The Future of Graduate Medical Education: How Can We Make GME More Accountable?

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Declaration of full disclosure: No conflict of interest

Selected Topics
- Financing
- Workforce
- Accountability
- Accreditation

Funding Sources for GME

- Medicare: $9.1 Billion
- Medicaid: $3.8 Billion
- Title VII Primary Care: $38 million
- Children’s GME: $253 million
- Teaching HC GME: $46 million
- NHSC Loan Repayments: $96 million
- VA: $1.45 Billion
- Primary Care residency expansion: $33 million

**DOD also provides some funding for GME**

GME: Medicare Support (DGME)
- Direct GME (DGME): $3.3 billion/83,000 FTEs
  - Medicare’s share of the direct costs associated with training residents (trainee salary and benefits, some faculty expenses, GME office, overhead, etc.)
  - Currently underpaid: outdated per resident amounts; fellow payment at 50%; varying faculty costs, etc. Estimated to cover approximately 1/4-1/3 of the actual Medicare share.

GME: Medicare Support (IME)
- Indirect Medical Education (IME): $6.6 billion/80,000 FTEs
  - Medicare’s share of teaching hospital support
  - A patient care payment to “compensate teaching hospitals for their higher costs attributable to the involvement of residents in patient care and the severity of illness of patients requiring specialized services available only in teaching hospitals.”

(Congress 1965, 1983, 1999)

Medicare Cap (DGME and IME)
- FTE limits set in 1996 based on existing approved residents and fellows
- 10,000 slots get no Medicare support: over “cap”
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Is IME Empirically Justified?

MedPAC and Health and Human Services (HHS) have found that less than ½ of IME adjustment ($3-4 Billion per year) is empirically justified.

Potential Medicare GME Reductions in Deficit Reduction Debate

IME – National Commission on Fiscal Responsibility and Reform recommended reducing IME adjustment from 5.5 percent to 2.2 percent (60 percent cut) - $4B

IME – Others proposed reducing the IME adjustment from 5.5 percent to 4.5 percent (20 percent cut) - $1.2B

IME – President proposed reducing the IME adjustment from 5.5 percent to 4.95 percent (10 percent cut) - $650M

DGME - National Commission on Fiscal Responsibility and Reform recommends limiting direct GME payments to 120 percent of the national average salary paid to residents - $1.3B

GME: Medicaid Support

Currently:
• 41 states and D.C. provide GME support through their Medicaid program
• $3.8 billion in combined federal and state support

State budget cuts and GME:
✓ Since 2005, 5 states eliminated support (MA, MT, RI, VT, WY)
✓ Since 2005, 9 states have seriously considered eliminating support (MI, MO, NE, NV, NH, NM, OK, OR, PA)

Additional Potential Medicare/Medicaid GME Reductions to Watch

• House budget “Ryan plan:” Privatizes Medicare-- GME support evaporates

• Medicaid becomes a block grant and states have added flexibility. Will more states eliminate Medicaid GME?

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Projected shortages of patient care physicians, 2008 to 2020

Projections prepared by the Lein Group for the AAMC
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### Shortages projected for both primary care and subspecialists

<table>
<thead>
<tr>
<th></th>
<th>Primary Care</th>
<th>Subspecialties</th>
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<tbody>
<tr>
<td>2010</td>
<td>9,000</td>
<td>4,700</td>
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<tr>
<td>2015</td>
<td>29,800</td>
<td>33,100</td>
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<tr>
<td>2020</td>
<td>45,400</td>
<td>46,100</td>
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Source: AAMC Projections, 2010

### Health Care Reform: likely workforce implications

- 32M newly insured?
- Upward Utilization
- Upward Physician demand
- Bend the cost curve?
- Efficiency
- Cost sharing
- Downward Physician demand

### Physician Supply: The Complex Reality

**Future Supply** = (Current + New – Exiting) × Productivity

- # of Physicians X Work hours
- GME Slots
- GME Reimbursement and Policy
- MD Enrollment
- DO Enrollment
- IMGs
- Age Distribution
- Economy
- Satisfaction
- Gender
- Age
- Systems Factors
- Teams
- PAs, NPs
- Service Delivery
- HIT/EMR
- Payment Policies
- Regulations
- Payment Policies

