes and performance.
- Despite receiving government support for their residency or fellowship training, the graduate physician has no obligation to return this government investment through service.

Some of the IOM's proposed changes to the system include:
- Updating the GME funding to account for inflation and make GME payments based on accountable performance.
- Phasing out the current GME payment system.
- Specifying funds for "transformational" programs that promote innovation and planning for the future.
- Analyzing and redistributing GME funds based on current population needs and performance metrics.
- Increasing fiscal transparency of the CMS payments and their use by hospitals.
- Establishing a GME center within CMS for ongoing oversight.

The American Orthopaedic Association recently held a forum on GME funding for resident education.[10] At that forum, departmental leaders noted the difficulty in securing additional funded resident spots from hospitals and the difficulty in proving residents' value to the hospital administration. Some in the forum suggested that, in the future, residents may need to pay for their residency like they pay for medical school.

There is very limited published data on the financial value added by orthopedic residents. A recent study examined the service provided by a single junior resident during 2 years of primary orthopedic call.[11] They found that the potentially billable services provided by the resident totaled more than $79,000 per year. This only accounted for services delivered while on call every sixth night. This did not account for any surgical assisting or outpatient clinic support.[11] This amount is nearly twice the amount provided in DME funds to the hospital for resident support.

Although the care and service that residents deliver is obvious to orthopedic attending physicians, we must "prove" our value through continued research and reporting of services provided by residents. If we do not demonstrate our value to the funders of GME, the government, and Congress, I worry that residents who follow behind us may have to fund their own training. An additional concern is that the current shortage of orthopedic surgeons may be worsened if GME funding is decreased.[12] This shortage will be exacerbated by the aging population's increased need for orthopedic care.[13]

As health care goes through dramatic changes, orthopedic residents and attending surgeons need to be engaged in the discussion so that we can help shape our future in a way that meets the needs of our patients and continues to allow orthopedic care to be delivered at a high level nationally. ■

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