Student Mental Health, a collaboration between 4 institutions to develop a standard of investigating a wide variety of understudied mental health domains using an instrument we call the Keck Mental Health Survey (KMHS). The KMHS collects data to achieve 3 primary goals. The first is to provide individual students with information about their personal mental health. The second is to give each institution data about mental health among their students to plan for wellness programs. Finally, the consortium uses the KMHS to investigate trends in medical student mental health on a national level.

**Approach:** The KMHS was administered in the Fall semesters of 2019 and 2020. A wellness representative introduced the survey and students in the first 3 years of medical school completed it during class time. Fourth-year medical students were emailed a link to the survey with a video introduction and given 2 weeks to complete it. The KMHS included 16 self-report instruments previously shown to be valid in the general U.S. adult population to measure a variety of psychological conditions. In accordance with the first goal of the consortium, the survey provided personalized information to students about their results. To address the second goal, descriptive statistics were obtained to determine the proportion of students that fall into the at-risk categories of the instruments included in the KMHS. Finally, to accomplish the third goal, inferential statistical tests and modeling including paired t tests and regression will be conducted following completion of data collection for the 2020–2021 administration of the KMHS, which concludes in January.

**Outcomes:** In 2019, a total of 1,819 medical students completed the KMHS at the Keck School of Medicine of University of Southern California (n = 585), Loma Linda University School of Medicine (n = 539), the University of South Florida Morsani College of Medicine (n = 471), and the Yale School of Medicine (n = 224). This presentation will describe the aggregate distribution of students at-risk for the 16 conditions measured by the KMHS that include generalized anxiety disorder (57.23% at-risk), major depression (41.29% at-risk), burnout (41.29% at-risk), imposterism (21.61% at-risk), and attention-deficit/hyperactivity disorder (20.51% at-risk).

Additionally, following completion of the second year of data collection at the end of January 2021 we will present inferential statistical findings that detail major trends in students’ responses across time.

**Discussion:** The above proportions of medical students who fall within the at-risk categories on the instruments included in the KMHS expand the evidence of need for services and care for this population to include previously understudied conditions. The Consortium for the Study of Medical Student Mental Health continues to add institutional collaborators to our longitudinal study to develop a nationally representative sample to investigate these phenomena. Upon conclusion of the second year of data collection, we will perform inferential tests to begin looking at trends across the continuum of medical education to better serve our future physicians.

**Significance:** The Consortium for the Study of Medical Student Mental Health advances the conversation about medical student mental health with a goal of promoting medical student wellness on an individual, regional, and national level.

**Conclusion:** Upon conclusion of the second year of data collection, we will present inferential statistical findings that detail major trends in students’ responses across time. The Consortium for the Study of Medical Student Mental Health continues to add institutional collaborators to our longitudinal study to develop a nationally representative sample to investigate these phenomena. Upon conclusion of the second year of data collection, we will perform inferential tests to begin looking at trends across the continuum of medical education to better serve our future physicians.

**Just 10 “CLEQS” Yields Formative Evaluation of the Clinical Learning Environment**

**Deborah Simpson, PhD, Tricia La Fratta, MBA, Lawrence Moore, MD, MPH, Matthew McDermid, DO, Jacob L. Bidwell, MD, Nicole Salvo, MD, and David M. Irby, MDiv, PhD**

**Purpose:** “Learning in a clinical context is foundational in the training of health professionals; there is simply no alternative” is the lead statement to a 2019 collection of papers exploring research and efforts to improve learning in the context of patient care.1 The Accreditation Council on Graduate Medical Education’s (ACGME) Clinical Learning Environment Review (CLER) affirms this foundational role by regularly providing clinical settings affiliated with ACGME-accredited sponsoring institutions with periodic feedback to optimize a shared goal—learning to provide safe, high-quality patient care.2 However, there are currently no tools available to evaluate the CLE that are: (1) appropriate for all health care team members; (2) informed by contemporary learning environment frameworks; and (3) are quick to complete.3

Our purpose was to create a reliable, evidence-based, short (10 items, <5 minutes to complete) CLE tool (Clinical Learning Environment Quick Survey [CLEQS]) appropriate for all participants in the clinical workplace (e.g., trainees, clinicians, clinical staff) to monitor the quality of CLEs.

