Is Greater Participation in Maintenance of Certification Associated with a Decrease in Malpractice Litigation or Medical Board Disciplinary Actions?

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Presenter Disclosures

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(1) The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

No relationships to disclose

Maintenance of Certification (MOC)

- Professional response to the need for public accountability and transparency

- Physician commitment to
  - Continuous professional development
  - Lifelong learning
  - Quality improvement
Objective

- To examine whether completing internal medicine MOC contributes to lowering the number and size of overall malpractice claims and state medical board disciplinary actions in internal medicine

MOC Status and Quality of Care

- Mixed evidence on an association between board MOC status and the quality of clinical care
  - Holmboe et al., 2008
  - Pham et al., 2005
  - Simpkins et al., 2007

- No prior research on its association of malpractice claims and medical licensure actions with MOC participation

ABIM MOC Rate 82%, 2000-2010

MOC Completion Rate, by State

(Chart showing MOC completion rates by state with various color codes indicating percentage completed)
Study Sample

- 56,953 internists (general internists and subspecialists) whose last certificate was granted between 1990 and 1999

Data

- American Board of Internal Medicine (ABIM) Certification Data, 2000-2010
- National Practitioner Data Bank Public Use File, 2000-2010
  - Malpractice claims (all specialties)
  - Specialty of defendant is not available
- Disciplinary Alert Notification System by the Federation of State Medical Boards, 2000-2010
  - Disciplinary actions (internal medicine specific)

Empirical Model 1 (State-Level)

- Test whether a MOC completion rate in each state is associated with the number and size of malpractice claims
- Aggregated state-level analysis with state fixed effects
- Independent variable
  - A lagged five-year of moving average of MOC completion rate in each state
- Dependent variables
  - Number of malpractice claims in each state
  - Median damage amounts awarded in each state
Empirical Model 2 (Physician-Level)

- Test examine an association of completing MOC and the likelihood of an internist ever getting suspended or revoked
- Physician-level logistic regression model with state fixed effects
- Independent variable
  - MOC completion
- Dependent variables
  - Ever getting suspended
  - Ever getting revoked

Malpractice Claims, 2000-2010

Result 1: MOC and Malpractice Claims (State)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>1 percentage point increase in five years moving average in MOC would change % in</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malpractice Claims (N)</td>
<td>253</td>
<td>-3.7</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Median Payment ($)</td>
<td>$185,897</td>
<td>1.6</td>
<td>.11</td>
</tr>
</tbody>
</table>
Result 2: MOC and Disciplinary Actions (Physician)

<table>
<thead>
<tr>
<th>Mean</th>
<th>OR (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspended</td>
<td>13.7%</td>
<td>0.11 (0.09 to 0.14)</td>
</tr>
<tr>
<td>Revoked</td>
<td>0.2%</td>
<td>0.05 (0.03 to 0.09)</td>
</tr>
</tbody>
</table>

Summary
- Higher rates of completing MOC in a state are associated with lowering the frequency of malpractice claims but not the severity of liability claims.
- An internist who completed MOC is less likely to ever get suspended or revoked.

Implications
- With much attention focused on medical errors and patient safety issues, MOC is recognized as one professional response to improving quality of care.
- As medical specialty boards try to promote quality of care through MOC for all physicians, an association between board MOC status and physician performance needs to be validated.