GRADUATE MEDICAL EDUCATION

INTRODUCTION

After completing medical school, physicians enter a postgraduate phase of training known as graduate medical education (GME). GME programs prepare physicians for independent practice in a medical specialty and focus on the development of clinical skills and professional competencies and on the acquisition of detailed factual knowledge within the chosen specialty.

GME programs are based in hospitals or other health care institutions and, in most specialties, utilize both inpatient and ambulatory settings. GME programs are usually called residency programs, and the physicians being educated by them, residents.

PROGRAM ACCREDITATION

Federal law requires a program to meet certain criteria, including accreditation by certain specified entities, in order to receive GME funds from the Medicare or Medicaid programs. Programs may be accredited by the Accreditation Council for Graduate Medical Education (ACGME, for allopathic medical residencies), the American Osteopathic Association (AOA, for osteopathic medical residencies), the American Dental Association (for dental residencies) or the American Podiatric Medical Association (for podiatry residencies).1,2 Federal law also provides an exception to these requirements for programs that would be accredited except for that the accrediting body includes a standard that requires the entity to perform or provide training for abortion; if the program meets all other accreditation requirements except for that particular requirement, it may receive payment even if it is not accredited.

1 ACGME-accredited residency programs train both MDs and DOs; AOA-accredited residency programs train only DOs.

2 Federal law also provides an exception to these requirements for programs that would be accredited except for that the accrediting body includes a standard that requires the entity to perform or provide training for abortion; if the program meets all other accreditation requirements except for that particular requirement, it may receive payment even if it is not accredited.
The various accreditation bodies establish educational standards for, and monitor compliance of, residency programs and institutional sponsors of GME in the United States. Accrediting bodies typically consider numerous factors when deciding whether to approve a residency program or an increase in a program, including the number of available programs, the number of patients available for the residents to treat and the number of faculty available to supervise and train the residents. Because federal funding is provided only to accredited programs, the size of most residency programs is limited by whether they receive accreditation.

The Arizona Health Care Cost Containment System (AHCCCS) reports the following figures for Arizona medical residency positions in 2007:

<table>
<thead>
<tr>
<th>Accrediting Body</th>
<th>Positions Approved</th>
<th>Positions Filled</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGME</td>
<td>1,353</td>
<td>1,220</td>
</tr>
<tr>
<td>AOA</td>
<td>71</td>
<td>42</td>
</tr>
<tr>
<td>Total</td>
<td>1,424</td>
<td>1,262</td>
</tr>
</tbody>
</table>

**GME FUNDING**

Another factor that limits the number of residencies is the availability of funding. According to the Association of American Medical Colleges, GME is funded from both the Medicare and Medicaid programs, hospitals that conduct the residencies, public and private third-party payers’ payments for patient care services, the Department of Veterans Affairs, the Department of Defense, faculty revenues and philanthropic gifts.³

³ President Bush’s FY 2008 budget proposes to eliminate Medicaid support for GME programs. Furthermore, in May 2007, the Centers for Medicare and Medicaid Services issued a proposed rule to stipulate that Medicaid GME expenditures are not eligible for federal Medicaid funds. The FY 2007 supplemental appropriations bill passed by Congress and signed by the President (P.L. 110-28) prohibits CMS from taking any regulatory or administrative action to limit Medicaid GME payments for one year.

**Types of GME Payments**

There are two main types of GME payments paid by public sources: Direct Graduate Medical Education (DGME) and Indirect Medical Education (IME). DGME payments reimburse for the tangible direct costs of operating a GME program, including compensation and benefits for residents and supervising faculty, as well as the proportion of the hospital’s administrative and related costs for facility management that is attributable to the GME program.

The IME payment mechanism is based on the premise that, through the teaching process, hospitals with residents incur additional costs beyond resident salaries and related expenditures. Teaching hospitals typically attempt to have up-to-date technology and often serve the sickest patients. In addition, teaching increases the time it takes for patient care, which increases costs. To account for these higher costs, entities may make payments to teaching hospitals include an IME adjustment, which is a percentage increase in the hospital inpatient rates based upon the ratio of interns and residents to hospital beds.

