



2023-2024 Duke AHEAD Grant Proposal  
Due by January 26th (5:00 pm)

**Title:** Collaborative Peer Support/Coaching For HPE Students

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**Focused question:** What are the impacts of a cross-disciplinary peer support program on connectness, burnout, and wellness, for participating and non-participating Health Professions Education (HPE) students? Further, we will assess the feasibility and acceptability of offering a peer support program to HPE students in diverse programs.

**Background:** The Duke School of Medicine (SOM) trains students in several Health Professions Education (HPE) programs, including Medical Doctorate; Occupational Therapy Doctorate; Doctor of Physical Therapy; and Physician Assistant. HPE learners participate in direct patient care, progressively becoming teachers to junior learners, with increasing autonomy in patient care. SOM programs emphasize the importance of diversity, inclusion and holistic application review, including markers of excellence beyond traditionally quantifiable metrics (e.g., standardized tests).<sup>1,2</sup>

“One-size fits all” is inadequate to meet diverse learners’ needs.<sup>3,4</sup> Historically, HPE students experience high rates of “imposter syndrome,” which may deter them from help.<sup>5</sup> Failure to seek help adds to the current elevated risk for burnout,<sup>6</sup> substance use disorder,<sup>7</sup> and mental illness – with inadequate services to meet students’ needs.<sup>8</sup> In a 2022 needs assessment, SOM HPE students reported high rates of anxiety symptoms (37%), depression (51%), and burnout (41%).

A growing body of evidence highlights the relationship between healthcare provider burnout and errors in patient care, suggesting both that providers who feel better do better and that error-prone systems and participating as second victims can be traumatizing to providers.<sup>9–11</sup> Noting an association between burnout and threats to patient safety, with implications for staff turnover and costs, health system administrators have realized an existential threat in terms of cost of burnout even before the COVID-19 pandemic.<sup>12</sup> Healthcare providers and learners from backgrounds that are underrepresented in medicine (URiM) are more likely to report symptoms of shame, self-doubt, and symptoms of “impostor syndrome” during training.<sup>13–15</sup> In addition, impostor syndrome is more frequently experienced in medical students who are women and non-white.<sup>5</sup> URiM learners’ experience with shame and self-doubt may result from challenges associated with efforts to assimilate into a medical education environment that initially evolved around the needs of mainly white men.<sup>15</sup> This lens may help explain why some students hesitate to identify as needing help.<sup>16</sup> Further, a leading factor in degree completion and performance among graduate students is the culture of the department and the facilitation of meaningful engagement and participation with peers and the larger department.<sup>17,18</sup> Therefore, interventions aimed at building connection and community for students may impact retention, performance and creativity among HPE students.

Peer support, a reciprocal or bidirectional strategy designed to provide support and benefit to both parties, has been successfully utilized in in-person and virtual arenas for conditions ranging from chronic diseases in children and adolescents managing chronic illnesses<sup>19–21</sup> to mental health treatment in resource-limited settings.<sup>22</sup> Since 2018, clinical learners under supervision of faculty members in the Department of Psychiatry and Behavioral Sciences have participated in peer support initiatives with GME trainees in the Department of Neurosurgery. In 2021, peer support was expanded to include social work interns, occasional GME trainees in other programs, and some outreach to medical students.<sup>23</sup> Peer support is offered by two psychology trainees who participate in weekly supervision with three faculty members in the Department of Psychiatry, each of whom bring different vantage points to the observations made by the psychology trainees. Dr. McLean Pollock, a public health researcher who designs and evaluates peer-based social support interventions to promote self management, emotional health, and quality of life for adolescents, young adults, and families, has expert knowledge of the supporting literature as well as practical strategies for promoting engagement with peer support, organizes the peer support collaborative.

Implementing peer support strategies has been tried in groups and individually; in person and virtually; and as an opt-in (e.g., learners are required to sign up) or opt-out (e.g., scheduled for learners who can then make other choices with their time). Overall uptake in any one program ranges, with engagement up to 30% of learners at any one time. Feedback from participants who attended one or more sessions is overall favorable, with benefits reported by both the psychology trainees and the other learners engaged in the project. With a larger vision of creating a truly interprofessional peer support collaborative, we propose to undertake a pilot program utilizing psychology trainees in a current peer support collaborative to offer and participate in peer support with HPE students from diverse programs on an opt-in basis. We will explore the feasibility and acceptability of HPE students’ participation in the peer support program, as well as the effect on connectedness, burnout, symptoms of anxiety and depression, and satisfaction with student support services.

**Specific aims:** 1. To evaluate the efficacy of a collaborative peer support program on HPE students' self-reported ratings of connectedness and wellness.

2. To determine the logistical feasibility and acceptability of offering a peer support program to HPE students in diverse programs

3. To determine the uptake (participation) of a peer support program offered to HPE students

4. To study facilitators and barriers of participation in a peer support program for HPE students

5. To conduct a needs assessment of HPE students in different programs to better understand the system of care, the educational program, and areas of potential stress and amelioration for students in each program

6. To gather pilot data to help determine scalability of a peer support program for interprofessional HPE students

**Methods:** The study will be an observational study of students in HPE programs for whom participation in the peer support collaborative is offered.

Intervention: Involvement in peer support collaborative with psychology trainees under the supervision of Drs. McLean Pollock, Laura Weisberg and Jane Gagliardi. Peer support can be offered in a number of ways, according to preference and availability of the participants.

After an introductory session and materials depicting boundaries of the relationship, including confidentiality (and situations, such as potential for harm to self or others or emerging evidence of need for psychiatric or behavioral health evaluation), which is specifically not a therapeutic relationship, participants will be offered times to meet in groups for discussion of topics of the peer support facilitators' expertise, ranging from values setting to sleep hygiene to "getting into the zone" to communicating in the clinical setting. It is anticipated that additional themes may emerge.

