

VIRTUAL CLINIC VIDEOS: USING DESIGN THINKING TO IMPROVE MEDICAL EDUCATION

AUSTIN DOPP, NATHAN KLESMITH, SCOTT SELF, DR. RYAN SPELLECY

INTRODUCTION

We wanted to know if online videos emphasizing patient interviews, basic science material, and physical exam skills can serves as a viable alternative to traditional didactic sessions. We believe these videos can help to improve students' knowledge retention, empathy, and reduce burn out.

KERN INSTITUTE TRIPLE AIM

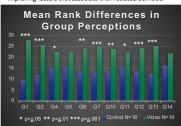
- Competence: Our project focuses on competence by developing curricular tools that can hopefully be used by students to better understand and retain content taught in the first two years of medical school.
- Caring: Our project focuses on caring by helping students to become more empathetic physicians, that really take the time to understand the difficulties that come with having different illnesses. By helping students to have more real experiences with patients in the pre-clinical years they will be able to be more caring physicians in the future careers

PROJECT DESCRIPTION

When we began our project we wanted to create recordings of patient interviews so that we could increase knowledge retention, increase empathy, and reduce burn out in a way that is organized, accessible, and consistent unlike traditional didactic sessions. To do this we recorded a short pilot video to test what we thought would be the best format for these videos. Because of this we decided that we needed to add a basic science and physical exam video to each interview in order to make it more appealing to the students.

RESULTS

We performed a randomized controlled trial with our videos to determine their effectiveness in achieving our goals. While mean scores were not statistically different, the experimental groups questionnaire scores which asked questions about how they felt the material impacted their learning, knowledge, and burnout showed 9 significant results as compared to the control group. This shows that the videos maintained immediate knowledge retention, while improving perceptions of improved empathy, and improving factors that associate with reduced burnout.



DISCUSSION

Throughout this process we learned many things:

- #1. Patients enjoy sharing their stories and may even find it "therapeutic."
- #2. Creating high quality videos for use in classroom settings is something that can be accomplished with relative ease when you have cooperation with physicians and professors.
- #3. The most difficult part in creating virtual learning videos is making the time and coordinating schedules with patients and physicians.

ENTREPRENEURIAL MINDSET

Where/How did we experience Curiosity in our work? Throughout our project we experienced curiosity in

many ways. The project itself was came from the question of "how can we learn in the first 2 years of medical school while interacting more from patients. Where/how did you experience Curiosity in your work? From this question came the idea of incorporating patient interviews into lectures through recordings. Further questions helped us to improve the project such as "What would make students want to use the videos," "What would professors want to see in the videos."

Where/how did we Create Connections and Collaboration in our work? Connections and collaboration were crucial to this

project. Without the connections of professors we wouldn't have been able to find such great physicians to help us in our videos. Without collaboration from the professors our videos would have had inaccuracies and we wouldn't have been able to find such fantastic patients. Additionally, without the collaboration of the videographers our videos wouldn't have been able to reach the quality that they are. This project took a team with many parts working to create a final project.

Where/how did we Create Value in our work? We created value by directly asking our

stakeholders what they thought was valuable and then made that into a reality. Because students told us they wanted material that focuses on board material we were able to design the videos with them in mind, and because we talked to the professors we were able to learn what thing they found valuable and the ways in which they could use the videos in their classrooms. Additionally, we believe we also created an immesurable value by helping future physicians to better empathize



with their patients.