Title: A pilot project of a web-based, narrative approach to educating interprofessional healthcare providers about shame

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Focused Question: Is a web-based seminar utilizing a documentary-style video and narrative reflection an effective tool for educating interprofessional healthcare learners and providers about shame and strategies to constructively engage with it?

Background: Shame in Medical Education Shame is a powerful emotion that occurs in response to negative events such as making mistakes or experiencing mistreatment.1-3 The psychology literature outlines associations between shame and a variety of mental health problems including depression, anxiety, post-traumatic stress disorder, and addiction.4 Further, it is possible that shame contributes to the challenges of burnout, declining empathy, and learner mistreatment that continue to perplex leaders in academic medicine.5 Our research in medical residents suggests that shame can be a “sentinel emotional event” that causes significant emotional distress and negative outcomes in medical learners.6 In an initial qualitative study, we collected and analyzed residents’ stories of their experiences with shame, which, somewhat to our surprise, they shared openly. These stories yielded critical insights into how medical learners can experience shame, including the words they use to describe their shame, physical manifestations that occur with shame, and outcomes that may result from shame. These outcomes include social isolation, depressive feelings, diminished physical wellness, impaired empathy, and unprofessional behavior.6 Our analysis also revealed factors that contribute to residents’ shame experiences, including perfectionism, comparisons to others, and fear of judgment,6 as well as traits that appear to confer resilience to shame. These data, coupled with theory and data from psychology, can inform development of strategies and resources to educate learners, teachers, and practitioners in healthcare about the nature and potential effects of shame. However, the optimal educational strategy is currently not known and at least one educational approach has unintentionally induced shame in medical students.7 We recently conducted two in-person shame seminars with Duke medical students that combined traditional powerpoint-based didactics and the sharing of personal stories to teach medical students about shame. Post-seminar quantitative analysis yielded statistically-significant increases in students’ attitudes, confidence, and willingness to reach out about future shame feelings, and qualitative analysis revealed that the sharing of personal stories was central to the seminar’s effectiveness.8 Building upon the apparent success of this seminar, we seek to develop and pilot a set of web-based educational resources about shame in healthcare that utilizes the power of narrative and can be broadly disseminated at Duke and beyond. This pilot project will inform a proposal to the Josiah Macy Foundation Faculty Scholars Program for a large-scale curricular innovation designed to promote emotional resilience in interprofessional healthcare learners and providers. The Power of Narrative Rita Charon, the architect of the narrative medicine movement, argues that At the same time that interest soars in the evidence-based “right” decisions…we see a growth in medicine's interest in the unknown/unknowable, the particular, and the self—in patients' lived experience, illness narratives, and the interior lives of clinicians.9 As a highly personal emotion, shame may be found within the “interior lives of clinicians”9, often hidden from view and difficult to openly share. As we continue the data-driven characterization of medical learners’ shame experiences, we must communicate these data in a way that builds the personal

and emotional connection to the topic necessary to promote understanding and healing. Utilizing the power of the narrative is a tangible way to achieve this goal. Narrative medicine is founded on the principle that sharing and receiving stories can illuminate meaning and drive understanding of complex phenomena in medicine, such as death, illness, and shame. Further, the self-reflection imbued by narrative medicine has the potential to promote healing and growth in the midst of the pain, unfairness, and suffering inherent in the practice of medicine.10 Thus, narrative-driven self-reflection may be a specific, reproducible means for interprofessional healthcare learners and providers to confront painful shame experiences in a way that promotes healing and builds resilience. However, the hidden and painful nature of shame may hinder open sharing of shame experiences, and educational resources are needed to facilitate this exchange. In this proposal, we outline plans to build and evaluate a seminar for interprofessional healthcare learners and providers built on principles of narrative medicine. With this project, we will produce a documentary-style video to introduce the concept of shame in healthcare through the power of narrative. The video will help participants establish an emotional connection to the topic of shame and set the stage for personal exploration and discussion about their shame experiences. The seminar materials will be housed on a website that will enable dissemination across Duke and beyond.

Specific Aims: 1. Produce a 3-5 minute video based on real-world shame narratives from interprofessional healthcare learners and providers. 2. Construct an educational shame resilience seminar for interprofessional healthcare learners and providers using the video and guided small-group discussion. 3. Build a simple website to house the video and seminar resources. 4. Conduct seminars in interprofessional healthcare learners and providers. 5. Evaluate the effectiveness of the seminars in changing participants' knowledge and attitudes about shame and their experiences interacting with the video and web-based resources.