### Physician Demand: The Complex Reality

**Demand** = Population X Health X Utilization Rates

- Prevalence and incidence of conditions and diseases
- Available supply
- Medical advances
- Access
- Organization of services
- Public health measures
- Behavior/lifestyle
- Insurance
- ACOs
- Care coordination
- Team-based care
- Tele-health
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### M.D. and D.O. growth since 2002 for current schools

[Graph showing M.D. and D.O. growth from 2002 to 2016]

Source: AAMC

### The number of residents entering the ACGME pipeline grew 7% between 2002 and 2010

[Graph showing the number of residents entering the ACGME pipeline from 2002 to 2010]

Source: ACGME

### Unless GME Positions Grow, Someone Likely to be Squeezed Out

[Graph showing projected growth in MD and DO entrants into GME]

Projected Data Prepared by: Center for Workforce Studies (SAS) 7/09

### Squeeze in GME is Already Happening

Results from NRMP 2002 - 2011

[Graph showing unfilled PGY-1 positions and U.S. seniors unmatched to PGY-1 positions]

### Rate of USMDs likely to become PCPs stabilizing?

[Bar chart showing percent USMD PGY-1 residents likely to become PCPs from 2000 to 2010]

Source: GME Track (Paul Jolly)

Notes: Percent equals 1) number USMDs entering IM, FM, or Peds minus number entering IM Subspecialties or Peds Subspecialties that same year 2) divided by number of PGY1 entrants

### Thirty years of USMD match rates into Family Medicine

[Bar chart showing percent of US medical school seniors matching into Family Medicine from 1980 to 2012]

Source: AAMC

Notes: Includes only those seniors who were matched
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**PA Growth**

![Graph showing PA growth from 2000 to 2010.](image1)

Source: National Commission on Certification of Physician Assistants

"Certified Physician Assistant Population Trends (PA-Cs)"

**Growth in NP Graduates 2000 -2011**

![Graph showing NP graduate growth from 2000 to 2011.](image2)

Source: American Association of Colleges of Nursing Annual Surveys

1Counts include master’s and post-master’s NP and NP/CNS graduates. Recipients in DNP graduates.

**Primary vs. Specialty Care**

![Graph showing distribution of active practitioners across primary care and specialty care.](image3)


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**GME Accountability**

Multiple calls for GME accountability.

Dominant is the call by MedPAC to place 50% of IME at risk based on GME outcomes.

Calls for accountability in public programs are not unique to GME: other forms of education (K-12), HIT, payment reform, etc.

**MedPAC (June 2010)**

Authorize Secretary to change Medicare funding of GME to support workforce skills needed.

- Ambitious goals for practice-based learning and improvement, communication skills, professionalism, system-based practice, and integration of hospital and community care
- GME funding allocated only if standards met

Payments above empirically justified IME would be used to fund the new system.
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Calls for Accountability in GME

<table>
<thead>
<tr>
<th>Entity</th>
<th>Accountability Measures (Generally)</th>
<th>Trainee Competence</th>
<th>Environment</th>
<th>Workforce</th>
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Current Administration (HHS/CMS) Vision

- Current system not producing workforce to maximize quality and reduce costs: inadequate primary care, geographic maldistribution.
- Goal:
  - Increase supply and improve distribution of PCPs
  - Change training to include more coordinated, team-based care, QI, EHR usage
- ? 50% of IME at risk (over and above 10% cut)

Graduate Medical Education Reform Act of 2012 (S. 3201 Reed/Kyl)

- IME performance program—up to 3% of IME at risk, in line with other value-based purchasing (VBP) programs
- Directs HHS Secretary to develop measures of patient care priorities consistent with MedPAC; and to report on GME costs/payments (transparency)
  - o Training provided in E/M or cognitive services;
  - o Training across a variety of settings and systems;
  - o Coordination of patient care across various settings;
  - o The use of HIT;
  - o Relevant cost and value of diagnostic and treatment options;
  - o Inter-professional & multidisciplinary care teams;
  - o Methods for identifying system errors & implementing system solutions.