**Medicare Funding and Position Caps**

Federal law caps the number of residents Medicare supports at 1996 levels. Rural teaching hospitals are capped at 130 percent of 1996 levels. However, there are several exceptions to these caps. According to the Centers for Medicare and Medicaid Services (CMS), urban hospitals, under limited circumstances, can apply for an increase in their cap for new residency programs, and hospitals in rural areas may receive an increase to their FTE caps for any newly approved programs. Hospitals may train more residents than the caps, but they will not receive additional Medicare payments for the residents. Therefore, without CMS approval, funding to increase residencies must come from sources other than Medicare.

The Congressional Budget Office estimates that, in federal FY 2006-2007, Medicare will...
pay $1.9 billion for DGME costs and $6.4 billion for IME related costs.

**Medicaid and Other State Funding**

Arizona currently funds allopathic and osteopathic GME programs through AHCCCS. Historically, AHCCCS used Medicaid funding to make DGME payments to residency programs established and approved by AHCCCS on or before October 1, 1999.

In FY 2006-2007 and FY 2007-2008, state appropriations for GME were increased and modified as part of an effort to increase the number of physicians practicing in Arizona (Laws 2006, Chapter 331, and Laws 2007, Chapter 263). 4

Monies available for residency programs that were established and approved by AHCCCS by October 1, 1999, are limited to the FY 2005-2006 appropriation, adjusted annually by a hospital inflation figure. The $12 million added in FY 2006-2007 is allocated for: 1) the expansion of programs established before July 1, 2006, at hospitals that do not receive existing GME funding, and 2) the expansion of programs established on or before October 1, 1999.

The $8.9 million added in FY 2007-2008 is allocated for: 1) programs established or expanded on or after July 1, 2006, and 2) a portion of IME costs for programs located in a rural county or a program that includes a rotation in a rural county.

Finally, FY 2006-2007 and FY 2007-2008 budgets included $1 million in non-Medicaid state monies to fund loans for start-up and ongoing costs for allopathic and osteopathic residency programs in accredited hospitals. 5 AHCCCS provides interest-free loans of up to $500,000 annually for one hospital per county if the hospital: 1) establishes a new program that includes at least six residents, or 2) adds a new specialty area with at least four new residents to an existing program. Loans are prioritized first for hospitals in counties with populations of less than 500,000 persons that submit applications on or before September 1, 2007; after that date, hospitals in any county are eligible.

The table below details current GME spending.

<table>
<thead>
<tr>
<th>Graduate Medical Education Appropriations</th>
<th>Federal Funding</th>
<th>Total Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2007-2008 Appropriations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Funding</td>
<td>$13,272,600</td>
<td>$29,384,000</td>
</tr>
<tr>
<td>Medicaid Funding</td>
<td>$29,384,000</td>
<td>$42,656,600</td>
</tr>
<tr>
<td>FY 2008-2009 Appropriations</td>
<td>$15,323,100</td>
<td>$32,583,100</td>
</tr>
<tr>
<td>Medicaid Funding</td>
<td>$29,583,100</td>
<td>$44,906,200</td>
</tr>
</tbody>
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**ARIZONA MEDICAL EDUCATION CONSORTIUM**

The Arizona Medical Education Consortium (AzMEC) was formed in 2003 to improve graduate medical education opportunities in Arizona. Working with Arizona teaching hospitals and the University of Arizona College of Medicine, AzMEC reports that it assists organizations in competing for the most qualified students, keeps members up to date with changes in accreditation requirements and GME financing, provides a forum for discussion of GME issues and educates the community about the benefits of GME.

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4 According to the Arizona Physician Workforce Study (Study), which was conducted by the University of Arizona Health Sciences Center and the W.P. Carey School of Business at Arizona State University, the site of a physician’s residency training is a major influence on the physician’s choice of a location for his or her practice. The Study reports that in 1992, 59 percent of Arizona resident survey respondents indicated they would practice in Arizona after completing their residencies. Therefore, if the number of residencies in the state increases, the number of physicians in the state may also increase.

5 Revisions made to the FY 2007-2008 budget reverted the appropriation made for the Hospital Loan Residency Program. The FY 2008-2009 budget continues the $1,000,000 decrease.
• **ADDITIONAL RESOURCES** •


- Accreditation Council for Graduate Medical Education  
  [www.acgme.org](http://www.acgme.org)

- Association of American Medical Colleges  
  [www.aamc.org](http://www.aamc.org)

- Council on Graduate Medical Education  

- Arizona Medical Education Consortium  
  [http://www.ahsc.arizona.edu/azmec/](http://www.ahsc.arizona.edu/azmec/)