During the pilot, participants from different HPE programs will be included in peer support group offerings together; if there is a large contingent from a particular HPE program, and/or depending on schedules and availability, HPE students from a single program may specifically or informally opt for program-specific support. Participants will also be offered the opportunity to connect with peer support participants outside of group time, as mutually agreeable, via cell phone or other electronic communication.

Topics for which the psychology trainees are prepared to facilitate discussions include:

- a. Values congruence and goal-setting
- b. Clinical practice akin to athletic performance
- c. Sleep hygiene
- d. Mind-body connection
- e. Coping skills conducive to everyday practice

Those HPE students who do not participate in the peer support collaborative will be counted as "controls" in the analysis.

Outcomes and measures:

- Ongoing feedback and input from participating students with a goal of continuous process improvement
- Pre- and post- participation surveys measuring connectedness (Classroom Community Scale,<sup>24</sup> adapted for HPE training programs)

- Qualitative analysis of interviews with participating students about their experiences with the peer support program
- Qualitative analysis of feedback gained during weekly supervision with psychology trainees
- HPE well-being assessment. This survey, initially sent to HPE students in spring 2022, provides a baseline for burnout (Emotional Exhaustion scale of the Maslach Burnout Inventory), anxiety (Generalized Anxiety Disorder – 7 item (GAD-7) instrument), depression (Center for Epidemiological Studies Depression – 10 item (CESD-10) instrument), and satisfaction with accessibility of services to support student well-being. It will be repeated annually starting in spring 2024, with the addition of the ability for students to indicate whether they have participated in the peer support collaborative. This measure will provide an opportunity to compare participating vs non participating students on measures of satisfaction with resources as well as symptomatology.

Data management and analysis: To examine the overall efficacy of the peer support program across HPE programs, we will conduct the following statistical analyses:

1. To evaluate the preliminary efficacy of the peer support program, we will compare change in connectedness and the HPE well-being survey from pre-intervention (early fall 2024) to post-intervention availability (late spring 2025) between program participating and non-participating students, utilizing Wilcoxon Two-Sample Tests.
2. To evaluate the subjective impact of the peer support program, we will assess participants' satisfaction and perceived impact of the program ratings from pre- to post-assessment, utilizing Wilcoxon Two-Sample Tests to examine differences in change from pre- to post-program assessment.
3. To evaluate feasibility of the expansion of the peer support intervention across HPE programs, we will assess the number and percentage of students who opt-in to participate in the intervention, and we will assess the percentage of sessions attended by participants across HPE programs.
4. We will evaluate the acceptability of the peer support intervention from the perspectives of HPE student participants, conducting thematic analysis of qualitative responses.

**IRB Status:** Plan to submit

**Challenges:** A potential challenge is one of low uptake. Though the evidence shows that peer support can be beneficial, voluntary participation is essential. Therefore, we propose offering peer support to all students in all of the HPE programs. It is our expectation that offering peer support as an option to 1200+ HPE students will provide an opportunity to meaningfully support at least 60-120 students (5-10%) while determining ways to optimize feasibility and acceptability.

Geographical challenges exist for HPE students, whose home base of operations include Duke South; TSCHE; IPE Building; and an off-site location off of Duke Street. Time and space limitations may lead to decisions about in-person vs. virtual offerings.

We anticipate learning about challenges and barriers as the project unfolds, with a goal of bringing to programmatic leaders' attention potentially modifiable infrastructural barriers.

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**Resource needs and budget:**

Funding will be available for a 12-month period. Please fill in the table below and provide justification/description for each item below. Also, where requested, please provide an estimate of the time/effort you will expend on this project. PI support may not total more than 25% of the requested funds. Administrative support is available through “consultant costs.”

	Description	Estimated Cost:
PI Support (no more than 25% of total funds requested)	<2% effort	\$2000.00
Consultant costs	Project coordination – electronic survey development, conducting qualitative interviews and analysis	\$3,579.03
Equipment		\$0
Computer		\$0
Supplies	Food for in person group meetings (\$100/meeting; 20 meetings)	\$2000.00
Travel		\$1000.00
Other Expenses	Statistical analysis software – Stata	\$50
	Transcription fees - \$125/recorded hour; 10 interviews/focus groups up to 1 hour	\$1250.00
Total Costs for proposed project:		\$9,879.03

- PI support (\$2000.00): The PI, McLean Pollock, will oversee the project, including supervision of the clinical psychology interns, coordinating with IPE programs for outreach and scheduling, submitting the proposal to the IRB and oversight of all regulatory tasks, as well as oversight of all data collection, analysis, and dissemination of results.
- Consultant Costs (\$3,579.03): This project relies on quantitative survey data as well as qualitative assessment through interviews and focus groups. A project coordinator will assist with developing the electronic survey (Qualtrics), as well as conducting qualitative interviews and focus groups with HPE students and assisting the PI with coding and analyzing the qualitative data.
- Supplies (\$2000): To encourage in person group participation, we will provide refreshments at peer support group offerings, scheduling up to 20 meetings across the HPE programs throughout the academic year.
- Travel (\$1000): It will be important to present findings from this project to inform future wellness interventions to support HPE students. Travel funds will support presenting at professional conferences.
- Other expenses:
  - Statistical software (\$50): We will use the statistical software package, Stata, to conduct quantitative analysis of survey data.
  - Transcription fees (\$1250.00): 10, 1-hour interviews or focus groups will be held at the end of the academic year to understand the acceptability of the program, as well as barriers and facilitators to participation in the peer support offerings. Transcriptions costs are \$125/recorded hour.