Duke AHEAD Grants 2022-2023

Title: Coaching to Decrease Burnout and Enhance Wellness in Medical Students

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University SoM

Focused Question: Does the Better Together Coaching Program for medical students, which incorporates different coaching modalities, positively affect student wellness, as measured by validated scales that assess burnout, imposter syndrome, self-compassion and moral injury? Does the coaching program enhance inclusion of students who are underrepresented in medicine?

Background: Medical students undergo substantial growth and development during their medical school years; it is also a time of many personal and professional transitions. Hence, they experience significant stress and anxiety.1,2 It is important that medical students' wellness be supported. Coaching has been demonstrated to enhance medical student wellness; moreover, it provides an opportunity for their development of agency, confidence, reflection and thoughtful decision-making as they navigate the challenges of medical school. Coaching is defined as "partnering with clients in a thought-provoking and creative process that inspires them to maximize their personal and professional potential".3,4 It is different than advising, mentoring or counseling. The underlying tenet of Coaching is that the best choices for each person reside within that individual. The skill of the Coach, someone without conflict of interest, is to ask key questions, reflect back, and support the person through the process of recognizing solutions within the individual. Coaching is goal focused and action oriented over a finite time.3,4 Coaching has been introduced into academia through faculty and leadership coaching, where studies have demonstrated its value. Many medical schools have implemented coaching for medical students, but dedicated formal student coaching is missing in others.5,6,7,8,9 The benefits of student coaching have begun to emerge, and recently published guidelines call for the creation of medical student coaching programs and competencies for coaches.5,8,10 Currently, Duke School of Medicine does not offer formal medical student coaching. Burnout has reached record highs in the last decade for physicians, trainees and medical students.11 Pre-pandemic studies reported a 44-56% prevalence of burnout among medical students alone.12,13 The pandemic further increased burnout in healthcare workers. Well-being is also a concern at Duke, where the 2022 Culture Pulse survey reported 42% burnout. Enhancing wellness in medical students is crucial to laying the foundation for well-being throughout their careers. Well-being contributes to improved teamwork, decreased conflict, and increased perceived task performance; enhancing student wellness could in turn affect the well-being of health professions educators and improve the institutional climate overall.14,15 Moreover, clinician wellness is key to safe, high-quality patient care.16 Studies evaluating medical student and trainee coaching have demonstrated positive impacts, including enhanced wellness, confidence, professionalism, academic performance, interpersonal skills, professional identity formation, reflection and self-advocacy, plus the ability to manage life integration, reflect on transitions, interpret

opportunities & challenges, acquire new skills, discuss career planning, and deal with "imposter syndrome".6,17,18,19,20 Many studies specifically cite professional coaching as a highly effective tool for reducing burnout and enhancing wellness in medical professionals and in medical students.21,22,23,24,25,26,27 Of note, racially, ethnically and socially underrepresented minority medical students and trainees cited different coaching needs, desiring acknowledgement of their cultural context and concerns around sharing vulnerabilities.23,28 With Duke's diverse student body, addressing these needs will be key in a student coaching program. A recent study by Ross et al with Duke 3rd year medical students demonstrated decreases in stress and anxiety with coaching. Students indicated gains in perspective and self-awareness, improved goal setting and problem-solving, and development of the ability to reflect and think critically. The students described coaching as a positive, individualized and supportive experience they were highly likely to access again 29 Currently, there is no formal, confidential coaching program for Duke medical students. Given the importance of medical student wellness and of enhancing our current institutional climate, a scalable and sustainable coaching intervention is an important initiative to implement and study. This project proposes Duke join a multisite pilot study offering "Better Together" (BT) coaching to medical students. Previously, an RCT of BT coaching of female medical residents demonstrated decreased burnout, significant reduction in emotional exhaustion, increased self-compassion, and decreased "imposter syndrome".30,31 Improved self-compassion persisted 12 months later. Their pilot was feasible & scalable. BT includes multiple interactive modalities led by coaches to enhance wellness; the varied modalities make the program a potentially successful way to address the unique coaching needs cited by diverse students. BT also has a DEI coach-champion who evaluates the curriculum and coaching with an EDI lens. To represent the learners served, BT actively recruits geographically, culturally, ethnically and demographically diverse coaches.