Definition of Accountability

Outcome measures that can be used to demonstrate the effectiveness of the GME training process to produce a physician workforce to meet society’s needs.

Key Principles of Accountability Measures

Accountability measures must:

- Be reliable and valid
- As appropriate, begin with reporting, then process measures, then outcomes
- Not create an undue burden of measurement (integrate with existing outcome measurements e.g. accreditation, quality and safety reporting, payment, etc)
- Encourage and incentivize further advances in GME outcomes.

Domains of Accountability in GME

Clinical training environments that provide high quality, safe, cost-effective and patient-centered clinical care while also meeting the learning needs of trainees.

Support development of MD workforce of sufficient size, specialty mix, diversity, and practice location to meet the public’s present and evolving health care needs.
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Trainee Competence

Objective: Ensure that physicians completing GME have the specific knowledge, skills, and attitudes to meet the needs of individual patients and the needs of the public at large.

Potential measures and measurement issues:
- Curriculum/teaching vs. learning
- Key competencies vs. all competencies
- Milestones
- Multiple measurements vs. once at end of training

Training Environment

Objective: To ensure that residents are trained in clinical environments that are accountable for the quality of patient care and for patient safety.

Evaluating Residency Programs Using Patient Outcomes

n=4,906,169 deliveries in Florida and New York, 1992-2007
4124 physician program graduates of 107 residency programs

Rate of Major Obstetric Complications by Graduates (%)

- 10.1-10.5
- 11.3-11.4
- 11.9-12.0
- 12.3-12.5
- 13.6-14.0

Difference remains after correction for USMLE performance
Excess Risk ± 33%
Q1 vs Q5

Training Environment

Potential measures and measurement issues:
- Clinical learning environment review (CLER)
- Measures of hospital quality: meaningful use, patient satisfaction, AHRQ culture of safety survey, use of safe surgical checklist, quality measures in value-based purchasing program, etc
- Measures of outpatient quality: faculty in PQRS, training in PCMH, patient satisfaction, EHR/meaningful use, etc

Workforce Development

Objective: Support development of MD workforce of sufficient size, specialty mix, diversity, and practice location to meet the public’s present and evolving health care needs.

Potential measures and measurement issues:
- Primary care vs. PC and other shortage specialties
- Current training or 5-year post training
- Geographic distribution, underserved communities
- Experiences for other professionals (DO, NP, PA)
- Racial and ethnic diversity (trainees, faculty)
- Hospital vs. sponsoring institution

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ACGME’s Next Accreditation System

- Goal: More on outcomes, less on process
- ACGME’s response to calls for greater accountability
- Site visits at intervals up to 10 years
- Program Information Forms (PIF) eliminated
- Annual data collection
- Periodic self-studies

Program Accreditation Criteria

- Milestones (new)
- Program attrition
- Board pass rates
- Resident surveys
- Faculty surveys (new)
- Operative and case logs
- Scholarly activity
- CLER visits (new)

Resident frequently fails to recognize or actively avoids opportunities for compassion or empathy. On occasion demonstrates lack of respect, or overt disrespect for patients, family members, or other members of the health care team.

Resident seeks out opportunities to demonstrate compassion and empathy in the care of all patients; and demonstrates respect and is sensitive to the needs and concerns of all patients, family members, and members of the health care team.

Resident demonstrates compassion and empathy in care of some patients, but lacks the skills to apply them in more complex clinical situations or settings. Occasionally requires guidance in how to show respect for patients, family members, or other members of the health care team.

Singapore End of PGY-1, Mid PGY-2 Year Evaluation, Overall Rating of Professionalism across All Specialties

Conclusions

- Financing and governance of GME is under fire from multiple quarters.
- ACGME efforts of NAS are an important partial response.
- Tying financing to specific accountability measures (outcomes) may further improve trainee competence, training settings, workforce deficiencies while preserving public funding and ultimately improving the public’s health.