Shortchanged
How Medicare's Physician Fee Schedule Undervalues Primary Care & Shortchanges Patients & Female Physicians

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Opening Speaker

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PANELISTS

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Shortchanged: How Medicare’s Physician Fee Schedule Undervalues Primary Care & Shortchanges Patients & Female Physicians

Ishani Ganguli, MD MPH
Assistant Professor of Medicine
Harvard Medical School
Brigham and Women’s Hospital
September 28, 2023
Female clinicians may produce better health outcomes

- Female clinicians are growing share of health care workforce

- Compared to male counterparts, female physicians do better on
  - Breast cancer screening
  - Avoidance of some low-value tests
  - Diabetes outcomes
  - Post-operative outcomes among surgical patients
  - Re-admissions and mortality among hospitalized patients

Yet there is a persistent gender wage gap in medicine

**Female Physicians Earn An Estimated $2 Million Less Than Male Physicians Over A Simulated 40-Year Career**

- For PCPs, a $1 million gap
What explains the gap?

- Age, specialty, academic rank, NIH funding, leadership status

- What about hours worked?
Physician work hours and compensation by gender

- Used national sample all-payer claims and electronic health record (including audit log) data
- 24 million primary care office visits
- Examined relationship between work hours and compensation by gender

What we found

- Female PCPs younger

- Female PCPs see patients who are younger, more female, slightly healthier

- Same # clinic sessions/week

<table>
<thead>
<tr>
<th>Physician Characteristics</th>
<th>Male PCPs (N=5,284)</th>
<th>Female PCPs (N=3,018)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, mean</td>
<td>53.2</td>
<td>46.5</td>
</tr>
<tr>
<td>Specialty, %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>56.7</td>
<td>47.0</td>
</tr>
<tr>
<td>Family Practice</td>
<td>42.5</td>
<td>52.4</td>
</tr>
<tr>
<td>Patient-Visit Characteristics (N=16.4 million) (N=8.0 million)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age Category, %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;44</td>
<td>21.1</td>
<td>28.4</td>
</tr>
<tr>
<td>45-64</td>
<td>33.9</td>
<td>35.0</td>
</tr>
<tr>
<td>65+</td>
<td>44.9</td>
<td>36.5</td>
</tr>
<tr>
<td><strong>Female, %</strong></td>
<td><strong>49.7</strong></td>
<td><strong>70.0</strong></td>
</tr>
<tr>
<td>White, non-Hispanic race, %</td>
<td>76.1</td>
<td>73.0</td>
</tr>
<tr>
<td>Payer, %</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare FFS/Advantage</td>
<td>41.4</td>
<td>33.9</td>
</tr>
<tr>
<td>Medicaid/Dual Eligible</td>
<td>12.1</td>
<td>13.2</td>
</tr>
<tr>
<td>Commercial</td>
<td>43.0</td>
<td>49.6</td>
</tr>
<tr>
<td><strong>Chronic conditions, mean</strong></td>
<td><strong>1.1</strong></td>
<td><strong>1.0</strong></td>
</tr>
<tr>
<td>Visit for low acuity condition, %</td>
<td>4.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Patient new to physician, %</td>
<td>21.8</td>
<td>23.2</td>
</tr>
</tbody>
</table>
Female PCPs have less revenue, more time w/ patients per year

<table>
<thead>
<tr>
<th>Year level analysis</th>
<th>Male PCPs</th>
<th>Female PCPs</th>
<th>Difference</th>
<th>% Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowed charges, $</td>
<td>358,795.1</td>
<td>319,652.0</td>
<td>-39,143.2</td>
<td>-10.9%</td>
</tr>
<tr>
<td>Visits, no.</td>
<td>3,058.2</td>
<td>2,727.7</td>
<td>-330.5</td>
<td>-10.8%</td>
</tr>
<tr>
<td>Days in clinic, no.</td>
<td>203.3</td>
<td>197.9</td>
<td>-5.3</td>
<td>-2.6%</td>
</tr>
<tr>
<td>Observed visit time, min.</td>
<td>46,709.2</td>
<td>47,910.6</td>
<td>1,201.3</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

All differences significant at p<0.01 unless indicated by asterisk

Female PCPs have equal revenue, more time w/ patients per visit

<table>
<thead>
<tr>
<th>Visit level analysis</th>
<th>Male PCPs</th>
<th>Female PCPs</th>
<th>Difference</th>
<th>% Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowed charges, $</td>
<td>117.4</td>
<td>116.9</td>
<td>-0.5</td>
<td>-0.4%*</td>
</tr>
<tr>
<td>Diagnoses documented, no.</td>
<td>3.4</td>
<td>3.7</td>
<td>0.2</td>
<td>5.9%</td>
</tr>
<tr>
<td>Orders placed, no.</td>
<td>2.6</td>
<td>3.1</td>
<td>0.5</td>
<td>19.2%</td>
</tr>
<tr>
<td>Observed visit time, min.</td>
<td>15.3</td>
<td>17.6</td>
<td>2.4</td>
<td>15.7%</td>
</tr>
</tbody>
</table>

- Per hour, female PCPs earned 87¢ for every $1 earned by male PCPs

All differences significant at p<0.01 unless indicated by asterisk
For patients with multimorbidity, female PCPs have equal revenue, more time w/ patients

<table>
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<tr>
<th>Visit level analysis</th>
<th>Male PCPs</th>
<th>Female PCPs</th>
<th>Difference</th>
<th>% Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowed charges, $</td>
<td>122.2</td>
<td>122.9</td>
<td>0.7</td>
<td>0.6%*</td>
</tr>
<tr>
<td>Diagnoses documented, no.</td>
<td>5.5</td>
<td>5.6</td>
<td>0.1</td>
<td>1.8%</td>
</tr>
<tr>
<td>Orders placed, no.</td>
<td>3.8</td>
<td>4.4</td>
<td>0.5</td>
<td>13.2%</td>
</tr>
<tr>
<td>Observed visit time, min.</td>
<td>16.7</td>
<td>19.3</td>
<td>2.7</td>
<td>16.2%</td>
</tr>
</tbody>
</table>

