Redistribution of unused residency positions: meeting the healthcare needs of the nation?

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Introduction

•The U.S. healthcare workforce is struggling to meet the nation's primary care and geographic distribution needs.
•Graduate medical education (GME) determines the total number, specialty make-up, and—studies show—the geographic distribution of the physician workforce.
•Efforts by U.S. lawmakers to address healthcare needs have often been formulated around GME.

•We studied the two initiatives by Congress to redistribute unused GME-funded residency slots:

- Medicare Modernization Act (MMA) of 2003 redistributed slots with the intent to increase residency training in rural areas
- Affordable Care Act (ACA) of 2010 calls for the redistribution to increase primary care and general surgery residency slots.

- Our goals were to:
  - Analyze the impact of the MMA
  - Compare the ACA and the MMA redistributions, demonstrating improvements and potential unintended consequences of the ACA
  - Suggest areas for research and future policy changes.

Materials and methods

We analyzed the legislation and regulations of both redistributions for common themes, key differences, and unforeseen consequences and implications for our nation's healthcare workforce. We also examined current literature and writing on GME and its implications, and reviewed current GME proposals.

Box 1. Medicare GME Payment Formulas

Direct GME (DME) – includes resident salaries and fringe, faculty salaries when teaching, administrative costs.

DME = PRA * FTE * % Medicare Days

PRA = per-resident amount, set per hospital
FTE – weighted full-time equivalent residents

Indirect GME (IME) – the higher cost of patient care associated with teaching, calculated as a % add-on to the inpatient prospective payment rate

$IME\ \% = c * [(1+r)^{0.405} – 1]$

c = multiplier set by Congress
r = hospital's resident FTE to bed ratio

Results

Medicare Modernization Act 2003	Affordable Care Act 2010
Intent according to Federal Register: **Encourage resident training in rural areas**	Intent according to Federal Register: **Increase the number of primary care and general surgery physicians**
Approximately 3,060 slots collected and redistributed	Approximately 1,354 slots collected and redistributed
A single hospital may receive no more than 25 additional slots	A single hospital may receive no more than 75 additional slots
Eligibility Criteria •Awarded slots **CAN** be used to fill already non-GME funded slots •**85% specialty fill rate either nationally**, in the State, Metropolitan Statistical Area, OR 85% fill rate in EACH of hospital's residency programs over 3 year period	Eligibility Criteria •Awarded slots **CANNOT** be used to fill already non-GME funded slots •**85% specialty fill rate either nationally**, in the State, Core Based Statistical Area, OR 85% COMBINED fill rate in hospital's residency programs over 3 year period
Ranking system for eligible hospitals with priority given to rural hospitals and those hospitals with **only specialty program** in the State	Ranking system for eligible hospitals •70% slots must go to hospital in State in the lowest quartile for resident to population ratio •30% slots must go to hospital in State whose primary care HPSA-to-population ratio is in the top 10 States •**Preference in each category given to urban hospitals with Rural Training Tracks (RTT)**
15 Sub-Ranking Criteria (to order hospitals within rank) •1-point each •Criteria range widely in focus	8 Sub-Ranking Criteria •Varying points •Criteria more focused on increasing primary care and care in rural and underserved areas •**Award points for accountability** (hospitals that can prove success of their programs in training primary care physicians)
• Direct GME (DME) payment for redistributed slots: calculated using locality-adjusted national average Per Resident Amount (PRA), rather than hospital's PRA • Indirect GME (IME) payment for redistributed slots: IME adjustment factor formula multiplier for redistributed FTE resident slots is 0.66	• DME and IME payments for redistributed slots-**no change** from hospitals' current GME payments • *Please see Box 1. Medicare GME Payment Formulas*
No requirements or follow-up for slots received	**Over a five year period** after the redistribution, hospitals awarded slots must maintain the average number of primary care residents, plus 75% of the awarded slots must be trained in primary care or general surgery

Conclusions

Specialty Program	2003 National Fill Rate %	2010 National Fill Rate %
Family Medicine	**76.3%**	**91.4%**
General Internal Medicine	92.8%	93.8%
General Pediatrics	97.7%	100%
Preventive Medicine	33.3%	66.7%
Geriatric Medicine	74.1%	55.8%
General Surgery	99%	99.8%

Table 1. 2003 vs. 2010 National Residency Fill Rates in the different primary care specialties. Note that in 2003, Family Medicine did not meet the 85% specialty fill rate criteria to be eligible for redistributed residency slots.

