

# Clinical Disclosure Training With AI Patient Actor

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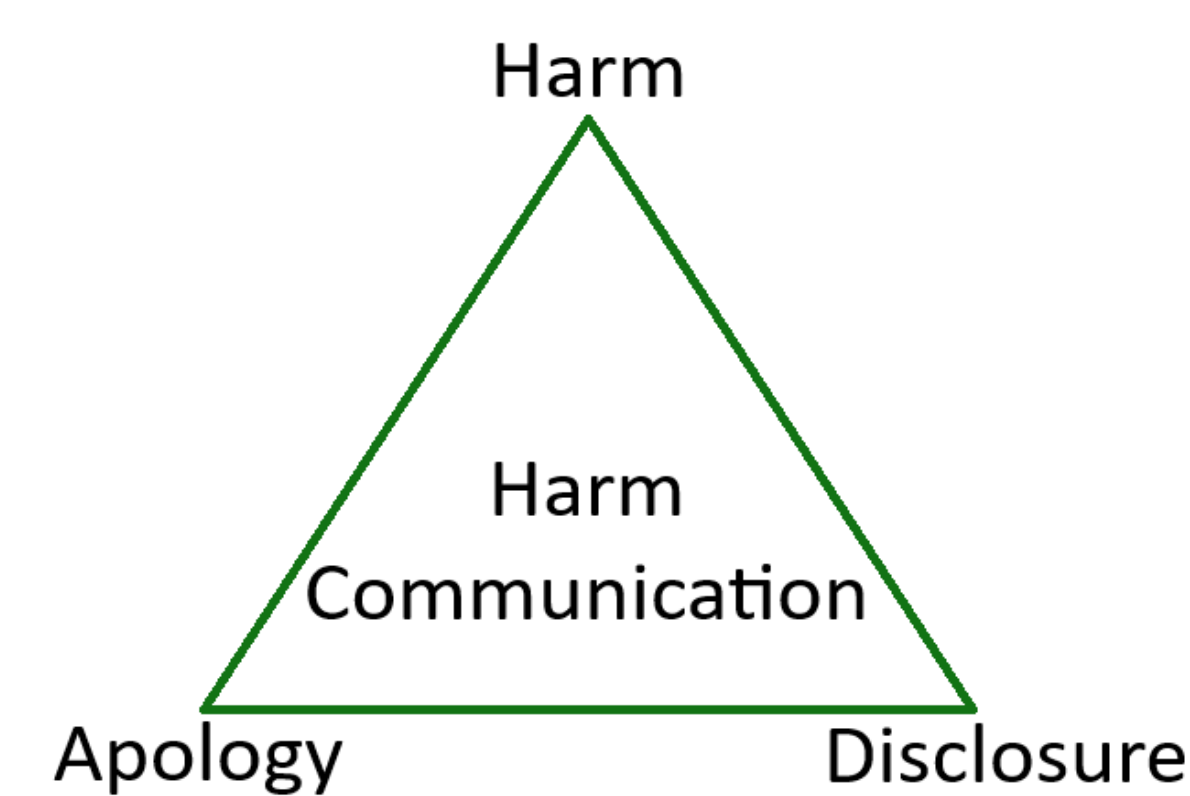
## THE BIG PICTURE

### BACKGROUND

Harm is common in medicine, medical students need to know how to talk about harm with patients and families. Clinical disclosure is an important part of being a physician that medical students will see in the future one way or another. There are correct and incorrect ways for clinicians to disclose errors that can be taught. However, many medical schools lack clinical disclosure as part of their curriculum. This can be due to limited available time in curriculums and practicing clinical disclosure skills being resource intensive. Many trainings described in literature are 8 hours or longer and sim patients are a large investment of time, money, and logistics.

### GLOBAL AIM

To develop a compact curriculum for teaching clinical harm communication to medical students.

