Health, Humanism, and Society Scholars – Project Submission Form

**Project Title:**

Comparison of Two Team-based Debriefing Strategies for Simulation-based Training of Pediatric Residents in the Delivery of Bad News: Reflective Practice vs Debriefing with Good Judgment

**Project Description:**

The broad definition of bad news in the context of medical practice includes any information provided by physicians that significantly affect the behavior, emotions and thought process of patients. Practicing physicians and trainees regularly are involved in clinical situations where such information should be delivered to patients with clarity, respect and compassion in ways that support families’ coping and participation in treatment decisions. Delivering bad news is a difficult task for physicians for a variety of reasons including the challenge of managing one’s own emotions in technically complex, high-stress situations and the unpredictable range of patient reactions to negative information. Moreover, physicians recognize lack of formal training with these types of situations as contributing to their discomfort and low confidence in effectively communicating bad news. Recognition that doctors require specific training on how to deliver bad news has led to development of several educational interventions designed to improve their communication skills.

We have developed a “Delivering Bad News Workshop” for pediatric residents based on the premise that effective communication skills for delivery bad news can be taught. The objective of the current project is to evaluate and compare two different debriefing approaches to teach pediatric residents how to deliver bad news. We plan to accomplish that goal through the development of the following aims: 1. Understanding and applying the principles of delivering bad news in prototypical scenarios (e.g., diagnosis of life-threatening disease). 2. Understanding and managing the participants’ own emotional responses in such scenarios.

The “Delivering Bad News” workshop will be conducted in the TCH Simulation Center in August 2021. We expect to have approximately 50 participants (2nd year pediatric residents). The workshop will be offered twice to accommodate the entire cohort of residents. The participation of pediatric trainees in the workshop will be voluntary (participants will sign an IRB-approved informed consent). Approximately 20-experienced BCM faculty from four sections of the Department of Pediatrics (Academic General, Hematology/Oncology, Emergency Medicine and Critical Care) will serve as instructors. This workshop has been conducted uninterruptedly for the past 10 years but it was suspended last year due to the COVID-19 pandemic.

On the morning of each workshop, all residents and faculty will meet in a plenary session to review learning objectives, procedures, room distribution and equipment available for the workshop. Residents will be assigned to one of four learning groups consisting of approximately 5-6 residents and 2 faculty facilitators. Two of the groups will employ the “Team-based Reflective Practice (TRP)” method and two will employ the “Debriefing with Good Judgment (DGJ)” method. All
groups will engage in the following 4 different clinical scenarios: 1) An unexpected finding on physical exam that conveys the diagnosis of a rare disease 2) Disclosure of potential medical error to a hostile parent 3) End-of-life care discussion for a chronically ill patient 4) Disclosure of life threatening illness in the emergency room.

Each clinical encounter with standardized patient (SP) is divided in the following three phases: 

**Preparation phase:** In the first phase, each group reviews the information provided and explores how to approach the specific task in each case (e.g. how to convey information about a possible medical error to an angry parent). Representatives of each group are randomly assigned to conduct the encounters with the SPs. In this phase, the faculty assigned to each group will facilitate a discussion among the residents, based on their practice experience, about how such situations should be approached to help prepare the representative for the encounter. The faculty assisting the group do not provide direct advice or establish any specific set of questions for the encounter with the SPs. The preparation phase lasts 7 minutes.

**Encounter phase:** The second phase is the spontaneous interaction of the group representative with an SP while the remainder of the group observes the interaction via closed circuit TV. Residents and faculty in the observing group are encouraged to think about similar situations in their own practice experience rather than critique the performance of their colleagues in the encounter. During the encounter, the faculty should avoid any comments about the learner performance. The faculty have the authority to stop the encounter at anytime if he/she considers that encounter is too stressful for the group representative. The encounter phase lasts 7 minutes.

