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Medicare Graduate Medical Education Payments: An Overview

The federal government makes significant investments in graduate medical education (GME), which is postgraduate training that medical, osteopathic, dental, and podiatric residents must complete to be certified to practice independently. Since its enactment in 1965, the Medicare program has been a chief source of federal GME funding to improve hospital quality and defray some of the extra costs for teaching hospitals that serve Medicare patients. The Government Accountability Office (GAO) reports that federal support for GME was \$14.51 billion in 2015 (GAO-18-240). Medicare accounts for most of that support.

The national physician workforce is largely determined by the number of residents who complete GME and the practice specialties and practice locations they choose. As such, Medicare funding has a significant effect on (1) the size of total physician supply, (2) the number of physicians practicing in various specialties, and (3) where physicians practice after completing their residencies. However, Medicare has acted primarily as a passive payer and has not actively directed the workforce's composition.

This In Focus provides an overview of Medicare GME payments to hospitals. Specifically, it discusses hospital eligibility for GME payments, what Medicare GME covers, and how Medicare pays for GME. More information on Medicare and other GME programs may be found in CRS Report R44376, *Federal Support for Graduate Medical Education: An Overview*.

Eligibility for Medicare GME Payments

To be eligible for Medicare GME payments, among other requirements, a hospital must have one or more approved residency programs in medicine, osteopathy, dentistry, or podiatry. (The remainder of this In Focus discusses medical and osteopathy residency programs.) Medicare regulations define an *approved medical residency program* as one that is accredited by an accrediting body specified at 42 C.F.R. §415.152. The Accreditation Council for Graduate Medical Education and the American Osteopathic Association, the two primary accrediting bodies for medical and osteopathy residency programs, are transitioning to a single accreditation system. Hospitals with approved residency programs are referred to as *teaching hospitals*; the Centers for Medicare & Medicaid Services (CMS) lists 1,281 teaching hospitals as of October 2017. Teaching hospitals often are affiliated with medical schools.

What Medicare GME Pays For

Medicare GME payments cover a defined share of expenses related to a hospital's approved medical residency program. Medicare GME pays for some *direct* costs of a residency program, such as resident stipends, supervisory physician salaries, and administrative costs. Medicare GME payments also cover some *indirect* costs to reflect the higher patient

care costs incurred at teaching hospitals relative to non-teaching hospitals. For example, resident-provided care may be more expensive due to additional testing that residents may order as part of their training. Medicare GME payments to a hospital are tied to the hospital's Medicare patient volume. GAO estimates that Medicare made \$10.34 billion in GME payments to teaching hospitals in FY2015, supporting approximately 88,000 resident full-time equivalents (FTEs). (Medicare GME payments and resident FTEs are further addressed below.)

How Medicare Pays For GME

Medicare payments for direct GME costs are called Direct Graduate Medical Education (DGME) payments. A DGME payment is an aggregate payment to a qualifying hospital, determined by a statutory formula and based on a hospital's Medicare patient volume. GAO reports that Medicare made \$3.71 billion in DGME payments to teaching hospitals, supporting 87,980 resident FTEs in FY2015.

Medicare payments for indirect GME costs are called Indirect Medical Education (IME) payments. As noted, IME payments are intended to cover the higher costs of teaching hospitals relative to non-teaching hospitals. However, Medicare typically does not provide separate payment for specific activities of residents, such as additional testing. Instead, Medicare IME payments are provided as an adjustment, or add-on, to the Medicare inpatient prospective payment system (IPPS) per-discharge payment for each covered Medicare patient. Per-discharge IME payments are determined, in part, through a statutory formula. GAO reports that in FY2015, Medicare made \$6.62 billion in IME payments to teaching hospitals, supporting 88,416 resident FTEs. (Medicare counts FTEs differently for DGME and IME.) (The DGME and IME payment formulas are described below and illustrated in **Figure 1** and **Figure 2**.)

Determining Medicare GME Payment Amounts to Qualifying Hospitals

When Medicare was enacted in 1965, GME payments—like hospital inpatient services—were paid based on a hospital's reported costs, which made GME payments essentially open-ended. In response to analysis predicting a future physician oversupply, provisions in P.L. 105-33 placed a cap on the number of FTE residents in medicine and osteopathy that Medicare would support each year through the program's per-hospital DGME and IME payments. There are exceptions to the Medicare FTE cap; for example, hospitals may start a new medical residency program that may be eligible, subject to meeting complex regulatory requirements, for Medicare GME payments. (For more information about new residency programs, see CRS Report R44376, *Federal Support for Graduate Medical Education: An Overview*.) Teaching hospitals may add resident FTEs to

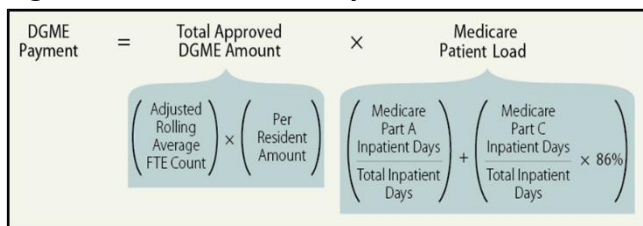
existing residency programs above the Medicare cap, however, Medicare generally does not pay for these additional FTEs.

