

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

> Jeongyoung Park Rebecca S. Lipner Gerald K. Arnold

October 31, 2012

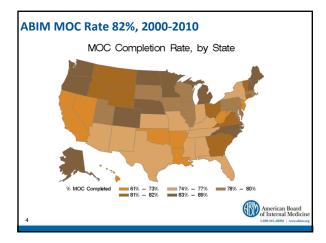
© 2008, 2009 American Board of Internal Medicin

# Presenter Disclosures Gerald K. Arnold, PhD, MPH (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





## **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



# 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



### **Study Sample**

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

> American Board of Internal Medicin

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)** 

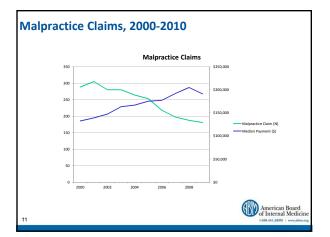
- Test whether a MOC completion rate in each state is associated with the number and size of malpractice claims
- Aggregated state-level analysis with state fixed effects
- Independent variable
  - A lagged five-year of moving average of MOC completion rate in each state
- Dependent variables
  - Number 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





### Result 1: MOC and Malpractice Claims (State) Mean 1 percentage point increase in five years moving average in MOC would change % in Malpractice 253 -3.7 <.001 Claims (N) Median \$185,897 1.6 .11 Payment (\$) American Board of Internal Medici

## Result 2: MOC and Disciplinary Actions (Physician)

Suspended 13.7% 0.11 (0.09 to 0.14) <.001  Revoked 0.2% 0.05 (0.03 to 0.09) <.001		Mean	OR (95% CI)	p-value
Revoked 0.2% 0.05 (0.03 to 0.09) <.001	Suspended	13.7%	0.11 (0.09 to 0.14)	<.001
	Revoked	0.2%	0.05 (0.03 to 0.09)	<.001

American Board of Internal Medicine

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

American Board of Internal Medicin

14

## **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



15