

“In Support of Medical Student Well-Being : A Narrative Medicine Curriculum”

I. Specific Aims: I plan to implement a Narrative Medicine curriculum into the medical student E4C curriculum and to study its effect on medical student well-being. The educational aim of this project is both to create a new component to medical student curriculum, and also to study its impact. By both implementing this and studying it, I will be able to advocate for its formal placement in the medical student curriculum for years to come, having a major educational impact.

II. Project rationale: Narrative medicine is the concept that being well-trained in close reading of literature and creative writing improves practitioners' abilities to understand patients' stories, or illness narratives, and to be moved to act on their behalf (1). Created at Columbia University and already well-integrated into medical student curriculum there, Narrative Medicine has traditionally focused on the benefits to the patient - improved medical outcomes such as a1c results (2), patients' increased perception of physician empathy, and improved patient satisfaction (3). However, I believe that the practice of Narrative Medicine has important benefits for the practitioner as well, which requires further study. This type of study is important in order to advocate for time and funding for the formalization of such training.

Increased attention has been paid to medical student and physician 'wellness', appropriately due to high levels of burnout, fatigue and job dissatisfaction amongst medical students, residents and practicing physicians nationwide (4). Most studies have so-far used measurement tools to evaluate separate factors effecting wellness, such as burnout or depression or quality of life. However, true well-being is multi-factorial and can be effectively measured using the medical student well-being index, a validated 7 point questionnaire measuring fatigue, depression/anxiety, burnout and mental/physical quality of life of medical students, created at Mayo Clinic, called the Medical Student Well-being Index (MSWBI) (5,6).

It is essential to develop interventions during medical school to give students resilience tools to carry with them through their training and into their careers. In order to truly impact medical student education and advocate for formalized integration of this type of training, its impact must be studied. I hypothesize that an incorporated narrative medicine workshop will improve (decrease) scores of the MSWBI. Thus, this is taking existing literature to a new level by thoughtfully evaluating the impact of Narrative Medicine on medical student well-being. In doing so, it can have a lasting impact on medical student curriculum design at Stanford and beyond.

III. Approach: The study will be conducted as a 'pre' and 'post' intervention survey, with the intervention being the Narrative Medicine workshop. I will hold a Narrative Medicine workshop during the April 2018 E4C 'Doctoring with Care'. This will be a 1 hour workshop on the theme of "Dealing with Error". This will consist of reading 2 short pieces related to this theme, discussing them, and then having time to write to a creative prompt. Finally, the short pieces created during the session will be shared within the group. This will be a completely self-contained session with no preparation required beforehand. Prior to the start of the group, a paper version of the MSWBI will be distributed (see Appendix) along with additional baseline characteristics. One week following the session, an electronic version of the survey will be distributed using RedCap and will also include free-text options soliciting feedback on the session.

I have experience and expertise in the development of these types of workshops, as I was trained in Narrative Medicine at Columbia University as a medical student, launched my first version of these workshops at UC San Diego in 2012, and developed a Narrative Medicine curriculum for internal medicine residents at Stanford in 2015 that is ongoing. With this

experience and background, I am confident I can reasonably complete this project in the time frame specified.

IV: Timeline: As stated above, the study and intervention portion will be conducted in April 2018. Following data collection, it is reasonable to have all data uploaded, cleaned, and interpreted by the end of the funding period, July 2018. The plan for implementation is straight forward and feasible. The survey will be handed out in person at the start of the Narrative Medicine workshop. I will lead the workshop in April 2018. 1 week following (which is standard timing in similar types of studies for a 'post-intervention' survey) I will administer the same survey electronically to the study participants via RedCap. They will be incentivized to complete the second survey with gift cards and repeated email follow up. The funding from this grant is essential to successful completion of the project in the timeline specified through compensation of the PI's time to conduct the workshop and for statistical support to collect and interpret the data.

V: Anticipated work product: At the end of this project I will have completed a pilot of a Narrative Medicine workshop as part of the medical student curriculum and an analysis of its impact on well-being. This is a starting point to be then be able to further integrate Narrative Medicine with more frequent workshops and to expand the study of its impact on medical students over time. As mentioned in the goals, this type of study is essential to advocating for its position in education and to understand its potential impact on the practitioner, which is lacking in current literature.

VI. Evaluation plan: The evaluation of this project's success will be 2-fold. One, is the scores of MSWBI (the 'post' intervention results). This is the testing of my hypothesis that Narrative Medicine should improve these scores. The second measure of success will be qualitative, in the medical students feedback. In addition to being helpful to them quantitatively, I hope that they will enjoy the session and notice its benefit themselves.

VII. Dissemination of results: I will plan to write up my findings with the goal of publishing in a journal such as "The Journal of Academic Medicine" and to present my curriculum design and study results at ACP or SGIM.

VIII. Budget (see table)

	Item	Justification	Amount
Compensation	2 clinical days	PI's time to develop curriculum and lead workshop	\$4,000
		Total compensation:	\$4,000
Non-compensation	data entry	student trained in data entry, \$25/hour x 6 hours	\$150
	statistical support	statistical analysis by junior statistician, \$75/hour x 10 hours	\$750

	incentives	gift cards to incentivize completion of electronic survey; 10 gift cards x \$25	\$250
	materials	paper, pens, food for session	\$100
		total non-compensation:	\$1,250
		Total funding requested:	\$5,125.00

Appendix:

A. References:

1. Charon, Rita. "Narrative Medicine: A Model for Empathy, Reflection, Profession and Trust." *AMA*. 2001;286(15):1897-1902. doi:10.1001/jama.286.15.1897.
2. Hojat et al. "Physicians' empathy and clinical outcomes for diabetic patients". *Academic Medicine* 2011; 86(3): 359-363.
3. Hojat et al. "A brief instrument to measure patients' overall satisfaction with primary care physicians". *Family Med* 2011; 43 (6): 412-17.
4. Shanafelt, TD, et all. "Burnout and satisfaction with work-lief balance among US physicians relative to the general US population." *Archives of Internal Medicine* 2012; 172: 1377-85.
5. Dyrbye LN, et al. Efficacy of a brief screening tool to identify medical students in distress. *Acad Med*. 2011;86:907–914.
6. Dyrbye LN, et al. Development and preliminary psychometric properties of a well-being index for medical students. *BMC Med Educ*. 2010;10:8.

B. Survey

Today's Date:

Wellbeing Assessment:

During the past month: (Y/N)

1. Have you felt burned out from your school?
2. Have you worried that your work is hardening you emotionally?
3. Have you often been bothered by feeling down, depressed, or hopeless?
4. Have you fallen asleep while stopped in traffic or driving?
5. Have you felt that all things you had to do were piling up so high that you could not overcome them?
6. Have you been bothered by emotional problems (such as feeling anxious, depressed, or irritable)?
7. Has your physical health interfered with your ability to do your daily work at home and/or away from home?

Biographic/Demographic Data

-Age

-Gender

-number of clinical rotations completed: