



## FOR IMMEDIATE RELEASE

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## **UICOMP study: Simulation yields high returns**

### *Reduced patient complications translate into savings*

**PEORIA** – (April, 14, 2015) Learning to perform a single medical procedure using simulation-based training reduced patient complications, yielding nearly \$1.5 million in savings, according to a recent cost analysis by the Center for Outcomes Research at the University of Illinois College of Medicine at Peoria in conjunction with OSF HealthCare.

The study, to be presented at an international conference next month, looked at data collected between 2012 and 2013, involving resident physicians who were trained how to insert intravenous catheters, a.k.a. central lines, using special manikins prior to performing the procedure on actual patients. That data was then compared to a control group trained via traditional methods.

Results showed overall complications to hospitalized patients were reduced by 3.9 percent. In the first year alone, simulation-based training demonstrated an estimated \$4,863 net benefit per patient admission, equating to nearly \$1.5 million in savings. The return on investment also is estimated to grow substantially in later years.

“This further proves how medical simulation training directly improves patient care – in this case, by reducing complications and infections – and simultaneously proving to be a huge savings to the entire health care system,” said Dr. John Vozenilek, Medical Director at Jump Trading Simulation & Education Center.

Infections related to central line insertions are estimated to cause thousands of deaths each year and add billions of dollars to the cost of the U.S. healthcare system.

The CVC study was among the first clinical training projects to take place under Jump and involved assessing more than 80 physician residents at OSF Saint Francis Medical Center. Ultrasound equipment was used to place a catheter in conjunction with a manikin head and torso containing specially-constructed plastic tubes, which were used to simulate vessels within the neck.

“We are creating a new health care model in Peoria that the rest of the world can learn from and benefit,” said Carl Asche, PhD, Director of the Center for Outcomes Research at UICOMP. Asche’s research team conceived, developed and conducted the economic impact study in collaboration with Jump and OSF HealthCare.

The study will be presented in May at the 2015 International Society of Pharmacoeconomics and Outcomes Research International Meeting in Philadelphia.

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