Financing and Graduate Medical Education:

What Does It Cost to Run a Residency Program in the Era of the Next Accreditation System?

Niraj Sharma, MD, MPH
Stephen Knohl, MD
Alwin F. Steinmann, MD
Disclosure

- None of the speakers have any conflicts to disclose
Learning Objectives

- Understand GME financing.
- Learn how we conducted a financial assessment of our residency programs.
- Learn the costs of implementing the Next Accreditation System, specifically the Clinical Competency Committee.
- Articulate the overall value of your program to institutional leadership.
Workshop Outline

- Niraj Sharma, MD, MPH
  - GME funding
  - Next Accreditation System
  - IOM Report

- Stephen Knohl, MD
  - Does your program have the proper allocation?
  - What Do You Pay In Hidden Costs?
  - Should Mid–Levels Replace Housestaff?

- Alwin F. Steinmann, MD
  - Financial assessment of eliminating your program
  - What does it cost to train a resident
  - Articulating the costs to hospital leadership
GME Funding and the NAS

Niraj Sharma, MD
Program Director
Internal Medicine–Pediatrics
Brigham and Women’s Hospital/Boston Children’s Hospital
Outline

- Overview of GME Funding
- Budget Battle and IOM Report
- Impact on GME
- NAS Overview
GME Funding

- Medicare
  - 1965: Support GME until society undertook “to bear such educational costs in some other way.”

- Direct Graduate Medical Education
  - Compensate for its share of the cost of medical education

- Indirect Medical Education
  - Compensate for the higher patient care costs due to the presence of teaching programs
Costs

- Medicare GME: 100,000 positions
  - DME: $3 billion per year
  - IME: $6.5 billion per year

- Balanced Budget Act of 1997
  - Last attempt to control costs
  - Cap on hospital FTE counts for GME payment
  - Includes Medicine–Pediatrics
Outline

- Overview of GME Funding
- **Budget Battle and IOM Report**
- Impact on GME
- NAS Overview
Summer 2011 Federal Debt Limit Debate
Joint Committee on Deficit Reduction
  ◦ Aka “The Super Committee”
  ◦ Must cut $1.2 trillion over the next decade
Failure will lead to an automatic federal budget cut of $1.2 trillion from 2013–2021
  ◦ Half defense/half non-defense spending
  ◦ Social Security and Medicaid untouched
  ◦ 2% Medicare Cut (max $11 billion in 2013)
Medicare Payment Advisory Commission (MedPAC)

- 2010 Report:
  - “Medicare’s IME adjustments “significantly exceed the actual added patient care costs these hospitals incur.”
  - Approximately 50% is not “empirically justified
  - Redirect half of IME ($3.5 billion) into incentive payments
Simpson–Bowles Commission

- National Commission on Fiscal Responsibility and Reform
- Bipartisan deficit reduction panel
- Reduce total GME by 50%
  - $60 billion over 10 years
Obama Administration
2013 Budget

- Reduce IME by $9.7 billion over 10 years starting in 2014
- Reduce IME to Children’s Hospitals
  - By 66% to $88 million
- Secretary of HHS:
  - Assess GME programs in outcomes
Background

There has been a growing concern that GME funding is based on costs that have changed over time and involves little transparency or accountability. It does not incentivize institutions to train the types of physicians we need, nor does it promote the acquisition of “newer” skills that modern physicians need.
The IOM Committee Report

- Medicare continues to fund GME at present levels for 10 years (adjusting for inflation)
- Create GME Policy Council (HHS) and a GME Center (CMMS)
- Combine IME and DME $ into two new funds; Operational and Transformation.
- Move to a national PRA with some geographic adjustments.
- Medicaid GME remains at states’ discretion, but with recommendation of same accountability and transparency.
The gist of the IOM recommendations:

- Use Medicare GME as a “lever” to influence the health care system wrt workforce (specialty mix / geographic distr.) and care delivery (“triple aim” of quality, population health and cost control)
- Transition from a GME finance system based on cost to one focused on outcomes (performance-based).
- Transparency, accountability and fairness.
- Encourage innovation.
What the report does not do:

- Guarantee any change in the current system – most recommendations will take Congressional action.
- Make any concrete statement regarding workforce needs.
- Establish performance standards.
- Recommend increasing the number of Medicare funded GME positions.
What the report does do:

