

**Protecting the Mental and Physical Well-Being of Frontline Healthcare Workers During COVID-19**  
**The COVER-HCW Project:**

Funded by the Patient-Centered Outcomes Research Institute (PCORI) (Grant #: COVID-2020C2-10721)

**PROJECT SUMMARY:**

Frontline HCWs are facing unprecedented stressors and are at risk of psychological distress and mental health disorders during COVID-19. Research from past infectious outbreaks suggests that the effects of COVID-19 on HCWs will be profound and long-lasting. Protecting HCWs' mental and physical well-being is critical not just in terms of the direct effects, but because patients will benefit from receiving higher quality, more efficient, and patient-centered care. SFA is an evidence-informed intervention and a promising candidate to mitigate the impact of COVID-19 on HCWs' well-being, designed as a framework of simple, supportive actions and delivered by individuals without mental health training, to mediate and mitigate impacts in atypically stressful circumstances. SFA is an excellent candidate for the proposed research, as it can be rapidly deployed, is actionable, and has great potential to be generalizable to different types of HCWs and settings. Results from this study will significantly move the field forward by providing a high quality of evidence for SFA in general and its application to HCWs during a pandemic.

The goal of the proposed project is to support the mental and physical well-being of U.S. healthcare workers (HCWs) to ensure high-quality patient-centered care. We propose a cluster randomized controlled trial to establish the effectiveness of a Stress First Aid (SFA) intervention compared to usual care (UC) in both hospitals, ambulatory care practices and Federally Qualified Health Centers (FQHCs) with an embedded evaluation to understand barriers and facilitators. Our specific aims are to: (1) test the comparative effectiveness of SFA versus UC on HCW mental and physical well-being; (2) understand and document any UC activities to support HCW well-being prior to implementing SFA; and (3) assess HCWs/sites' experiences with SFA (acceptability, likelihood of uptake, lessons learned) and impact on HCW well-being.

The end result will be an online and printable SFA toolkit for stakeholders that will be scalable across a wide variety of settings, as well as a case study, webinar, and final report all of which will reside on a user-friendly landing page. We will share the evidence generated by this study with relevant stakeholders with the support of national organizations such as the American College of Emergency Physicians and the American Academy of Nurse Practitioners to facilitate implementation and adoption of study recommendations.

**PROJECT AIMS:** Our study design is a cluster randomized controlled trial with three cohorts in approximately 40 diverse healthcare sites (12 pairs of matched hospitals and 10 pairs of ambulatory care practices/FQHCs). The 2-hour web-based intervention will be delivered to 1-4 champions in each site. The SFA training will be given by the champion to teams of HCWs to avoid disrupting important relationships and leverage existing peer support. We will roll out the intervention in three cohorts using a rapid cycle/quality improvement approach to incorporate lessons learned and stakeholder feedback in each phase into subsequent training phases. Our mixed-method evaluation approach will include qualitative interviews as well as brief online surveys pre- and post-training. For Aim 1, we will compare the effectiveness of SFA and UC on the mental and physical well-being of HCWs via a survey that captures PTSD symptoms and physical function as primary outcomes, and anxiety, depression, sleep, fatigue, social activity, burnout, and resilience as secondary outcomes. We will conduct an analysis of the comparative effectiveness analysis by applying a difference-in-differences model at follow-up. For Aims 2 and 3, we will conduct brief, structured interviews with at least one leader at SFA and UC sites (N~40) (pre- and post-intervention), and semi-structured interviews with champions (N~132) at SFA sites, and HCWs (N~66) at SFA and UC sites (post-intervention). We will conduct standardized practices for analyzing qualitative data, including systematic, team-based coding procedures. The proposed work will be shaped and informed at every stage by a highly engaged multidisciplinary working group of stakeholders (including HCWs and patients).

**STUDY POPULATION AND SETTING:** This project will be conducted with two of RAND's established partners, Clinical Directors Network, a practice-based research network (PBRN) and Vizient, a national health system. Vizient and CDN will recruit hospitals, ambulatory practices and FQHCs from which we will identify champions who will in turn train HCW teams. This study will be conducted in 40 healthcare sites, including 24 hospitals, 10 ambulatory care practices and 10 FQHCs, which will be recruited from CDN's PBRN. Stanford Health Care will serve as a pilot site to rapidly refine and revise the SFA training intervention in its earliest phase.

**PROJECT COLLABORATORS:** This application brings together a multi-disciplinary research team led by Lisa S. Meredith, PhD and Courtney Gidengil of the RAND Corporation, in partnership with Clinical Directors Network, Inc. (CDN) and Vizient.

Principal Investigator(s):	Principal Investigator - Lisa S. Meredith, PhD Co-Principal Investigator - Courtney Gidengil CDN's Principal Investigator - Jonathan N. Tobin, PhD Vizient's Principal Investigator - Tomas Villanueva, DO, MBA, FACPE, SFHM
Project Type:	Randomized Control Trial
Funding Source:	(Grant #: COVID-2020C2-10721)
Expected Duration of Project:	7/2020 – 10/2022