Specific Aims: 1. To assess how a coaching program for medical students, that offers multiple modalities and avenues to access coaching, affects medical student wellness. 2. To measure the impact of the Better Together coaching program on medical student wellness using several validated scales, along with a qualitative analysis of the program. 3. Given the many modalities and modes of access, we aim to provide diverse learners with several options to find their preferred way(s) to engage with coaching. 4. To ultimately develop the foundation for a sustainable program that can be scaled up and offered to all health professions learners and faculty in order to mitigate burnout, and thereby enhance wellness and create a climate conducive to the best functioning of individuals and groups at our institution

Methods: - UME Group Coaching Program – "Better Together" Physician Coaching Educational Intervention: This 4-month, online group coaching program is a combination of live group coaching calls, anonymous written coaching, webinars and worksheets. The program begins with establishing a framework and shared understanding of the tenets of professional coaching and progresses to deeper, richer coaching. The benefits of the group coaching model include both the normalization and community building that comes from watching colleagues receive coaching, as well as the process of hearing the coaching many times, and using metacognition to apply it to oneself. There are also efficiencies to group coaching that allow it to be rapidly scaled up, if successful. The "Better Together" Coaching is housed at the University of Colorado School of Medicine. The Coaching Program Pilot for UME students will be a collaboration between 3 - 5 medical schools; to provide coaching for Duke medical students within this innovative framework, we are proposing that Duke University School of

Medicine participate as a site. For the Participants: The program is housed on Better Together's secure, members-only online platform and includes: o Introductory package: Introductory workbook with reflective prompts that introduce the coaching model and a corresponding webinar of basic coaching content and application. o Group Coaching: Two to Five 60-minute, live, group coaching calls hosted by a certified physician coach on Zoom open to all participants each week. o Anonymous Written Coaching: Unlimited, anonymous written coaching posted on the "Ask-for-Coaching" forum, with answers posted by a certified physician coach within 2 days. o Self Study Modules: 4 months of themed-content broken into weekly worksheets. Each worksheet is accompanied by a short (10 minute) webinar introducing the concepts and facilitating metacognition. o Weekly emails: weekly worksheets and the group coaching call schedule will be introduced via a weekly email to the entire group. The intent is that the use of multiple modalities, along with coaching in a virtual environment, will further create a safe space for all, especially those who are underrepresented in medicine, who described a sense of vulnerability with individual coaching sessions per prior studies. The "Better Together" Coaching Program Pilot for UME students will be a collaboration between 3 - 5 participating medical schools, all enrolling participants who voluntarily opt in. Participants will be randomly assigned to a first or second cohort, each lasting 4 months. The second cohort will serve as controls for the first cohort and then the second cohort will receive coaching the subsequent 4 months. Outcomes and Measures: The outcome measures used are the Maslach Burnout Inventory, including subscales of emotional exhaustion, depersonalization and professional accomplishment; the Young Impostor Syndrome Scale, Neff's Self-Compassion Scale-Short Form, and the Moral Injury Symptom Scale-Healthcare Professionals. Additionally, there will be qualitative analysis via open-ended questionnaires and interviews. If there are enough medical student participants from the different medical schools, then we hope to be able to perform sub-analyses evaluating the impact of this innovative group coaching program on geographically, ethnically, racially and socially diverse students. Data Management and Analysis: The data will be collected, de-identified and stored by the Main site, "Better Together" at the University of Colorado School of Medicine, where the program currently resides; the overall data will be analyzed by their statisticians through the protocols of their project grant. The University of Colorado study group will obtain IRB approval from their home institution, and the other participating sites (i.e., Duke) will submit the IRB to their individual institution's IRB. Each Program site will have access to de-identified baseline and post-intervention burnout and wellness scores, along with outcome measures for their participants; additionally, each site will have access to the thematic reports around general topics and issues that the trainees brought to the Primary site PIs. This will be provided as de-identified data with the intent to deliver actionable, measurable, and impactful information. Drs. Elizabeth Ross and Kathleen McGann plan to receive additional training at The Life Coach School, where all current "Better Together" coaches are trained, as the program wants to assure all the coaches utilize the same model.

