Congressional Research Service
Informing the legislative debate since 1914

IN FOCUS

Updated September 29, 2022

Medicare Graduate Medical Education Payments: An Overview

Medicare makes a significant investment in medical residency training (or graduate medical education, GME). It paid an estimated $16.2 billion in FY2020, primarily to hospitals. The Government Accountability Office found that Medicare is the largest federal source of GME funding, which also includes Medicaid, the Department of Defense, the Department of Veterans Affairs, the Children's Hospital GME, and Teaching Health Center GME programs.

Given the prominence of Medicare in funding medical residency training, policies that alter Medicare GME can affect the future physician supply and could be used to address identified health care workforce priorities. This In Focus addresses Medicare GME payments to hospitals—specifically, eligibility for these payments, what and how Medicare pays for GME, how Medicare determines the number of residents it pays for, and the amount per resident.

Eligibility for Medicare GME Payments

To be eligible for Medicare GME payments, a teaching hospital, which is often affiliated with a medical school, must have an approved residency program in medicine, osteopathy, dentistry, or podiatry. Medicare regulations require that programs be accredited. For medical and osteopathy programs, the Accreditation Council for Graduate Medical Education (ACGME) is the single accreditation system. (The remainder of this In Focus addresses medical and osteopathy residency programs.)

What Medicare GME Pays For

Medicare GME payments cover Medicare's share of the costs of a hospital's approved medical residency program. These costs include *direct* costs of operating a residency program, such as resident stipends, supervisory physician salaries, and administrative costs. Medicare GME payments also cover *indirect* costs associated with residency programs that may result in higher patient care costs in teaching hospitals relative to non-teaching hospitals. For example, resident-provided care may be more expensive because of additional tests that residents may order as part of their training. In neither case is Medicare's payment intended to reflect the hospital's full cost of training.

How Medicare Pays For GME

Medicare pays separately for direct and indirect GME costs. Medicare payments for direct costs of GME are called *Direct Graduate Medical Education* (DGME) payments. DGME payments are sometimes referred to as "pass-through" payments in that they are not an adjustment to a Medicare payment for an individual hospital discharge. Rather, DGME is an aggregate payment determined by a statutory formula. (See section on "Determining Medicare GME Payment Amounts to Qualifying Hospitals.")

Medicare payments for indirect GME costs are called *Indirect Medical Education* (IME) payments. IME payments are intended to cover the costs of "inefficient" care that may be provided by medical residents. However, since Medicare typically does not provide separate payment for such activities as additional testing, Medicare IME payments are provided as an adjustment or add-on to each Medicare inpatient prospective payment system (IPPS) per-discharge payment for qualifying teaching hospitals. IME payments are determined through a statutory formula.

Both the IME and the DGME payment formulas generally are based on patient volume or the number of beds and number of residents. (See **Figure 1** and **Figure 2** for information about how each formula uniquely accounts for these factors.)

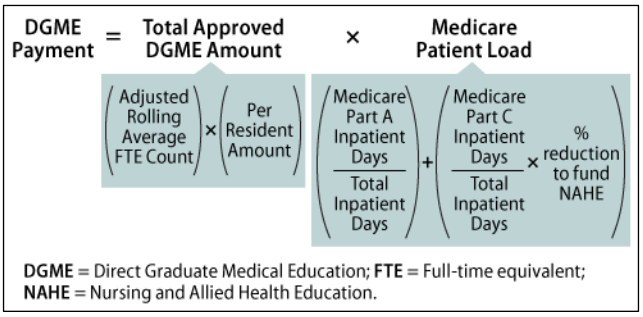
Determining Medicare GME Payment Amounts to Qualifying Hospitals

When Medicare was enacted in 1965, GME payments—like hospital inpatient services—were paid based on a hospital's reported costs, essentially an open-ended commitment by Medicare. Congress later capped Medicare GME payments for residency programs in medicine and osteopathy through limits on the number of resident full-time equivalents (FTEs) and per resident amounts (PRAs) it would support. FTEs that Medicare GME payments would support are capped at the *number* of FTE residents a hospital was training in 1996; the *amount* Medicare pays for an FTE is based on a 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, as compiled by the Bureau of Labor Statistics.

Direct Graduate Medical Education

DGME payments are the product of a hospital's total approved DGME costs (i.e., a three-year rolling average of FTEs, subject to the FTE cap, multiplied by the PRA) and a hospital's Medicare patient load percentage. A hospital's Medicare patient load is the proportion of Medicare beneficiary inpatient days relative to all-patient inpatient days for the year. The Medicare Part C (Medicare Advantage) portion of a hospital's Medicare patient load is reduced by a Centers for Medicare & Medicaid Services (CMS)-specified percentage to fund nursing and allied health education. The CMS-specified percentage can change each year. (See **Figure 1**.) In FY2020, Medicare paid $4.5 billion for DGME, supporting 88,247 FTEs.

Figure 1. Medicare DGME Payment Formula



Source: CRS analysis of 42 U.S.C. §1395ww(h)(3) and 42 C.F.R. §413.75-88.

The FTE cap and PRA amount are hospital-specific. However, qualifying hospitals may enter into a formal affiliate agreement in which a group of hospitals can share and redistribute FTEs among the hospitals. This allows some affiliated hospitals to reduce their Medicare-supported FTEs to increase another affiliated hospital's FTEs without exceeding the aggregate number of FTEs of the affiliated group (i.e., no net increase in Medicare-supported FTEs).

Indirect Medical Education

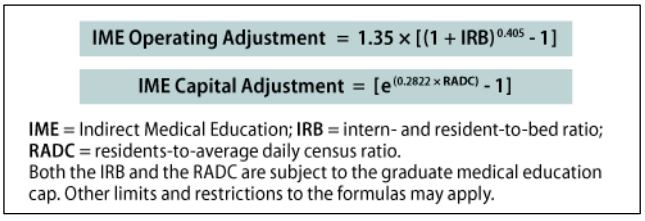
IME payments are intended to cover the higher costs of delivering health care services in teaching hospitals relative to non-teaching hospitals. IME payments are adjustments or add-ons to both the operating and capital portions of the Medicare IPPS per-discharge payment. The IME payment adjustment for each portion—operating and capital IPPS payments—is calculated differently. (IME payments and FTEs also are calculated differently from the DGME.)

The IME adjustment to the operating portion of the IPPS payment is based on a statutory formula. The IME formula (see **Figure 2**) captures for each teaching hospital the ratio of interns and residents to beds (IRB). The formula applies an exponent to the IRB (0.405), which estimates the effect of teaching activity on hospital costs. In addition, the formula contains a "multiplier" (1.35) that is set by Congress in statute. CMS states that this multiplier represents a 5.5% increase in the IME payment for every 10% increase in the IRB ratio.

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 **Figure 2**.)

In FY2020, Medicare paid an estimated $11.68 billion for IME, supporting 98,542 FTEs.

Figure 2. Medicare IME Operating and Capital Adjustment Formulas



Source: CRS analysis of 42 U.S.C. §1395ww(d)(5)(B) and 42 C.F.R. §412.322(b).

Medicare GME Payments and FTEs

CMS does not publish estimates of Medicare GME payments and the FTEs supported by such payments. **Table 1** contains estimates of payments and FTEs based on analysis of publicly available Medicare cost report data.

Table 1. Estimated Medicare GME Payments and FTEs, FY2020

Medicare GME Payments ($billions)			Medicare GME FTEs	
DGME	*IME*	*Total*	*DGME*	*IME*
$4.50	$11.68	$16.18	88,247	98,542

Source: CRS analysis of FY2020 Medicare hospital cost report data.

Increasing Medicare-Supported Residency Positions

There are limited administrative options to increase the number of Medicare-supported residency positions. For example, a hospital with an existing residency program can establish a new program; "new" is defined in regulation. A hospital without a residency program can start one, though some of these hospitals may already have a Medicare cap that is smaller than the number of residents the hospitals intend to train. (The Consolidated Appropriations Act, 2021 [P.L. 116-260] allowed some of these hospitals to adjust their caps.) Alternatively, an urban hospital can start a new Rural Training Track to train residents in a rural area. Otherwise, Congress may enact legislation to increase the number of Medicare-supported residency positions, which was done most recently in P.L. 116-260.

Selected Issues for Congress

Analysis by the National Academies of Science and the Medicare Payment Advisory Commission (MedPAC), among others, has identified issues that Congress may consider as part of any potential GME legislation:

- Medicare GME payments are intended to cover the higher direct and indirect costs of teaching hospitals relative to non-teaching hospitals. However, Medicare GME payments are not adjusted for any cost savings or revenue generated by the medical residents.
- MedPAC has noted that the statutory formula for IME results in payments that are up to twice the amount that is empirically justified. (For example, see reports to Congress of March 2007 and March 2016.)
- Medicare GME payments begin after a hospital's GME program starts; Medicare does not cover up-front costs to establish a new GME program.
- Medicare GME payments generally do not address changing health care workforce needs, changes in settings where care is delivered, or trends that may necessitate changes in training.

For further information, see CRS Report R44376, *Federal Support for Graduate Medical Education: An Overview*.

Marco A. Villagrana, Analyst in Health Care Financing

IF10960

Disclaimer