Methods: In the first arm of the project, we will work with Blueline Media to produce a 3-5 minute documentary-style video depicting healthcare providers' experiences with shame. The purpose of the video is to provide a personal, narrative account of real-world shame experiences and strategies to overcome them. The members of our interprofessional team will bring the perspectives of their respective disciplines to the video production process, ensuring that diverse interprofessional experiences are represented. We will recruit, on a voluntary basis, actual interprofessional healthcare learners and providers who have experienced shame to be featured in the video. These providers may include, but are not limited to, students (nursing, PA, medical), nurses, advanced practitioners, and physicians. The video will provide personal, impactful insight into their shame experiences in healthcare and the strategies they have used to recover. We anticipate including 4-5 providers in the video, and we will compensate them with a $100 Amazon gift card for their time. In the second arm of the project, we will develop a seminar and build a simple website to house the seminar resources. The video will be featured early in the seminar (or beforehand) to help attendees develop a personal connection to the topic.; the ways in which the video might be most optimally used is a focus of this study. We intend for the video to assist seminar leaders who may be reluctant to share their own personal shame stories with a large group, a potential barrier to widespread implementation of this educational innovation. After viewing the video, seminar attendees will, at a minimum, be guided through a narrative writing exercise and small group discussions in which they explore and share their own shame experiences. We will house all seminar resources on a website constructed by the Director of Communications in the Department of Community and Family Medicine at no additional cost. The website will include the video, goals/objectives, discussion prompts, a faculty guide, an evaluation tool, and resources for further study. The overall goal of the website is to house all of the resources necessary for educators to conduct a seminar about shame without having intimate knowledge of the topic. We will conduct three seminars in medical students, PA students, and nursing students, and an additional three seminars in the family medicine, obstetrics, and pediatrics residency programs. The latter three seminars will be publicized to all members of the clinical learning environment in an attempt to gather a diverse, interprofessional audience of learners and providers. We will evaluate the effectiveness of the seminars using post-surveys that assess participants' responses to the seminar and changes in their attitudes, confidence, and knowledge about shame, and their comfort

level in sharing shame experiences with others. We will also evaluate participants' perceptions of the video and likelihood of using it to educate others about shame in the future. We will record our team reflections about the utility of the video and its optimal use within the seminars we conduct. Finally, we will collect informatics data on the use of the video and website beyond the seminars, including including click rates, video views, and dissemination metrics (e.g. twitter posts/reposts). We will manage evaluation data using Duke Qualtrix or RedCap. We will utilize descriptive statistics and the paired t-test to analyze quantitative data and inductive thematic analysis to analyze qualitative data. We will disseminate these findings via scholarly publication and conference presentations as we have done with past shame seminars. We will seek IRB exemption for the evaluation data we collect. This application has not yet been started, but we have successfully gained IRB exemption for similar post-seminar evaluation data in the past.

IRB Status: Plant to submit

Challenges: Primary challenges include deciding on the content and style of the video and recruiting real-world learners and providers to be filmed. Our team members are comfortable discussing our own shame experiences and are confident that we can channel these experiences and observations of our learning environments into meaningful video content. We are also confident that we can recruit participants to appear in the video, as we have had success recruiting speakers for our seminars and research studies in the past and we have already identified a handful of potential participants. We face the additional challenge (or opportunity) of finding partners within other schools at Duke and will remain open to additional opportunities for collaboration beyond those outlined in this proposal.

Budget: $10,000

PI effort	<1% effort for PI to oversee project	$1,000
Consultant	The $ 8,500 allotted to the production of the documentary - style video will be paid to Blueline Media (www.thisisblueline.com), a firm based in Indianapolis, IN and Durham, NC that has done high- quality work for Duke in the past. The estimate includes production of a 3-5 minute video and the myriad requirements that accompany it, including production research, casting, storyboarding, scripting, production, editing, and motion graphics. The Duke AHEAD logo would be included as a sponsor of the video, offering a significant branding/marketing opportunity, especially should the video be widely disseminated outside of Duke. Of note, we reached out to numerous departments at Duke seeking opportunities to involve graduate students or	$8500

	other internal resources, and very few emerged. Blueline was the clear choice to create the highest quality video within the budgetary constraints of the grant.	
Equipment		
Computer		
Supplies	We have allotted $ 500 to compensate volunteers who participate and appear in the documentary style. We anticipate compensating five volunteers each with $100 amazon gift cards.	$500
Travel		

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