**Approach:** Survey content (items) was developed for each of the 4 construct domains outlined in Gruppen et al’s learning environment construct framework: individual, social,
organizational, and material. Consistent with CLER 2.0’s emphasis on the health care systems responsibility for the clinical learning environment (CLE), we wanted the items in each construct to align with: (1) existing surveys/data in use in our sponsoring institution (e.g., patient safety, employee engagement); (2) existing education-oriented surveys (e.g., ACGME); and (3) the literature. To be a short/quick tool, 2–3 items per construct (10 items total) were identified, reviewed, edited, piloted using read/think aloud, and then revised by multiple stakeholders to ensure applicability to all health care team members and an expert in research on learning environments. The survey tool tracked time to complete the survey—addressing the feasibility of quick (<5 minutes) response time.

Outcomes: Two hundred and one CLEQSs were completed in 2019 by interprofessional team members in Cardiology, Family Medicine, Internal Medicine, OB/GYN, Radiology, GME leaders who were engaged in quality improvement initiatives in 2 hospitals or affiliated clinics (est. response rate = 70%). Respondents by role/profession: 28% residents/fellows (N = 77/201), 22% faculty members (N = 45/201); and 21% were other clinicians (N = 42/201), such as nurses, nurse midwives, speech pathologists, social workers, and lab techs. The remainder were students and other clinic/lab staff. Respondents typically completed the survey in 1.5 minutes with good reliability (Cronbach’s α = > 0.83). The Cronbach alpha for each of the 4 CLE domains with the overall item ranged from 0.79 for social to 0.50 for personal. CLEQS scores varied by GME teams with GME leaders confirming that their respective teams’ results were consistent with service line/unit/program data from other system-wide and accreditation surveys (safety, engagement, ACGME). Team leaders reported that survey data allowed them to focus on celebrating strengths and targeting improvement strategies specific to their teams with the ability to easily readminister the tool.

Discussion: CLEQS is a short, reliable, evidence-based survey tool that can be completed by all participants in the clinical workplace to monitor its quality as a CLE. It can be used to monitor progress on team projects that occur in the CLE and/or to achieve standards associated with system-wide and/or GME accreditation tools that are administered annually.

Significance: The evidence is clear that the quality of the CLE predicts quality of trainees’ care long after graduation and well-being. All individuals contribute to the CLE’s quality and its learning climate. Having a quick, reliable perception tool aligned with 4-frame learning environment construct and existing annual education and clinical data can provide process data to monitor quality of the CLE and guide improvement.

Correspondence should be addressed to Deborah Simpson, Aurora UW Medical Group/Academic Administration, 1020 N 12th St., Suite 5120, Milwaukee, WI 53233; email: deb.simpson@aah.org.

Author affiliations: D. Simpson, Advocate Aurora Health, Medical College of Wisconsin, and the University of Wisconsin School of Medicine and Public Health; T. La Fratta, L. Moore, M. McDermid, N. Salvo, Aurora Health Care—a part of Advocate Aurora Health; J. L. Bidwell, Aurora University of Wisconsin Medical Group at Aurora Health Care—a part of Advocate Aurora Health; D.M. Irby, University of California San Francisco, and Karolinska Institutet

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Ethical approval: As monitoring the clinical learning environment and quality/safety interprofessional project teams is an accreditation requirement, D. Simpson’s Research Subject Protection Program determined that this type of work does not constitute human subject research.

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References


Assessing Program Mission and Graduate Practice Outcomes: University of California, Davis School of Medicine Community Health Scholars

Melody Tran-Reina, MD, Michelle Ko, MD, PhD, Maya London, Alicia Gonzalez-Flores, MD, Melody Y. Hou, MD, MPH, Marjorie Westervelt, MPH, PhD, and Tonya Fancher, MD, MPH

Purpose: To meet the state’s physician workforce needs, the University of California, Davis School of Medicine (UCDSOM) developed 4 tailored pathways: Accelerated Competency-based Education in Primary Care (ACE-PC), Rural Programs in Medical Education (PRIME), Transforming Education and Community Health for Medical Students (TEACH-MS), and San Joaquin Valley PRIME, collectively known as Community Health Scholars (CHS). These programs strive to increase the number of physicians who practice primary care and/or practice in underserved rural, urban, or Central Valley communities, respectively. We aimed to evaluate program outcomes by examining the primary care specialty choice and practice location characteristics among CHS graduates from 2011 to 2020.

Approach: We created a database of 2011–2020 CHS graduate information from 4 secondary data sources: The National Provider and Plan Enumeration System (NPPES), the 2017 American Medical Association (AMA) Masterfile, state medical boards, and by conducting searches for individuals using Google. Using the practice address listed from each data source, we categorized