IRB Status:

Plan to submit

Challenges Communication between BT program and local sites o Will need to assure regular communication occurs regarding the project and for troubleshooting issues. To assure consistency, calls will ideally be held jointly with all sites Participants identified as being in distress or needing support o Site Pl's at participant's school will be notified of concerns and responsible for referring or linking participant with medical school resources Scalability and Sustainability of the UME coaching program o To sustain the UME program- option to train interested Duke faculty as certified coaches with

specialized training in "medical student specific" coaching themes, tips & topics o Ultimate goal to handoff the coaching program to local faculty coaches. BT website and materials are proprietary and remain under the "Better Together" developers. Use of materials may be negotiated in the future o Ideally, program could be expanded to Duke trainees and faculty and other health professions schools

Works Cited: 1. Dyrbye, Liselotte N. MD; Thomas, Matthew R. MD; Shanafelt, Tait D. MD: Systematic Review of Depression, Anxiety, and Other Indicators of Psychological Distress Among U.S. and Canadian Medical Students. Academic Medicine 2006;81:354-373 2. Kumar B1, Shah MAA1, Kumari R2, Kumar A3, Kumar J4, Tahir A5. Depression, Anxiety, and Stress Among Final-year Medical Students. Cureus 2019;11:e4257 3. Nichol B and Nichol LR., The Essentials of Business Coaching: The Process, the Skills and the Relationship. The Business Coach Institute, 2011, p. 5 4. International Coaching Federation (ICF) www.coachingfederation.org 5. Hammoud MM, Deiorio NM, Moore M, Wolff M. Coaching in Medical Education. The AMA MedEd Innovation Series. Elsevier, 2022 6. Wolff M, Hammoud M, Santen S, Deiorio N, Fix M. Coaching in undergraduate medical education: a national survey. Med Educ Online 2020;25:1699765 7. https://www.statnews.com/2019/03/25/coaching-leadership-training-avoidburnout-medical-students/8. Deiorio N, Miller Juve A. Developing an academic coaching program [version 1]. MedEdPublish 2016:5:143 (https://doi.org/10.15694/mep.2016.000143) 9. https://www.ama-assn.org/system/files/2019-09/coaching-medical-education-faculty-handbook.pdf 10. Wolff M, Deiorio NM, Juve AM, et al. Beyond advising and mentoring: Competencies for coaching in medical education. Medical Teacher 2021;43:1210-12137 11. Dyrbye LN, West CP, Satele D, Boone S, Tan L, Sloan J, Shanafelt TD. Burnout among U.S. medical students, residents, and early career physicians relative to the general U.S. population. Acad Med. 2014;89:443-51 12. Frajerman A, Morvan Y, Krebs MO, Gorwood P, Chaumette B. Burnout in medical students before residency: A systematic review and meta-analysis. Eur Psychiatry 2019;55:36-42. Epub 2018 Oct 29. 13. Dyrbye L, Shanafelt T. A narrative review on burnout experienced by medical students and residents. Med Educ. 2016 Jan;50(1):132-49 14. Sigal G. The Ripple Effect: Emotional Contagion and Its Influence on Group Behavior. Administrative Science Quarterly 2002;47:644-675 15. Hauer KE, Chang A, Frank J. Coaching Catalyzes Culture Change in Medical Education, 10/13/22. International Clinician Educators (ICE). https://icenetblog.royalcollege.ca/2022/10/13/coaching-catalyzes-culture-change-in-medicaleducation/ 16. National Academy of Medicine Action Collaborative on Clinician Well-Being and Resilience: https://nam.edu/initiatives/clinician-resilience-and-well-being/ 17. Wolff M, Morgan H, Jackson J, Skye E, Hammoud M, Ross PT. Academic coaching: Insights from the medical student's perspective. Med Teach. 2020;42:172-177 18.de Lasson L, Just E, Stegeager N, Malling B. Professional identity formation in the transition from medical school to working life: a qualitative study of groupcoaching courses for junior doctors. BMC Med Educ 2016:24;16:165 19. Wolff M, Ross P, Jackson J, Skye E, Gay T, Dobson M, Hughes DT, Morgan HK. Facilitated transitions: coaching to improve the medical school to residency continuum. Med Educ Online 2021;26:1856464 20. Palamara K, Kauffman C, Stone VE, Bazari H, Donelan K. Promoting Success: A Professional Development Coaching Program for Interns in Medicine. J Grad Med Educ. 2015;7:630-7 21. Dyrbye LN, Shanafelt TD, Gill PR, Satele DV, West CP. Effect of a Professional Coaching Intervention on the Well-being and Distress of Physicians: A Pilot Randomized Clinical Trial. JAMA Intern Med. 2019;179:1406-1414 22. Palamara K, Kauffman C, Chang Y, Barreto EA, Yu L, Bazari H, Donelan K. Professional Development Coaching for Residents: Results of a 3-Year Positive Psychology Coaching Intervention. J Gen Intern Med. 2018;33:1842-1844 23. Palamara K, Chu JT, Chang Y, Yu L, Cosco D, Higgins S, Tulsky A, Mourad R, Singh S, Steinhauser K, Donelan K. Who Benefits Most? A Multisite Study of Coaching and Resident Well-being. J Gen Intern Med 2022;37:539547. Epub 2021 Jun 7. 24. Solms L, van Vianen A, Koen J, Theeboom T, de Pagter APJ, De Hoog M; Challenge & Support Research Network. Turning the tide: a quasi-experimental study on a coaching intervention to reduce burn-out symptoms and foster personal resources among medical residents and specialists in the Netherlands. BMJ Open. 2021;11:e041708 25. McGonagle AK, Schwab L, Yahanda N, Duskey H, Gertz N, Prior L, Roy M, Kriegel G. Coaching for primary care physician well-being: A randomized trial and follow-up analysis. J Occup Health Psychol. 2020;25:297-314. Epub 2020 Apr 16. 26. Shorey S, Ang E, Chua JYX, Goh PS. Coaching interventions among healthcare students in tertiary education to improve mental well-being: A mixed studies review. Nurse Educ Today. 2022;109:105222. Epub 2021 Nov 16. 27. Mikhaiel JP, Pollack J, Buck E, Williams M, Lott A, Penner JC, Ann Cary M. Graduating With Honors in Resilience: Creating a Whole New Doctor. Glob Adv Health Med. 2020 Dec 3;9:2164956120976356 28. Najibi S, Carney PA, Thayer EK, Deiorio NM. Differences in Coaching Needs Among Underrepresented Minority Medical Students. Fam Med. 2019;51:516-522 29. Ross, E, Faw, T, Covington, K: Does coaching in the 3rd year of medical school affect stress, anxiety and depression? https://www.medrxiv.org/content/10.1101/2021.07.13.21260303v1.full 30. Fainstad T, Mann A, Suresh K, et al. Effect of a Novel Online Group-Coaching Program to Reduce Burnout in Female Resident Physicians: A Randomized Clinical Trial. JAMA Netw Open. 2022;5:e2210752 31. Mann A, Fainstad T, Shah P, et al. "We're all going through it": impact of an online group coaching program for medical trainees: a qualitative analysis. BMC Med Educ 2022;22:1-10

