I. SPECIFIC AIMS

Identification with a minority or marginalized group is linked to health disparities, inadequate treatment, and poor health.[1] Despite demand for formalized teaching to address the social determinants of health (SDH) that influence the care of such populations, it is challenging to adequately teach culturally sensitive care. Narrowing diverse experiences in the classroom can stereotype patients, and discussing such topics at the bedside is inconsistent and can be uncomfortable. As part of a larger curriculum on **diversity and inclusion,** our aim is to create a social determinants simulation workshop that focuses on promoting empathetic communication as a screening tool rather than narrowing patient experience, and uses simulation as a safe venue for this potentially triggering topic. Specifically, we aim to:

1. Increase empathy of trainees toward SDH, before and after four simulated experiences where they play patients challenged by social needs, as measured by the Jefferson Scale of Personal Empathy (JSPE).

2. Create best practices in screening and intervening on social determinants of health that act as barriers to patient care through a debriefing discussion with cross sector stake-holders (social work, case management, legal aid), patients and providers.

We will **collaborate** with the departments of Obstetrics and Gynecology (OB-GYN) and Family Medicine to create scenarios around barriers in language, restriction of resources (living in a food desert, or homelessness), addiction and provider suspicion, and low medical literacy. Incorporating feedback from debriefing discussions and empathy scores, we will **rigorously design** an **impactful** workshop on social determinants. Our goal is to distribute the workshop widely for use in undergraduate and post-graduate education creating a **sustainable** model for teaching cultural sensitivity.

II. PROJECT RATIONALE

That front line physicians need a formalized curriculum in social determinants of health has long been recognized.[2,3] However, teaching around topics of race, culture, gender, and resource restriction can be uncomfortable, and summarizing the lived experience of diverse populations can be reductionist. The resulting gap in training has been filled by inconsistent, implicit curricula on SDH, and lack of training can lead to a sense of futility and burnout.[3] Simulation can effectively overcome the challenges in creating an explicit, standardized curriculum on SDH. Hardee identified that providers hesitate to discuss social needs because they feel they are not relevant to medical care.[4] However, a recent poverty simulation was effective in illustrating the effects of poverty on the medical needs of the patient.[5] We will build on this model to illustrate the relevance of other social determinants in our workshop. Providers also hesitate to discuss cultural and racial influences for fear of being able to speak knowledgably.[4] Patients are already experts on their own social determinants and while it may not be possible to narrow the broad experiences of our patients into teachable bullet points, we know that empathy is a teachable and learnable skill that can solicit the conversations needed to identify social determinants.[6] Empathy is linked to improved health outcomes and may be the natural way to address SDH in the health setting.[7] Lastly, simulation creates a safe space for debriefing with patients, providers and learning resources from cross-sector stakeholders.

III. PROJECT APPROACH

The goals of this project are to use simulation to overcome the challenges to formalizing curricula around the social determinants of health. Drs. Schertzer, Poffenberger, and Khan hold national expertise in simulation, social medicine, and medical education respectively. They will create four simulated scenarios around barriers in language, restriction of resources (poverty,

living in a food desert or homelessness), addiction and provider suspicion, and low medical literacy. Each scenario will be crafted with two parts: 1) a task that the resident must accomplish while playing the part of the patient and 2) a debriefing during which the resident will have the opportunity to discuss the events, and their emotions. The resident will be coached through the experience with providers, experts from the community, and social workers. The debriefing time will also be used to explain key concepts, provide resources in the community, and have facilitators explain objectives, applicability, screening, and interventions in the clinical setting. This discussion will be used to craft best practices for intervention and screening in SDH. The workshop modules will be piloted to second year emergency medicine residents, with OB-GYN and family medicine residents invited to join. The JSPE will be administered before and after the workshop with a survey eliciting feedback and comments. Feedback and scores will be used to improve the scenarios. After dissemination we will solicit screening and interventions cultivated in other settings and use a modified Delphi method to create best practices that will be incorporated into future iterations of the simulation guide. Eventually, we would like to use this data as a pilot to plan an in vivo simulation with patients reporting the empathy of the physician using the Jefferson Scale of Physician Empathy.

IV. TIMELINE AND IMPLEMENTATION

October 2019-November 2019: Partner with representative patients from the community and do a focus group to extrapolate on difficulties they face
December 2019-January 2020: Work with emergency department social workers to identify community resources for patients and form partnerships with community stake-holders
January 2019-March 2020: Develop scenarios consistent with focus group stories. Define empathetic screening questions scope of intervention
April 2020: Do two, one-day simulation events with second year residents from OB GYN, EM, and Family Medicine. Administer JSPE and feedback survey before and after workshop.
May 2020-June 2020: Analyze quantitative data and feedback. Revise and publish scenarios for dissemination to the undergraduate and post-graduate medical community. Solicit screening questions and interventions cultivated by other groups. Use a modified Delphi method to create best practices.
July 2020: Seek funding to enact in vivo simulation and measure provider empathy from the patient perspective using the Jefferson Scale of Physician Empathy.

V. ANTICIPATED WORK PRODUCT

We will create a model curriculum for residents and medical students with four simulated patient encounters that address four common social barriers to care. Each module will contain the scenario, guidance for empathetic communication, interventions, and points to emphasize for the facilitators. We will include guidance for partnering with community organizations and best practices as they develop.

VI. EVALUATION PLAN

We will evaluate the efficacy of this curriculum in teaching empathy using the JSPE. Feedback from surveys will be used to modify the scenarios. Ongoing evaluation through a modified Delphi method with experts from other institutions will occur as the workshop is disseminated.

VII. DISSEMINATION PLAN

This curriculum will be broadly available online on medportal and linked to on SEMpact.com, the social emergency medicine website of the Emergency Medicine national colleges. We will continue to use the workshop with departments across Stanford and other institutions. The findings will be shared at nation emergency medicine conferences.

APPENDIX

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