- Focuses attention on the issue
- Defines concerns
- Provides a possible operational framework
- Might catalyze a meaningful discussion, but will it result in Congressional action and actual change?
Outline

- Overview of GME Funding
- Budget Battle and IOM Report
- Impact on GME
- NAS Overview
The Potential Impact of Reduction in Federal GME Funding in the US

- Survey of all Designated Institutional Officers (n=680)
- Asked how funding would impact their institutions programs and positions:
  - Funding stable at 2011 levels
  - Funding reduced by 33%
  - Funding reduced by 50%
- Responses rated: Slight increase, Stable, Slight reduction (10%), Significant reduction (33%), Close (100%)

Positions Lost with 50% Reduction

Effect of Potential 50% Reduction in Federal Funding on GME Residents and Fellows in the US
Estimated Impact

- 35.9% core programs closed
- 24.5% core positions lost
Outline

- Overview of GME Funding
- Budget Battle and IOM Report
- Impact on GME
- NAS Overview
The Goals of NAS

- To begin the realization of the promise of Outcomes
- To free good programs to innovate
- To assist poor programs to improve
- To reduce the burden of accreditation
- To provide accountability for outcomes to the Public

Thomas J. Nasca, MD, CEO, ACGME
Next Accreditation System

- Milestones
  - Entrustable Professional Activities
- Clinical Competency Committees
- Clinical Learning Environment Reviews
- Duty Hours
How will faculty devote time to these activities?
Will hospitals be forced to implement alternative staffing models?
Who will pay for all of this?
Will these changes force hospitals to rethink involvement in GME?
As a Program Director, how do you protect yourself?
The all-mighty

Costs Associated with GME

Stephen J. Knohl, MD
Program Director
and
Vice Chair for Education
How many house officers for the workload?

What Do You Pay In Hidden Costs?

Should Mid-Levels Replace Housestaff?
How many House Officers for the Workload?
My Program
Upstate Medical University

Crouse Hospital
- 566 beds
- Critical Care and ED Service
- Housestaff = 11

University Hospital
- 440 beds
- All Services represented
- Housestaff = 52

VA Hospital
- 106 beds
- All Services represented
- Housestaff = 36

Annual Salary+Benefits
$6,650,000

Are the Hospitals getting what they pay for?
Residents Salary & Debt Report 2014
Leslie Kane, MA; Carol Peckham

At Upstate:
66 hours of work per week
University Hospital
Upstate Medical University

UH Services
- Chief Resident
- Floors-Days
- CCU-Days
- ICU-Days
- Med Consult
- ER
- Night Service (Admitters, Night Float, ICU)
- Admitters
- Continuity Clinic
- Subspecialty Clinic
- Cardiology Consult
- Dermatology Consult
- Endocrine Consult
- GI Consult
- Geriatrics Consult
- Palliative Care
- ID Consult
- Nephrology Consult
- Pulmonary Consult
- Rheumatology Consult
- Neurology Consult
- Elective/Scholarship
- Quality Service

5 (Inpatient Teams) × 3 (1 Resident; 2 Interns) = 15 (Team Housestaff)
My Program
Upstate Medical University

Crouse Hospital  University Hospital  VA Hospital

At Upstate: 66 hours per week

Housestaff Current = 11  Housestaff Current = 52  Housestaff Current = 36
What Do You Pay In Hidden Costs?

NO HIDDEN COSTS!

We guarantee that rate you see is the rate you pay.
## Annual Core Program Expenses