State	Resident-to-population ratio in the lowest quartile	Top 10 primary care HPSA-to-population ratio	RTT program
Alabama		✓	
Alaska	✓		
Arizona	✓		
District of Columbia		✓	
Florida	✓		
Georgia	✓		✓
Idaho	✓		✓
Indiana	✓		
Louisiana		✓	✓
Mississippi	✓	✓	
Montana	✓	✓	
Nevada	✓		
New Mexico		✓	✓
North Dakota	✓	✓	
Puerto Rico Commonwealth	✓	✓	
South Dakota	✓	✓	
Wyoming	✓	✓	

Table 2. States eligible to receive redistributed residency slots according to the 2010 ACA's ranking system and those with Rural Training Tracks. Note that only four of the seventeen states have RTTs.

While the MMA states a focus on rural training and the ACA focuses on primary care and general surgery, both incorporate priorities for primary care specialties and rural and underserved training.

We determined that the MMA criteria for residency slot redistribution included significant loopholes and counterproductive incentives for hospitals that received slots that rendered it largely ineffective at achieving its goal of encouraging resident training in rural areas:

- Allowed hospitals to receive redistributed slots for slots the hospitals were already funding on their own (termed "cap relief")
- Set strict eligibility criteria making most Family Medicine programs ineligible for slots (even though FM is critical for rural medicine—the focus of the 2003 redistribution)
- "Only specialty program in State" ranking criterion seems to have favored specialty programs over primary care
- No follow-up requirements for awarded residency slots

Based on the above analysis, our study suggested that the ACA framework is more likely to produce desirable outcomes by:

- Not allowing cap relief
- Prioritizing Rural Training Tracks
- Promoting accountability by giving preference to hospitals that can prove their success at training residents who remain in primary care and/or practice in underserved areas
- Follow-up requirements for awarded residency slots

Nonetheless, certain aspects of the ACA are suboptimal, including:

- Retains eligibility requirements that disadvantage other needed specialties, such as Preventive Medicine
- Rural Training Tracks, although successful, are small programs with little growth, and many are located in states not eligible for awarded slots
- Fails to require retention of Internal Medicine and General Surgery physicians, most of whom pursue subspecialty training

Understanding the effect of these two redistributions has important implications for any future GME reforms. Introducing accountability into the GME system and adjusting GME payment levels have been the focus of recent MedPAC reports and debt ceiling discussions and such redistributions offer a first look at these reforms.

Literature cited

Medicare program; changes to the hospital inpatient prospective payment systems and fiscal year 2005 rates; final rule. 69 Federal Register 154. 11 August 2004:48916

Medicare program: Hospital outpatient prospective payment system. 75 Federal Register 226. 24 November 2010:72147

National resident matching program, results and data: 2007 main residency match. Washington, DC: National Resident Matching Program; 2007.

National resident matching program, results and data: 2010 main residency match. Washington, DC: National Resident Matching Program; 2010.

Table 3.2: Geriatric medicine fellowship programs, family medicine and internal medicine 1991/2-2010/11 [homepage on the Internet]. [cited 8/26/2011]. Available from: http://www.adgapistudy.uc.edu/figs_fellowship.cfm

About the rural training track technical assistance program [homepage on the Internet]. [cited 8/30/2011]. Available from: http://www.raconline.org/rtt/rtt_list.php