

# The Bucksbaum Institute for Clinical Excellence 2012 Pilot Grant Program

Final Grant Report  
Due Date: March 1, 2013

## Project Title:

Improving Patient Perception During Disclosure Conversations of Unanticipated Outcomes Utilizing Disclosure Training for Anesthesiology Residents and Critical Care Medicine Fellows: A Novel Approach

## Introduction/Background:

Since the 1999 landmark Institute of Medicine report "To Err is Human," evolving healthcare innovations have intended to reduce harmful patient events through education and systems improvements. Currently, hospitals, accreditation organizations, and legislators in the United States are developing standards, programs, and laws encouraging the transparent communication with patients after harmful events. Many organizations have been advocating for patient safety by instituting quality measures meant to create environments of transparency and encourage disclosure practices. Educational disclosure training programs are slow to grow and currently seem to be limited to cognitive exercises via electronic learning modules. I propose a simulation study employing "real time" simulation disclosure training within the University of Chicago Medical Center. The concept for the effective disclosure conversation is based on successful research by Foglia PhD, Gallagher MD, and Shannon. Given the high stakes environment of the operating room, I plan to employ "real time" simulation disclosure training to Anesthesiology residents. Simulation training has proven a viable training modality in sustaining changes in communication behaviors. These disclosure simulations are modeled after simulations that are ongoing by Gallagher MD as part of the "Team-Based Error Disclosure Web Assessment Modules" developed as part an Agency for Healthcare Research and Quality (AHRQ) study titled "Using Team Simulation to Improve Error Disclosure to Patients and Safety Culture." To date, no investigator has validated the relationship between educational disclosure training and the perceptions of patients after disclosure of harmful events. Following each actual disclosure event, a previously validated post-disclosure questionnaire will be used as an assessment tool measuring both resident/fellow perception versus the patient's perspective of the disclosure process. I anticipate that actual disclosure discussions with patients will markedly improved. I propose this novel project with the following specific aims:

**Primary Aim: 1.** To characterize the relative effectiveness of simulation disclosure conversations using Effective Arts actors and using the "Attend-To's" methodology.

**Secondary Aims: 1.** To characterize the relative effectiveness of simulated disclosure conversations after simulated unanticipated outcomes using utilizing real time disclosure simulation as best practice as assessed by pre and post simulation assessments. **2.** To characterize the relative experiences of participants using post evaluations and reflective practices after each RT unanticipated outcome simulation. **3.** To characterize performance improvements in participant scoring on residency and fellowship ACGME competencies following participation in RT simulation.

## **Design and Methods:**

### **Study site:**

The Simulation Center at the University of Chicago Medical Center will act as the site for the simulation study. The Simulation Center is currently maintains the certification for Maintenance of Certification for the American Board of Anesthesiology.

### **Randomization of the Residents:**

#### **Study participants:**

- *Anesthesiology residents* in their second year of training will serve as the study participants.
- *Effective Arts Actors* will serve as the simulated family to whom the residents will disclose the circumstances.
- *Clinical disclosure coach (CDC)* will be the role that this PI of this study will serve.

### **Interventions:**

**Web-Based Error Disclosure Training Program:** The Web-based error disclosure training program is being developed as part of the real time disclosure simulation training for improving patient safety and will offer a Quicktime Disclosure Podcast that covers topics related to the components of the effective disclosure conversation. Gustin MD as the error disclosure expert is tasked with production of this Error Disclosure podcast as part of this educational curriculum. This module will include key teaching points that will be augmented by the real time disclosure simulation. This podcast will be completed prior to the initiation of the study.

**Real Time (RT) Simulation Training:** This RT simulation on disclosure was initially designed by Gallagher MD in order to train physicians in how to communicate with patients about errors. The simulation will be based on the following objectives. The teams will be exposed to case simulations (videotaped) and debriefed after completion of each simulation by member of each site's risk management team.

**Real Time (RT) Disclosure Conversation Simulation:** This RT simulation on disclosure was based on the work by Effective Arts (See attached letter Appendix A).

**Results:** None

**Current Data:** None

### **Deliverables:**

The UC Simulation center has been challenged with their anesthesia equipment. The simulation center's anesthesia machine was dysfunctional with dysfunctional oxygen sensors and no oxygen line feeds for the mechanical ventilator. The need for functional equipment for real time immersion simulation is paramount. The distractors of alarms and dysfunctional equipment would render the simulation with less fidelity. I was unable to gain permission to use operating rooms in the DCAM or the main hospital for the simulation; and thus had to postpone the simulations until repairs could be made. The oxygen sensors were repaired on February 15, 2013 (with a continuous supply now available). The oxygen feed lines with adapters for the

anesthesia machine were being finalized with construction/build out that was to be completed by March 10, 2013. At that time, the Gustin Simulation Pilot Grant will move forward with the goals and objectives as listed.

The Effective Arts training and development occurred during the last portion of August and the first portion of October 2012.

As soon as the repairs to the UC Simulation are finalized, I am ready to move forward with the grant and the high fidelity immersion simulations. I am more than willing to write another project report within the next several months as requested by the Bucksbaum Institute. Given the issues associated with the equipment resources in the UC Simulation Center, the Department of Anesthesia and Critical Care has offered to purchase a new ventilator for use within the UC Simulation and place this new ventilator under the service contract with the Department of Anesthesia and Critical Care (in order to ensure its continued function and availability). Thus, I hope that no further issues regarding physical resources will be experienced for the remainder of this project.

**Discussion/Budget:**

Budgeting has projected the use of all the Bucksbaum Pilot Grant at the conclusion of this study (despite that funds are currently still available).

**Primary Investigator:**

Allen N. Gustin, Jr., M.D., F.C.C.P.  
Assistant Professor of Anesthesia and Critical Care  
Department of Anesthesia and Critical Care  
agustin@dacc.uchicago.edu