<table>
<thead>
<tr>
<th>Item</th>
<th>Totals</th>
<th>Per H.O.</th>
<th>Hits</th>
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<tr>
<td>Noon Conference-Lunch</td>
<td>$100,700</td>
<td>$1,148</td>
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<td>Morning Report/Faculty Orientation-Breakfast</td>
<td>$10,800</td>
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<td>Interview Meals (Dinner &amp; Lunch)</td>
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<td>Coats/Uniforms</td>
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<td>Educational Fund</td>
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<td>Board Review [Annual Internal Review]</td>
<td>$1,300</td>
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<td>BioEthics [Annual Retreat]</td>
<td>$1,400</td>
<td>$16</td>
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<td>Hopkins [Ambulatory Modules]</td>
<td>$2,000</td>
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<td>MKKSAP [Medical Knowledge Self-Assessment Program]</td>
<td>$800</td>
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<td>LTK [Learning To TALK Communications Program]</td>
<td>$7,600</td>
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<td>SIM [Mach Code and Procedure Simulation Training]</td>
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<td>Ward Manager [Signout/Handoff System]</td>
<td>$32,000</td>
<td>$365</td>
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<td>Travel [Housestaff and Program Expenses]</td>
<td>$145,000</td>
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<td>Social Events</td>
<td>$12,000</td>
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<td>Academic Alliance for Internal Medicine Annual Fees</td>
<td>$10,000</td>
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<td>In-Training Exam</td>
<td>$8,000</td>
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<td>Recruiting Costs [Booklets, DVDs]</td>
<td>$8,500</td>
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<td>Orientation Expenses [Reception/Picnic/R2 Fly Up]</td>
<td>$9,200</td>
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<td>Graduation Expenses [Dinner/Awards/Invites]</td>
<td>$17,100</td>
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<td>Salary Support for Program Director and Associates</td>
<td>$220,000</td>
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<td>Salary Support for Administrative Staff</td>
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<td><strong>Total</strong></td>
<td><strong>$856,200</strong></td>
<td><strong>$9,763</strong></td>
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Should Mid-Levels Replace Housestaff?
My Program
Upstate Medical University

What if **Housestaff** are replaced with **Mid-Level Providers**?
Residents Salary & Debt Report 2014
Leslie Kane, MA; Carol Peckham

| 30 to 39 | 131 | 36.4% |
| 40 to 49 | 96  | 26.7% |
| 50 or more | 42  | 11.7% |

Total: 360
(Missing: 27)
(Invalid: 3)

Appendix B– Demographic Data Summary
2011 Role Delineation Study: Family Nurse Practitioner – National Survey Results
© Copyright 2012 American Nurses Credentialing Center, All Rights Reserved
Housestaff vs. Mid-Levels

If 1 House Staff FTE = 66 Hours/Week
Housestaff Needed = 13
If 1 House Officer Costs $80,440
Total $8,526,640
$3.35 Million Saved

If 1 Mid-Level FTE = 50 Hours/Week
Mid-Levels Needed = 17
If 1 Mid-Level Costs $90,000
Total $11,880,000
120 Academic Centers
+
299 Affiliates

“Inpatient” Status

Direct Patient-Care Costs

Length Of Stay

Housestaff-Hospitalist vs. Midlevel-Hospitalist

Over a 3-Year Study Period
My Program
Upstate Medical University

University Hospital

Direct Costs
$617 Saved
$5.1 million Saved

Length Of Stay
1.26 Saved
$11.1 million Saved

Over a 3-Year Study Period, Housestaff-Hospitalist Services saved $16.2 million compared to Midlevel-Hospitalist Services
How many house officers for the workload?

Conduct a "Manpower Hours" analysis

What Do You Pay In Hidden Costs?

Account for Everything

Should Mid-Levels Replace Housestaff?

Look at Manpower Hours, Direct Patient-Care Costs, and LOS
Estimating the “Costs” of your Residency Program

Alwin F. Steinmann, MD, FACP
Chief of Academic Medicine and DIO
Saint Joseph Hospital
Denver, CO
President - Assoc. of Program Directors in Internal Medicine
Board Member – Alliance for Academic Internal Medicine
Why should we do this?

• As hospitals and health systems get squeezed, all costs are being scrutinized.
• If GME reimbursement falls (and it probably will) – it will draw attention to us.
• Increasingly, teaching hospitals are becoming part of larger health systems that may or may not understand or value GME.
• Perhaps WE need to know!
  - have the information to “defend” our programs
  - consider changes to better position ourselves within our institutions
What do we need to analyze?

- The financial cost (or benefit) of eliminating the residency program. (You have to include replacement costs.)
- Your cost of training a resident.
- Issues of “right-sizing”
  - Helpful to know your institution’s Medicare GME cap as well as how many resident FTE’s you actually have. (Not necessarily the # of residents in your program.)
Your hospital’s Medicare GME cap

• I would start by talking to your DIO or CFO / Finance department. (develop a relationship)
• [website]: “GME tables” Will show your hospital’s data (all programs): amount of DME / IME $ received, # of resident FTE claimed*, PRA
  *(not necessarily your cap)*
• IME and DME may have different caps.
• Caps are hospital-specific.
Estimating the cost / benefit of eliminating your program.

