Advisor/Mentor Role in Guiding Future Primary Care Physicians

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Authors
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Advisor/Mentor Role in Guiding Future Primary Care Physicians

Stacey Kadish, Gina Gentile, Laura Sefton, Mary Zanetti, Michele Pugnaire
In 2006, Massachusetts health care reform law signed, thousands of people were added to the state’s pool of medically insured, many looking for Primary Care Physicians (PCPs).

Both state legislators and professional medical organizations\(^1\) agree that the PCP shortage is at a “critical/severe” level\(^2\).

\(^1\) Massachusetts Medical Society, Robert Graham Center, Several state legislators cited in McAuliffe, Michael (January 4, 2009).
\(^2\) Since the time of this study there has been small increases in PCP and the critical level for some PCP specialties has been downgraded to a “Severe” level, with the exception of family medicine which still remains at a critical level. This according to the Sept. 2009 Massachusetts Medical Society Physician Workforce Study.
Health Care Reform in Massachusetts

Selected results:

• 440,000 residents are newly insured\(^1\)

• > 97% of all MA residents are insured\(^1\)

• One study found adults now more likely to visit health care providers than before, but now finding difficulty identifying and accessing providers in a timely manner\(^2\)

• In 2007, 1 in 5 adults in MA reported that a physician's office or clinic was not accepting new patients, and the majority (67%) of those reporting these problems were patients seeking primary care specialties\(^2\)

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\(^1\) Massachusetts Medical Society. Physician Workforce Study, 2009 Available at: [www.massmed.org/workforce](http://www.massmed.org/workforce)

Current and Previous Research

• Graham Report\(^1\): found several measurable factors that are related to students choice to pursue a residency in PC: *student related factors* (rural birth, student intent, marriage status, etc.), *institutional factors*, (public vs. private, exposure to Title VII funding, strength of family medicine department, etc.), and *curriculum factors* (family medicine exposure)

• Mixed results in studies exploring factors such as *student debt/specialty income difference* impact on students’ choice of medical specialty\(^1\),\(^2\)

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\(^1\) The Robert Graham Center; Funded by the Josiah Macy, Jr. Foundation (March 2, 2009). *Specialty and Geographic Distribution of the Physician Workforce: What Influences Medical Student and Resident Choices?* Washington, D.C.

\(^2\) Harris, Scott. (December, 2008). Graduates Report Higher Debt, Primary care Interest. AAMC Reporter. Available at: [www.ammc.org/newsroom/reporter/dec08/graduates.htm](http://www.ammc.org/newsroom/reporter/dec08/graduates.htm)
UMMS Mission

One component of UMMS’s mission is to provide affordable, high-quality medical education to state residents and to increase the number of PCPs practicing in underserved areas of the state.
Purpose

This study responds to our growing need to recruit future PCPs by investigating differences in relationships with advisors/mentors between those students who pursue a primary care residency and those who do not.
Primary Care as defined for this study

• Family Practice
• Internal Medicine
• Medicine/Pediatrics
• Pediatrics
Advisor/Mentor Match Process

• First year students fill out form indicating:
  - characteristics of desired advisor
  - characteristics of the student (self)
  - expected specialty choice

• Rank order each aspect by importance
Advisor/Mentor Relationship

• Advisors meet variably with students
• All advisors are volunteers
• 400+ students = approximately 300 advisors
• Advisors receive a training guideline packet
Method

- Exit survey data analyzed over a five year period (2004-2008, n=499)
- Primary Care (n=244) vs. other residencies (n=255)
- Four items measuring extent of use and satisfaction with advisor/mentor system
Analyses

- T-test with Bonferroni correction

- Proportions analysis using approximation of the binomial distribution (upper & lower ends of satisfaction scale collapsed)
Four Variables Measured

Satisfaction with:

*advisor/mentor system for overall guidance and assistance¹

*advisor/mentor system for guidance and assistance in choosing a specialty¹

*advisor/mentor system for guidance and assistance in choosing a residency program¹

Extent of use of the advisor/mentor system at UMMS²

¹ 5-point scale: Very Dissatisfied, Dissatisfied, No Opinion, Satisfied, Very Satisfied
² 3-point scale: Not at All, To Some Extent, A Lot
Student Satisfaction with Advisor/Mentor System

