

Michael Hoerger, PhD, MBA, MSCR

As a leading international expert in health analytics, Dr. Hoerger is well-positioned to model COVID-19 data. Dr. Hoerger completed his PhD in clinical psychology, which is a unique discipline that involves advanced training in statistics, research methodology, and the provision of mental healthcare. He is an expert in personality, emotions, and affective decision science, with clinical expertise in the assessment and treatment of individuals with long-standing mood and interpersonal challenges. For nearly 20 years, Dr. Hoerger has taught statistics and research methodology to undergraduates, doctoral students, medical students, and physicians, which is useful for explaining COVID data in ways that are understandable to non-statisticians. Following his PhD, Dr. Hoerger completed an NIH-sponsored fellowship, followed by an NIH-sponsored career award, which in-part involved completing a post-doctoral master's degree in medical research (MSCR) with a cohort of physicians and scientists. This training largely focused on advanced clinical research methodology, statistics, and epidemiology. Much of Dr. Hoerger's work the past decade has focused on the quality of cancer care, so many of the practical applications of his COVID work focus on helping people with cancer avoid severe outcomes of COVID-19. There are many challenges to leading on clinical research in the U.S. Deep South, so in the fall of 2019, Dr. Hoerger went back to school again part-time to complete an MBA focused on strategic management. As the pandemic unfolded, the finance folks were among the most cautious with respect to masking and remote options, leading Dr. Hoerger to ultimately focus on financial analytics. Such coursework involved modeling COVID case data and many other outcomes using data sets of similar form. On a personal level, Dr. Hoerger grew up in a large family with medical and financial challenges and sympathizes with the ongoing challenges many are experiencing. With three young children of his own, older family nearby, and in-person work with patients with advanced cancer, Dr. Hoerger took a keen interest in COVID mitigation from the pandemic's onset and continues to exercise high-level precautions. Dr. Hoerger has led and collaborating in conducting prominent clinical research studies funded by NIH, ACS, and PCORI. This work has resulted in >100 scientific articles and chapters and a clinical research methods book. Dr. Hoerger has several national and international leadership positions related to clinical decision science and cancer care and is a tenured associate professor and founding director of the Health Psychology doctoral program at Tulane University.

Pandemic Mitigation Collaborative

The Pandemic Mitigation Collaborative has led many projects to keep people safer during the ongoing COVID-19 pandemic. The collaborative ran the first known research study to distribute high-quality masks (N95 respirators) to the community in the lead up to the BA.1 surge and has conducted many studies aimed at understanding the mental health impact of the pandemic, the challenges of working in high-risk settings, and geographic health disparities. The collaborative has also contributed to national and international guidance on healthcare, educational, and workplace safety. The PMC-19 dashboard has existed since August 2, 2023. It has been viewed tens of millions of times and is informed by feedback from the general public, scientific modelers who are conducting similar work privately, and real-time outcome accuracy data. As a "learning" model, Dr. Hoerger will eventually publish several articles on its theoretical accuracy using historical data and real-time accuracy while the model has been live. By summer 2024, the PMC hopes to have a 2.0 version of the model that will have limited iteration going forward and guide pandemic decision making through at least 2025. The PMC dashboard is cited in grant applications, including at least two grants already funded. It has been cited by trusted organizations like the People's CDC, news outlets, and scientific journals, including a forthcoming article in JAMA Oncology.