- Every situation is different.
- You may make different assumptions.
- You may use a different methodology.
- I am NOT a finance person!!! (and you probably aren’t either)
- **Run it by someone who is.**
- You will likely need help getting data – again, develop a relationship with Finance
Saint Joseph Hospital

- Est. 1873, first resident in 1893
- Commitment to underserved
- 565(now 400) Licensed beds
- Member of 8 hospital SCL Health, JOA with NJH
- 40+ year partnership with KP (70% of vol.)
- Strong C-V and cancer services, Ob/NICU
- No trauma
- Roughly ½ of IM service is “covered”
- 4 residencies: FM (24), GS (20/8), IM (27/11) Ob/Gyn (20) - 110 Total residents
- Relatively few employed faculty (IM: 5 / .5)
General Assumptions

• Replacement costs involve maintaining the same level of inpatient and outpatient volumes, **including charity care**. (Also looked at impact of eliminating charity care as well.)
• Overall payer mix will not change.
• No additional nursing or clerical resources.
• Allocated overhead costs will remain.
• MGMA data used for compensation and productivity (median, **private practice**)
• Kaiser costs not considered separately.
Assumptions for Internal Medicine

- Each of the floor teams carries an average of 10-12 patients, therefore the teaching attending (volunteer or FT) could manage those patients during the day.
- One additional overnight MD 24X7 (2 FTE)
- One additional daytime and one nighttime intensivist (4 FTE).
- Did not utilize mid-level providers in the analysis as that is not the model on our non-teaching IM services.

????Assumptions for other residency programs????
Components of Analysis

• Expense savings – program salary and overhead

• Additional (new) costs – replacement workforce

• Lost GME-related revenue – DME / IME

(no change in patient revenue in this scenario)
1) Expense savings:

- Faculty, resident and administrative salaries: $3,475,427
- Benefits: $868,857
- Malpractice insurance: $59,567
- Other budgeted expenses: $326,314

TOTAL: $4,730,165
2) Additional Costs:

Physicians for 8,244 outpatient visits: 3 FTE
$197,080 + $49,270* ea. ------------------ $ 739,050

1 MD for faculty inpatient service
$215,000 + $53,750* ------------------ $ 268,750

One additional nocturnist / shift: 2 FTE
$215,000 + $53,750* ea. ------------------ $ 537,500

Two additional intensivists / 24 hr.: 4 FTE
$281,773 + $70,443* ea.------------------ $1,408,864

Misc. expenses (ins, fees, CM, etc.) --- $ 73,110

TOTAL ------------------------------- -$3,027,274

* benefits
3) Lost GME-related Revenue

Medicare DME ---------------------- $1,213,100

Medicare IME* ---------------------- $2,620,910

TOTAL ------------------------------- -$3,834,010

* pushback?
Overall financial impact of eliminating the IM residency:

Expense savings ----------------- $4,730,165

Additional costs ----------------- -$3,027,274

Lost GME-related revenue ---- -$3,834,010

TOTAL ----------------------------- -$2,131,119
## Summary Table of the Financial Impact of Closing the SJH Residency Programs

<table>
<thead>
<tr>
<th></th>
<th>Expense Savings (+)</th>
<th>Additional Costs (Clinic-related) (-)</th>
<th>Additional Costs (Inpatient) (-)</th>
<th>Lost GME Income (-)</th>
<th>Total (+ / -)</th>
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<tbody>
<tr>
<td>Family Medicine</td>
<td>$4,018,756</td>
<td>$1,332,960</td>
<td>$266,392</td>
<td>$2,524,812</td>
<td>-$104,408</td>
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<tr>
<td>General Surgery</td>
<td>$2,535,477</td>
<td>$885,420</td>
<td>$1,022,540</td>
<td>$2,474,303</td>
<td>-$1,846,786</td>
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<tr>
<td>Internal Medicine</td>
<td>$4,730,165</td>
<td>$760,983</td>
<td>$2,266,291</td>
<td>$3,834,010</td>
<td>-$2,131,119</td>
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<td>Ob/Gyn</td>
<td>$3,655,897</td>
<td>$1,141,743</td>
<td>$1,059,100</td>
<td>$1,918,518</td>
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<td>GME Office</td>
<td>$1,230,702</td>
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<td></td>
<td>+$1,230,702</td>
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<tr>
<td>GME Simulation Lab</td>
<td>$131,608</td>
<td></td>
<td></td>
<td></td>
<td>+$131,608</td>
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<tr>
<td>Total</td>
<td>$16,302,605</td>
<td>$4,121,106</td>
<td>$4,614,323</td>
<td>$10,751,643</td>
<td>-$3,184,467</td>
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</table>
Results of analysis of eliminating the 4 residency programs and closing clinics:

**SAVINGS** of $1,221,163

However …

Charity care central to mission.

