How Much is Your Residency Worth?

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Does a medical center gain or lose money on its residents?
How Did We Get Into This Mess?

I. Prior to 1940
   ➢ Housestaff lived in “the house”. Salary paid directly by the hospital. Room and board included.

II. 1945-1965: GI Bill
   ➢ Residency positions increased 6-fold
   ➢ GI Bill supports subsidizes residency positions for servicemen, and subsidizes hospital expenses

III. 1966-1981: Medicare
   ➢ Congress acknowledges need to support GME. Medicare and private payers contribute “customary and reasonable expenses”
iv. **1982-1986  DME & IME**
- Special subsidies to teaching hospitals. Complex calculations based upon resident-to-bed ratios, Medicare’s share of total hospital inpatient days, etc.
- Additional subsidies for classrooms, clerical support, faculty teaching efforts,
- Subsidies to teaching hospitals for additional testing and increased technology in teaching centers

   Government begins to pull back on IME payments.
Modern Era-Balanced Budget Act (BBA)

BBA acts of 1997, 2001

- Markedly increased attention on cutting costs
  - 5-year annual progressive decrease in IME
  - Cap on total resident-to-bed ratios
  - GME payments “carved out” of reimbursements sent to hospitals that care for Medicare HMO patients

Health care reform-2012?
Why Worry Now?

Figure 1

SOCIAL SECURITY, MEDICARE, AND MEDICAID AS A PERCENTAGE OF GDP

% of GDP

Source: Congressional Budget Office.
## Will There be Any Money Left at All?

*(HI=hospital insurance)*

### Chart 1-11. Medicare HI trust fund is projected to be insolvent in 2017

<table>
<thead>
<tr>
<th>Estimate</th>
<th>Year costs exceed income</th>
<th>Year HI trust fund assets exhausted</th>
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<tbody>
<tr>
<td>High</td>
<td>2008</td>
<td>2014</td>
</tr>
<tr>
<td>Intermediate</td>
<td>2008</td>
<td>2017</td>
</tr>
<tr>
<td>Low</td>
<td>2018</td>
<td>2028</td>
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**Note:** HI (Hospital Insurance). Income includes taxes (payroll and Social Security benefits taxes, railroad retirement tax transfer), income from the fraud and abuse program, and interest from trust fund assets.

**Source:** 2009 annual report of the Boards of Trustees of the Medicare Trust Funds; CMS, Office of the Actuary.
How Does the Money Get to Our Trainees?
Direct Medical Education Payments

- **DME** *(also DGME)* This is the Medicare determined payment for each resident.
- **PRA** The “Per Resident Amount”
- **FTE** Full Time Equivalent

How is it calculated?

\[
\text{DME} = \text{PRA} \times \text{FTE} \text{ (weighted)} \times \text{Medicare share of inpatient days.}
\]

*This rate was frozen 12/31/96*
IME - Additional payment for a Medicare discharge to reflect higher patient care costs for teaching hospitals relative to nonteaching hospitals.

\[ R = IME \text{ Adjustment Factor} = \text{Calculated by using ratio of hospital’s residents to beds} \]

\[ C = \text{Multiplier} = \text{Random factor set by congress} \]

\[ IME = C \times \left[ (1 + R) \times 0.405 - 1 \right] \]
What the???????????????
IME payment is dependent upon your number of residents and a congressionally determined IME multiplier.

Multiplier has been 1.35 since 2003

That translates into a **5.5% increase in IME payments for every 10% increase in the resident to bed ratio** *(it used to be 7.7% increase)*

This translates into a disincentive to increasing residency program size.
PPS Payments
**PPS=Prospective Payment System**

PPS is a pre-determined fixed amount of reimbursement made up of the following...

- Base payment
- Wage index (local costs)
- MS-DRG (accounts for differences in patient mix from one hospital to the next)
- Add on for “disproportionate share of indigent patients”
- Add-in for IME
- Add on for cases that use approved eligible technologies
- Outlier payment for “exceptional” cases
- Reduced payments for hospitals that don’t report on quality data.
What’s the Bottom Line for the USA?

American DGME & IME payments: estimates for fiscal year 2010

DGME Payments = $3.0 billion
IME Payments = $6.54 billion
Total = $9.54 billion
SO... How Much Per Resident?

2010 estimates

- $9,540,000,000 in GME funds
- 90,000 residents funded under the cap for...
- $106,000 per resident

- 110,000 residents total in USA 2010 (i.e. 20,000 over cap) or final average of $86,700 per resident
Calculations - Part I

- Resident Salary = $50,000 per year
- Fringe of 27% = $13,500 per year
- Total costs = $63,500 per year
- DGME/IME = $106,000 per year

- Net Profit to Institution = $42,500 per resident/year!
- For our categorical residency of 50 = $2,125,000

Remember... if your residency is already capped, additional residents will NOT bring in additional DGME or IME from Medicare!
But how much does it cost to teach?