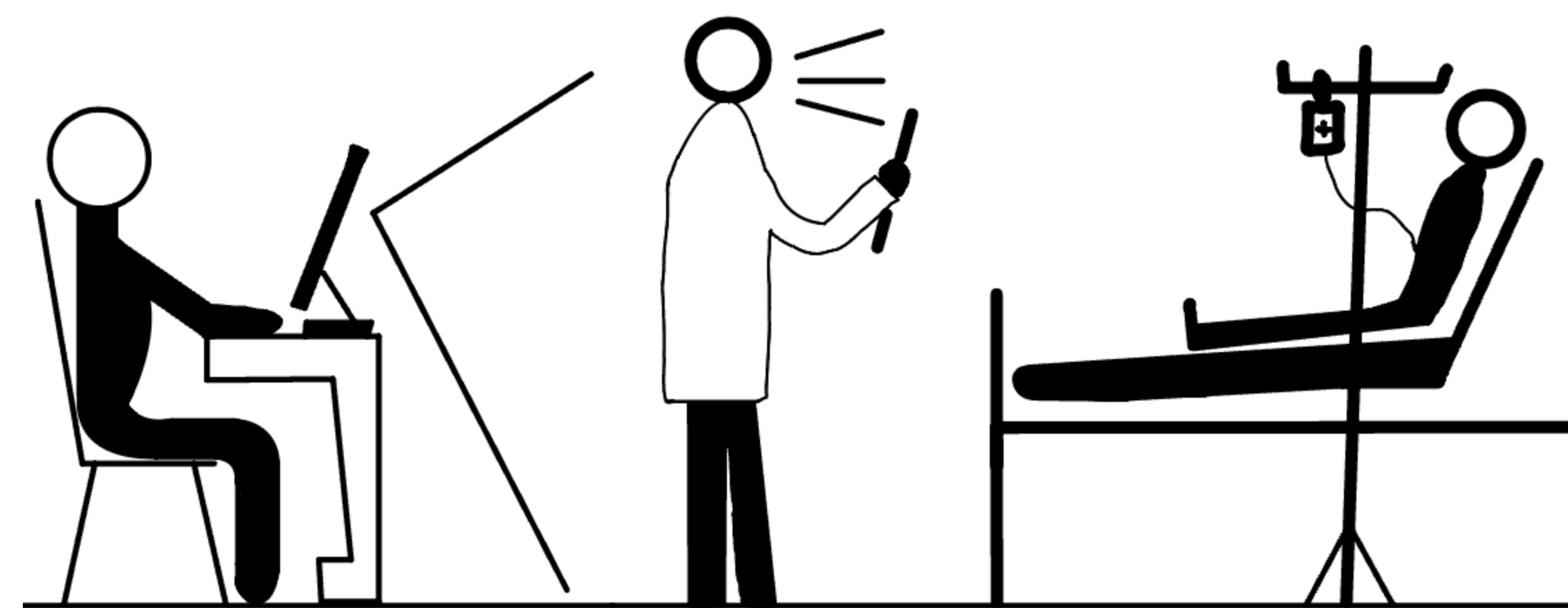


### ADVANTAGES OF PROPOSED CURRICULUM

- Curriculum is compressed and flexible, introducing harm discussions and clinical disclosure to students in an approachable manner compared to traditional curriculums.
- It has the potential to be slotted into medical school curriculums at multiple spots both clinical and pre-clinical
- Can be 100% student directed and offers the opportunity to practice the skills with multiple simulated cases.
- Easily scalable from small to large groups of learners
- Less expensive and less logistically intensive than traditional models of clinical disclosure practice involving sim patients

### LEARNING DESIGN

The curriculum developed includes self-directed pre-work videos on clinical disclosure developed by Alberta Health Services entitled Disclosure Done Well, a lecture on harm in medicine and clinical disclosure, and self-directed practice with AI patient scenarios powered by Dartmouth's AI Actor 2.0. This summer a proof of concept trial was done to evaluate the efficacy of this curriculum. The students began by completing an AI patient encounter to establish a baseline. Then they viewed the video pre-work followed by a prerecorded lecture. Upon completing the videos they worked through a second AI Patient scenario.



### PILOT TESTING EVALUATION

The trial was done with 8 second year Geisel medical students working through the proposed curriculum to investigate whether it would be effective at introducing clinical harm discussions to medical students. This was evaluated through subjective and objective means via survey and rubric.

**Subjective Evaluation:** After completing their second AI patient actor encounter the students took an anonymous survey to subjectively rate their learning and the effectiveness of the training.

**Objective Evaluation:** The AI Patient Actor has a custom rubric embedded to evaluate student learning. The categories graded are: Introduction and Building Rapport, Disclosure, Apology, Explanation, and Plan. They are rated from excellent, good, or needs improvement. Student's performance was compared between their encounter before the training and their encounter after.



## TEAM AIMS AND OUTCOMES

### RESULTS

This was a proof of concept with a small group to evaluate if the training methodology is sound in preparation for larger groups of learners.

- Unanimously, the student's self-evaluations reflected that they felt they effectively learned the skill.
- On average the learners scores increased by 7% with a high of 20% on their second case. There were some students who did not have improvement per the rubric.
- No student's scores decreased on the second attempt.
- The AI actor 2.0 was found to be work well and felt more organic than prior models the students had used.
- Students also believed that this training would function well in On Doctoring sessions or scaled up to a larger group.
- There was some suggestion that the didactic portion was repetitive.

### CONCLUSIONS/NEXT STEPS

The findings were promising in this proof of concept cohort. AI models can be an efficient tool for learning at the learner's pace that is not possible with human sim actors. AI models may require tuning before they perfectly match humans. Our next step is to do this training with a larger group in a medical school setting.

Training for this skill could be integrated at multiple parts of the medical school curriculum: on doctoring core skill, transition to clerkship, or during clerkship. Before the second iteration the rubric and AI instructions are going to be reevaluated and hopefully improved upon.

Interested? Try  
the curriculum  
for yourself!