$ from Kaiser to support GME / charity care would likely be lost.

Kaiser still incurs about $2M in new expenses, or asks the hospital to pick up all or part of it.

Impact on ED and inpatient care.
Cost of training a resident: Can you benchmark your program?

- Few studies have assessed this.
- Fair agreement among those few studies.
- Smaller programs and outpatient-intense programs cost more.
- $130,000 / year / resident (2010 estimate based on those studies, accounting for inflation and cost of duty hours rules but not any other regulatory changes after 2003) includes resident salary
Cost of training a resident:


- Higher estimated costs - ~$180,000 - $225,000 / res.
- Utilized a 27% fringe benefit rate
- Fiscal year 2012, so accounts for regulatory changes up to that point.
- Technically pre-NAS, but did estimate some NAS costs (“observe / document milestones”)
- Corroborated higher costs in smaller programs and outpatient-intense programs (10-14% in non-salary costs)
Communicating with hospital / system leadership

• Know what is important to your leadership
  - Med. Ed. - the underserved
  - affiliations - community docs
  - “pipeline” - service lines
• When to communicate this information?
• Hospital leadership vs System leadership
• Who are your allies?
  DIO? CFO / Finance? CEO? Dean?
• Who are your … “non-allies”?
• Know and understand the results of your analysis before communicating.
• Who is interested in this information? (a leadership champion?)
• Implication of differential costs of programs (FM vs IM)
• Anticipate follow-up questions:
  - assumptions - methodology
  - “right-sizing” - change in GME $
  - efficiency of your program (cost / res.)
  - Can GME help us to reduce our costs? (“service”)
Learning Objectives

• Understand GME financing.
• Learn how we conducted a financial assessment of our residency programs.
• Learn the costs of implementing the Next Accreditation System, specifically the Clinical Competency Committee.
• Articulate the overall value of your program to institutional leadership.
Thank you!

- Niraj Sharma, MD, MPH
  - nsharma5@partners.org
- Stephen Knohl, MD
  - knohls@upstate.edu
- Alwin F. Steinmann, MD
  - alwin.steinmann@sclhs.net
University Hospital

Direct Patient-Care Costs

Housestaff-Hospitalist  Midlevel-Hospitalist

<table>
<thead>
<tr>
<th></th>
<th>Covered (N=8392)</th>
<th>P-Value</th>
<th>Uncovered (N=5161)</th>
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<tr>
<td>Discharges</td>
<td>$9,839 (±16,126)</td>
<td>0.572</td>
<td>$9667 (±18,877)</td>
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<tr>
<td>Direct Cost Observed</td>
<td>$8,392</td>
<td>&lt;0.001</td>
<td>$7,603</td>
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<td>Direct Cost Expected</td>
<td>$1,447(±13,302)</td>
<td>0.016</td>
<td>$2,064(±15,882)</td>
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<td>Observed-Expected</td>
<td>1.15 (±1.23)</td>
<td>0.034</td>
<td>$617</td>
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<td>Observed/Expected</td>
<td></td>
<td>1.20 (±1.49)</td>
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### My Program
Upstate Medical University

#### University Hospital

Length Of Stay

**Housestaff-Hospitalist**

<table>
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<tr>
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<th>P-Value</th>
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<tr>
<td>LOS Observed</td>
<td>6.88 (±9.37)</td>
<td>&lt;0.001</td>
<td>7.84 (±14.49)</td>
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<tr>
<td>LOS Expected</td>
<td>5.58 (±3.85)</td>
<td>&lt;0.001</td>
<td>5.28 (±3.76)</td>
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<td>Observed-Expected</td>
<td>1.30 (± 8.16)</td>
<td>&lt;0.001</td>
<td>2.56 (±13.4)</td>
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<td>Observed/Expected</td>
<td>1.23 (±1.32)</td>
<td>&lt;0.001</td>
<td>1.43 (±2.06)</td>
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**Midlevel-Hospitalist**

<table>
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<th>Discharges</th>
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