



American Board
of Internal Medicine

510 Walnut Street | Suite 1700
Philadelphia, PA 19106 - 3699

Contact: Lorie Slass
215-399-4005

American Board of Internal Medicine Interventional Cardiology Simulations Effective in Differentiating Novice vs. Skilled Physicians, According to New Research

Summary: (Philadelphia, PA) Research published in the April issue of *The Journal of Simulation in Healthcare* demonstrates the potential for high-fidelity simulations to be used in assessing physician performance as an approach to improving patient safety. The analysis, led by researchers at the [American Board of Internal Medicine \(ABIM\)](#), found that simulations can be used to identify physicians who are extremely poor performers and may not be providing appropriate patient care.

(Philadelphia, PA) Research published in the April issue of *The Journal of Simulation in Healthcare* demonstrates the potential for high-fidelity simulations to be used in assessing physician performance as an approach to improving patient safety. The analysis, led by researchers at the [American Board of Internal Medicine \(ABIM\)](#), found that simulations can be used to identify physicians who are extremely poor performers and may not be providing appropriate patient care.

The research examined the results of sophisticated mannequin simulators that electronically record detailed operator's actions and the patient's state using interventional cardiology simulated cases with 115 physicians at three levels of expertise – novice, skilled or expert. The evaluation of performance of the physician effectively distinguished the novice group from the skilled and expert group. The cases and scoring methodology used in the study were developed by a panel of interventional cardiology experts, with technical assistance from Medical Simulation Corporation.

Interventional cardiology, a subspecialty of cardiology and internal medicine, deals specifically with the catheter-based treatment of structural heart diseases. Interventional cardiologists in the United States perform more than one million procedures per year, many of them highly complex.

The case scenarios evaluated physicians' technical and cognitive skills around specific competencies needed to practice interventional cardiology, including stent positioning. The simulations also introduced unexpected complications, such as coronary perforation. The subjects completed a questionnaire, one practice case and six test cases on Medical Simulation Corporation's SimSuite[®] simulators to evaluate their experience. Approximately 90 percent of the study participants thought that the cases were well simulated and presented situations encountered in practice.

"ABIM continues to look for authentic and rigorous ways to assess physician performance as part of the Maintenance of Certification program," said Rebecca Lipner, Vice President for

Psychometrics and Research Analysis. “This pilot project demonstrates the potential for ABIM to use high-fidelity simulations in physician assessments.”

ABIM offers [simulations for interventional cardiologists](#) at Medical Simulation Corporation’s SimSuite® education centers, and several society meetings and conferences each year.

The study, available in the [research section of ABIM’s website](#), is one of a number of studies that are available for physicians, patients and policy makers for education and quality of health care improvement. The research and resources available on [ABIM’s](#) website include:

- A [bibliography on physician assessment](#) with articles on a wide range of topics including as assessment in training, physician knowledge and competency, and physician professionalism.
- [Research regarding Maintenance of Certification \(MOC\)](#)
- [Resources for patients](#)
- [Resources for policy makers](#)
- [Resources for hospitals and medical groups](#)

###

For more than 70 years, Certification by the [American Board of Internal Medicine](#) //link to www.abim.org/ (ABIM) has stood for the highest standard in internal medicine and its 19 subspecialties and has meant that internists have demonstrated – to their peers and to the public – that they have the clinical judgment, skills and attitudes essential for the delivery of excellent patient care. ABIM is not a membership society, but a non-profit, independent evaluation organization. Our accountability is both to the profession of medicine and to the public. ABIM is a member of the [American Board of Medical Specialties](#). For additional updates, follow ABIM on [Facebook](#).