All differences significant at p<0.01 unless indicated by asterisk
Female PCPs spend more time with male and female patients than male PCPs

Female physicians spend more time on counseling, shared decision-making

### Table 3. Ordered Logistic Regression Analyses of Screening and Counseling for Female Patients

<table>
<thead>
<tr>
<th>Gender Nonspecific Screening (N = 1,566)</th>
<th>Health-Habits Counseling (N = 1,594)</th>
<th>Sensitive-Topics Counseling (N = 1,594)</th>
<th>Female-Specific Screening (N = 992)</th>
<th>Female-Specific Counseling (N = 998)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female physician</td>
<td>1.22</td>
<td>1.33*</td>
<td>1.63†</td>
<td>1.36*</td>
</tr>
</tbody>
</table>

### Table 4. Ordered Logistic Regression Analyses of Screening and Counseling for Male Patients

<table>
<thead>
<tr>
<th>Gender Nonspecific Screening (N = 1,205)</th>
<th>Health-Habits Counseling (N = 1,222)</th>
<th>Sensitive-Topics Counseling (N = 1,203)</th>
<th>Male-Specific Screening (N = 513)</th>
<th>Male-Specific Counseling (N = 770)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female physician</td>
<td>1.56</td>
<td>2.18*</td>
<td>2.36†</td>
<td>0.84</td>
</tr>
</tbody>
</table>

*P value for adjusted odds ratio <0.05.
†P value for adjusted odds ratio <0.01.
‡P value for adjusted odds ratio <0.001.
§Odds ratio.
Controlled for age, education, income, race/ethnicity, and health status.
Female physicians spend more time on EHR work...

Table 2. Adjusted Association of Female Sex With EHR Use Metrics

<table>
<thead>
<tr>
<th>EHR use metrics</th>
<th>All physicians (N = 997)</th>
<th>Surgical specialty (n = 305)</th>
<th>Medical specialty (n = 692)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female sex, % change (95% CI)</td>
<td>P value</td>
<td>Female sex, % change (95% CI)</td>
</tr>
<tr>
<td>Minutes in system per day on unscheduled days</td>
<td>47 (34-60)</td>
<td>&lt;.001</td>
<td>36 (17-59)</td>
</tr>
<tr>
<td>Minutes in system per day outside of scheduled hours</td>
<td>48 (33-65)</td>
<td>&lt;.001</td>
<td>39 (15-68)</td>
</tr>
<tr>
<td>Minutes in system per day outside of 7 AM to 7 PM</td>
<td>61 (43-81)</td>
<td>&lt;.001</td>
<td>35 (16-94)</td>
</tr>
<tr>
<td>Total minutes in system per day</td>
<td>33 (24-42)</td>
<td>&lt;.001</td>
<td>41 (24-61)</td>
</tr>
</tbody>
</table>

Abbreviation: EHR, electronic health record.

*Separate models were fit with each EHR use metric as an outcome, and a log-transformation was applied to each outcome during modeling. Each coefficient has been exponentiated and is represented as percentage change of the outcome variable associated with female vs male sex. All models are adjusted for the following covariates: years since completion of training, mean number of problems on patient problem list, and percentage of days with appointments.
...but not from lack of efficiency
Instead, female physicians may have more messages to respond to

![Table 3. Differences in Staff and Patient Messages Received per Month by Physician Gender](image)

1. Robust standard errors clustered by MD
2. Adjusted for appointments per month and panel size
In short...

- On average, female physicians spend more time on
  - face-to-face visits
  - nonbillable services (e.g., counseling)
  - non-face-to-face care

- These practice patterns desired by patients, linked to better outcomes

- Yet these patterns are systematically undervalued by Medicare’s Fee Schedule and other productivity-based payment models

PCPs generally want to spend more time with their patients. Female PCPs seem to be taking that extra time, but at personal and professional cost.
What are the consequences of a payment system that undervalues time with patients?

• For clinicians:
  • Wage gap
  • Burnout

• For patients:
  • Less effective, compassionate care
What can we do?

• Streamline asynchronous work
  • Formally incorporate into clinician workflows
  • Tackle through patient education, shared inboxes, AI

• Change how we pay clinicians
Would the gender wage gap for PCPs change if different compensation models were applied?

2016–2019 national clinical registry
1728 primary care physicians
Male and female PCPs matched on specialty, years since medical school graduation, practice site, and sessions worked

Microsimulation model of net, annual, full-time compensation. Inputs included overhead and patient and visit characteristics.

Male Minus Female Compensation Using Different Compensation Models

Takeaways

- The gender wage gap persists, in part, because current payment models systematically undervalue traditionally female practice patterns.

- Consequences for patient and physician outcomes.

- Solutions
  - Streamline asynchronous work
  - Trial new payment models (with caution)
Acknowledgments

• Collaborators including Sanjay Basu, Michael Chernew, Josh Gray, Kathleen Mulligan, Hannah Neprash, Bob Phillips, Meredith Rosenthal, Bethany Sheridan
2021 Medicare E/M payment policy changes

[Bar chart showing median total Medicare payment for different physician types and time periods.]
Q & A
Thank you!

- Website: [www.thepcc.org](http://www.thepcc.org)
- Twitter: [@PCPCC](https://twitter.com/PCPCC)
- LinkedIn: [company/primary-care-collaborative](https://www.linkedin.com/company/primary-care-collaborative)
- Questions? Email: aclark@thepcc.org
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