**Debriefing phase:** The third phase is a 10 minute group debriefing session. Immediately after the encounter phase is completed, both the resident representative and the SP give their general impressions to the observing group about how they experienced the encounter. The debriefing will be conducted using one of the following methods.

a. **Team based reflective practice (TRP):** A core feature of the method is that priority is given to the residents’ judgment of what is crucial to review in the debriefing sessions. Faculty can contribute key points based on their experience, but only after the residents have had an opportunity to process their ideas and if the faculty determines that important considerations have not been adequately addressed. Another core feature is that the TRP approach does not focus on the behavior of the individual resident representatives in the simulated encounters but rather focuses on a review and discussion of what is evoked in the members of the learning group who observe the scenarios as they reflect on their own practice. Reflective in and on practice in medicine is seen as essential to develop strategies to manage complex situations where there are no easy answers as well to encourage the habit of lifelong learning. Instructors will also be trained on this methodology.

b. **Debriefing with good judgment (DGJ):** This method presumes there are best practices and targets that should be achieved during each encounter. The faculty use specific aspects of the resident’s performance as triggers to lead a group discussion of what, in their expert opinion, is important for effective delivery of bad news in that type of scenario in alignment with pre-established learning targets. The DGJ approach is comprised of three elements: 1. The actions of
the trainee: seen as a product of an internal frame based on prior training and experiences. 2. The instructor role: to understand the rationale behind the trainee’s actions in a non-judgmental way in order to discover and make explicit the trainee’s frames. 3. A conversational technique: a pairing of advocacy and inquiry, designed to bring together the experience/judgement/expertise of the instructor with the frames of the trainee. Instructors will be trained on this methodology. 4. A script, which contains the goals for each encounter, will be developed for the workshop.

After completing the three phases described above, all residents and faculty gather for a summary review of their learning in the workshop. This “summary debriefing session” is conducted separately for the DGJ group and the TRP group.

Data analysis:
Participant residents will complete a retrospective pre-post Likert-type evaluation. The survey will also specifically ask residents to describe 3 take-home messages for each encounter. The questionnaire is aimed to assess the residents’ ability to describe common principles used to delivery bad news and to assess their level of confidence breaking bad news after their participation in the workshop. A follow-up questionnaire will be collected from participants 10-12 months after workshop. Workshop sessions will be recorder for further qualitative analysis (e.g. consistency among faculty within the two debriefing methods and evaluation of learning objectives). The data obtained from the surveys and qualitative analyses will allow us to compare the methods, to discover their strengths and weaknesses and to frame the discussion of current practices in teaching how to delivery bad/life-altering news in medicine.

Institution and Location: Texas Children’s Hospital

Project timeframe (2 semesters is standard, 1 semester options also available beginning Fall 2021): 2 semesters

Prerequisite training:
Students with the following interests/experience might consider this project, although anyone interested in medical decision making would be a reasonable fit: psychology or social science majors (cognitive psychology), communication (health communication), or philosophy (applied). Students should be enthusiastic, organized, detail-oriented, self-motivated, adaptable, punctual, and professional. Accepted applicant may participate in the workshop as observer.

Knowledge and skills student can expect to gain:
This project may be of particular interest to students who are considering careers in health care or find the social and psychological aspects of medicine and science interesting. Students who have an interest in group and organizational dynamics may also find this attractive. Students will have
the opportunity to learn the basics of qualitative analysis including exposure to the type of software programs used in such research. These research principles and practices have wide applications in the social sciences. Finally, students will learn about conceptual frameworks in medical education.

Two RICE students participated in the qualitative analysis of the “2019 Delivering Bad News Workshop” recording sessions during the past 2 semesters. The results obtained from this analysis have been instrumental to modify the workshop for the next academic year. Accepted applicants will perform qualitative analysis of the “2021 Delivering Bad News Workshop”

**Expectations of student (Rice University requirements are listed):**

- The student must devote 8 hours per week to the project (consistent with a 3-credit course) and will develop a timeline of activities in collaboration with supervisor(s). The student will meet at least monthly with the faculty supervisor(s) to evaluate progress. The student will attend relevant research team meetings as requested (may occur weekly depending on project).

**Expectations of PIs/project sponsors:**

- The projects should be designed with the academic rigor of Rice University in mind, and abide by the U.S. Department of Labor’s Fair Labor Standards Act for unpaid internships. Mid-semester and final supervisor evaluations will be submitted to evaluate student’s professional progress. Complete details found here: Project Sponsor Eligibility.