Budget:

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		Estimated Cost:
PI Support	Investigator	\$1000
	Administration of	
	program at Duke: Site	
	Investigators, Drs.	
	Ross & McGann, will	
	receive	
	\$500/each/year for	
	serving as the local	
	site contacts. They will	
	disseminate	
	information about the	
	program to the	
	students, enroll	
	interested students,	
	communicate updates,	
	assist with data	
	collection, and receive	
	Duke site data for	
	analysis. They will also	
	submit information to	
	the Duke IRB.	
	Additionally, if a BT	
	coach in a session	

	norsolves one of the	
	perceives one of the	
	Duke students is in	
	distress or needs	
	support, then the	
	Better Together coach	
	will reach out to Drs.	
	Ross and McGann,	
	who will take	
	responsibility for	
	assuring the student is	
	provided the	
	appropriate resources	
	and will communicate	
	with the respective	
	student's Advisory	
	Dean. Drs. Ross and	
	McGann will attend live	
	coaching sessions and	
	participate in the	
	various modalities	
	offered to medical	
	students.	
Consultant costs		\$5000
Consultant costs	Participant fees for the Medical Student	\$5000
	"Better Together"	
	Coaching Program: BT	
	Coaching at the	
	University of Colorado	
	is offering their	
	program for students	
	I	
	at a reduced cost of	
	\$10 per student for	
	\$10 per student for	
	\$10 per student for yearlong participation	
	\$10 per student for yearlong participation in the "Better Together"	
	\$10 per student for yearlong participation in the "Better Together" Coaching Program.	
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	maximum enrollment	
	of 500 Duke students	
	at \$10/student =	
	\$5,000 These fees will	
	serve to partially cover:	
	New website arm for	
	medical students,	
	Ongoing maintenance	
	of the Coaching	
	platform, Subscription	
	fees for the BT	
	Coaching Program	
	Private Podcast,	
	Mailchimp	
	communication,	
	Calendar system for	
	organizing the	
	Coaching sessions,	
	and Administrator	
	salary	
Equipment	Salary	
Computer		
	Other Fyrences	¢4000
Supplies	Other Expenses:	\$4000
	Enrollment in The Life	
	Coach School Course:	
	Drs. Elizabeth Ross	
	and Kathlana MaCana	
	and Kathleen McGann	
	are requesting \$2,000	
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Other Expenses	
Total Costs for proposed project:	<mark>\$10000</mark>