<table>
<thead>
<tr>
<th></th>
<th>Non-PC</th>
<th>PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choosing Specialty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choosing Residency</td>
<td></td>
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</tr>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

% Very Satisfied/Satisfied

% Very Dissatisfied/Dissatisfied

Proportions analysis: all statistically significant p < .05 level
### Proportions Analysis

<table>
<thead>
<tr>
<th></th>
<th>% Very Satisfied or Satisfied</th>
<th>% Very Dissatisfied or Dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PC</strong></td>
<td>83%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Non-PC</strong></td>
<td>71%</td>
<td>19%</td>
</tr>
</tbody>
</table>

#### Satisfaction level for *overall* guidance

<table>
<thead>
<tr>
<th></th>
<th>PC</th>
<th>Non-PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction for guidance in choosing a specialty</td>
<td>75%</td>
<td>63%</td>
</tr>
<tr>
<td>Satisfaction for guidance in choosing a residency program</td>
<td>78%</td>
<td>61%</td>
</tr>
</tbody>
</table>

1 All statistically significant (p<.05)
Average Score of Use and Satisfaction with Advisor/Mentor System

- **Overall***: The average score for overall satisfaction is higher for PC users compared to Non-PC users.
- **Guidance in Choosing Specialty***: Both PC and Non-PC users have similar satisfaction levels, with PC users slightly higher.
- **Guidance in Choosing Residency***: Similar to guidance in Specialty, both groups show comparable satisfaction, with PC users having a slight edge.
- **Extent of Use***: There is a significant difference between PC and Non-PC users, with PC users reporting higher use.

Legend:
- **PC**: Red bars represent PC users.
- **Non-PC**: Blue bars represent Non-PC users.

Scores:
- *1=Very Dissatisfied, 2=Dissatisfied, 3=Neither, 4=Satisfied, 5=Very Satisfied  
- **1=Not At All, 2=To Some**
# Average satisfaction levels with advisor/mentor system

<table>
<thead>
<tr>
<th></th>
<th>PC</th>
<th></th>
<th>Non-PC</th>
<th></th>
<th>Statistically significant (p&lt;.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Satisfaction level for <em>overall</em> guidance</td>
<td>3.9</td>
<td>1.3</td>
<td>3.6</td>
<td>1.4</td>
<td>✓</td>
</tr>
<tr>
<td>Satisfaction for guidance in <em>choosing a specialty</em></td>
<td>3.6</td>
<td>1.6</td>
<td>3.4</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Satisfaction for guidance in <em>choosing a residency program</em></td>
<td>3.6</td>
<td>1.5</td>
<td>3.4</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Extent of use of advisor mentor system at UMMS</td>
<td>2.1</td>
<td>0.5</td>
<td>2.1</td>
<td>0.6</td>
<td></td>
</tr>
</tbody>
</table>

Satisfaction Scale: 1=Very Dissatisfied, 2=Dissatisfied, 3=No Opinion, 4=Satisfied, 5=Very Satisfied
Extent of Use Scale: 1=Not at All, 2=To Some Extent, 3=A Lot
Discussion

• Approximately 90% of all students accessed their advisors/mentors with no statistically significant difference between groups.

• While Non-PC students less satisfied than counterparts with overall guidance, majority (71%) indicated very satisfied/satisfied with overall experience.

• Majority of both groups very satisfied/satisfied with advisors in choosing specialty, (PC=75%; Non-PC=63%), yet this was lowest rating for PC group, indicating potential for improvement.

• The greatest disparity between the two groups was among satisfaction with guidance in choosing a residency.
Conclusion

• Future PCPs more satisfied than counterparts with advisors/mentors role in guiding their medical career

• Direct causation remains unclear

• Faculty development should be explored to increase recruitment/retention of future PCPs

• Capitalize on relationship between students and advisors*

*This could build upon a recommendation from the Graham Report (2009), “Support primary care departments and residency programs and their roles in teaching and mentoring trainees.”

• Harris, Scott. (December, 2008). Graduates Report Higher Debt, Primary care Interest. AAMC Reporter. Available at: www.ammc.org/newsroom/reporter/dec08/graduates.htm

• Massachusetts Medical Society. Physician Workforce Study, 2009 Available at: www.massmed.org/workforce


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