- **Time for faculty effort when they’re not billing?**
  - Direct supervision, Observed H & P, didactics, advising, remediation, program directorship, procedural training, etc.

- **Ancillary staff**
  - Coordinator, chiefs, assistants, DIO, etc.
Can we estimate minimum FTE faculty to calculate cost of teaching?

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<th>Cty</th>
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<td>8</td>
<td>10</td>
<td>3</td>
<td>32</td>
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Hasbro Children’s Hospital
The Pediatric Division of Rhode Island Hospital
A Lifespan Partner
Now add in minimum FTE admin

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<td>=57</td>
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<tr>
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<td>1</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>=96</td>
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Our best guess – **Price Tag** for Faculty-Pediatric Residency Training.

SM = $4,740,000

MD = $7,840,000

LG = $16,500,000

(Assumption of 27% fees for benefits)
Calculations- Part III

- What about the intangibles and “goodwill”?
- Academic medical centers often have potent advantages in
  - grants, research support, up to date providers, recruitment of specialists, intellectual stimulation, community prominence
Calculations Part IV

- Balance Sheet
- Do residents bring money in, or cost us?
  - Generally more testing?
  - Increased length of stay?
  - Increased errors?
  - Diminished billing?
  - Patient satisfaction?
  - Mandates to expand faculty to meet ACGME requirements in money losing programs?

Hasbro Children's Hospital
The Pediatric Division of Rhode Island Hospital
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Replacement Cost

how many FTE’s would be required to fill the role of one resident FTE

Assumption: 50% inpatient, 50% ambulatory

Inpatient replacement FTE: 3-4 for one resident x 50%

Ambulatory-1 FTE replacement x 50%

SUM: Need 2.5 FTE per resident per year

=$425,000 per year for each replacement
Expansion Costs

Unless there is a new source of billing or revenue, residency expansion will generally appear as a net loss!

*Caveat: Winning new cap positions from recently closed institutions*
Many Possible Futures
Freestanding Children’s Hospitals: a group at particular risk?

Children’s Hospital GME Payment Program

- Freestanding children’s hospitals don’t have a significant Medicare source of funding
- Congress appropriated $300 million dollars for ONE year of GME funding including DME/IME
- Obama budget 2012 would eliminate that funding.
Who Will Pay For All of the Training?

Huge numbers in the medical student pipeline

- Medical schools awarded 16,468 MD Degrees in 2009
- A total of 18,390 students entered medical schools in 2009
- AAMC and COGME calling for increase in students to offset projected shortages
Medicare Payment Advisory Commission

MedPAC is heavily influential and seeking complete reform of GME funding

- Should Medicare be in the GME business at all?

- Recommendation that Congress convene an expert group to come up with new standards to link payments with national incentives on quality and outcome.

- Timeline to completion- 3 years.

- Incentivize primary care and ensure high quality primary care experiences
“Medicare (should) publish information about how much it pays each teaching hospital for GME-information that is sometimes not even available to the residency-program directors and teaching hospital faculty. GME payments...may be allocated as the institution’s chief executive and board of directors see fit without regard to the GME mission”

NEJM, 364:8 p.694
ACGME has taken important steps in reorienting its residency-program accreditation standards to support needed change. We applaud that progress, but it has been slower than MedPAC and some members of the GME community would like.”

NEJM 364:8, 2/24/11 Pg.693
“MedPAC like many others is also concerned about the declining proportion of U.S. medical students choosing careers in primary care. GME could help to address this problem—for example by expanding primary care programs and shrinking subspecialty programs or by investing sufficient resources in primary care programs to ensure that residents have high-quality experiences”
Opportunity Knocks

- Shall we increase pediatric residency slots, and if so, who pays?
- Shall we increase primary care exposure and incentives, and if so, who pays?
- Shall we (APPD) become more politically active as an advocacy group?
Should We be Thinking Entirely Anew?

- Multidisciplinary medical home?
- Fewer pediatricians, but more extenders?
- Accountable care organizations?
  - Financial risks shared between hospitals and community practitioners?
- Let market forces reign?
Where Shall We Go Next?

- More training programs or fewer?
- More residents or fewer?
- More primary care practitioners or specialists?
- More doctors or mid-levels and extenders?
What Will YOU do Next?

SUCCESS

The ladder of success was not crowded at the top. Did I set it against the right building?