Stemmler Grants

2025 Stemmler Grants Projects

Established in 1995, the Stemmler Grant Program supports the research and development of innovative assessment approaches with the potential to advance assessment in medical education. Each year, as many as three awards of up to $150,000 each are given to research teams to support their efforts to drive innovations in the field.

Learn more about the 2025 projects.

Utility of Entrustable Professional Activities to Support Clinical Competency Committee Decision-Making

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Abstract

Across the continuum of medical education, significant shifts toward a competency-based paradigm have occurred in recent years. Much data about learner performance in Graduate Medical Education has been facilitated by workplace-based assessments, and the requirement to utilize assessments within an Entrustable Professional Activities (EPAs) framework was recently launched nationwide in general surgery training programs in the United States. This project aims to enhance general surgery trainee performance and the transition to practice by exploring the fundamental question: how are summative entrustment decisions about general surgery trainees' readiness for practice made within the context of residency programs? Prior attempts to answer this question have been significantly hindered by lack of availability of longitudinal, identified data. This team of investigators proposes a multisite consortium leveraging the resources, expertise, and infrastructure of a leading research-intensive institution

to create a superlative data set powered to explore how individual EPA micro-assessments are evaluated within residency programs and ultimately translate to summative entrustment decisions in support of surgeons' transition to practice. Four research questions will be addressed, including how EPAs are used by programs, how trainees are determined to be practice-ready, whether struggling learners can be identified early, and whether assessment bias is detected.

Novel Assessment Tool for Physician Communication Skills Related to Racial Implicit Bias: AI "Coach" in the Exam Room

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Abstract

Racial implicit bias negatively impacts physician communication skills with Black patients in both simulated and actual clinical encounters. The purpose of this study is to develop an assessment tool to give near-real time feedback to physicians in communication skills with a special emphasis in addressing the impact of racial implicit bias and to generate validity evidence across various simulated clinical encounters using Messick's framework. Two research questions will be addressed: 1) What are the granular physician communication skills (both verbal and nonverbal) beyond that which can already be captured in usual checklists and global rating scales that should be included in assessments of clinical encounters with racially diverse patients? 2) Can we train a large language model to generate valid and reliable feedback and provide formative and summative assessments to physicians in near real time in clinical encounters? This will be one of the first studies to apply Messick's and Hoffman's validation frameworks in developing a co-collaborative AI system. Our assessment innovation could reach practicing physicians and create a co-collaborative AI system that would not be overly burdensome to the physician work force as we seek to contribute to ultimately achieving health equity through medical education and assessment.