As part of the change, the law limited both the number of Medicare-supported resident FTEs and the amount Medicare pays for each FTE (referred to as the *per-resident amount*, or PRA). FTEs for a given hospital were capped at the number of FTE residents that a hospital was training in 1996, and the amount Medicare pays for an FTE, the PRA, is based on a given hospital’s costs for a resident FTE in a base year, usually FY1984 or FY1985, updated by the Consumer Price Index for All Urban Consumers (CPI-U) as compiled by the Bureau of Labor Statistics.

DGME Payments

Overall, DGME payments are the product of a hospital’s (1) total approved direct GME costs and (2) Medicare patient load (see **Figure 1**). The total approved DGME amount is the number of FTEs (subject to the FTE cap) times the PRA. The Medicare patient load accounts for a hospital’s Medicare Part A (and a portion of Medicare Part C, or Medicare Advantage) patient days.

Figure 1. Medicare DGME Payment Formula



Source: CRS analysis of Title XVIII of the Social Security Act and relevant regulations.

Notes: The adjusted rolling average FTE count is subject to the GME cap.

IME Payments

IME payments to compensate teaching hospitals for higher resident costs are adjustments or add-ons to both the *operating* and *capital* portions of the Medicare IPPS per-discharge payment. Each IME adjustment, operating and capital, is calculated differently. The IME adjustment to the *operating* portion of the IPPS payment is based on a statutory formula that is intended to adjust for a hospital’s teaching intensity, as defined by an intern and resident-to-bed ratio (IRB). The IME formula (see left side of **Figure 2**) addresses teaching intensity through a “multiplier” (1.35) set in statute. According to CMS, the formula provides a 5.5% increase in the IME payment for every 10% increase in the IRB.

The IME payment adjustment for the *capital* portion of the IPPS payment is based on the residents-to-average daily census ratio (RADC) and an estimate of the effect of teaching activity on hospital costs (0.2822). (See the right side of **Figure 2**.) Both adjustments are subject to the FTE cap.

Figure 2. Medicare IME Operating and Capital Adjustment Formulas

IME Operating Adjustment = $1.35 \times ((1 + \text{IRB})^{0.405} - 1)$	IME Capital Adjustment = $(e^{0.2822 \times \text{RADC}} - 1)$
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Source: CRS analysis of Title XVIII and relevant regulations.

Notes: IRB = an intern and resident-to-bed ratio; RADC = residents-to-average daily census ratio. Both the IRB and RADC are subject to the Medicare GME FTE cap. Other limits and restrictions to the formula may apply.

Issues for Congress

The Medicare Payment Advisory Commission (MedPAC) and GAO, among others, have identified GME payment issues that Congress could consider addressing through legislation. These issues include the following:

- Medicare GME payments are intended to cover the direct and indirect costs of teaching hospitals relative to non-teaching hospitals. However, a 2013 MedPAC-commissioned study noted that Medicare GME payments are not adjusted to reflect the benefits of GME, such as additional revenue generated by certain medical specialties.
- Analysis by MedPAC and the U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, concludes that the statutory formula for IME results in IME payments that are up to twice the amount of teaching hospital IME costs.
- Medicare GME payments begin after a residency program is established. Therefore, any up-front investment by a hospital may not be recovered until after Medicare GME payments begin.
- With few exceptions, Medicare GME payments are not targeted to address changing health care workforce needs or trends (e.g., type of practitioners, settings, or geography). GAO (GAO-17-411) found that GME training residents continue to be concentrated in geographic areas that have experienced less population growth. The President’s FY2019 budget proposes to consolidate Medicare, Medicaid, and Children’s Hospital GME and target federal GME spending to address physician geographic and specialty shortages.
- Data needed to assess the relationship between GME funding and training costs are not generally available. GAO (GAO-18-240) analysis concludes that federal agencies, including CMS, which administers Medicare and Medicaid GME, lack the data to evaluate their investment in GME training, specifically, how training sites use GME funding.

Marco A. Villagrana, mvillagrana@crs.loc.gov, 7-3509

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