Measuring the Clinical Learning Environment

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Ongoing Consortium projects

Master Adaptive Learner
Bill Cutrer, Martin Pusic, Larry Gruppen and others are currently completing a book on aspects of the Master Adaptive Learner model. In addition, we are continuing to develop, implement and evaluate methods of deliberately teaching and applying the model in third and fourth year clinical rotations. We are also beginning to develop ideas about approaches to assessment.

Health Systems Science
Heather Ridinger represents the Foundations of Health Care Delivery team, which is continuing to refine the four-year longitudinal curricular element aimed at introducing health systems sciences to our students, including quality improvement, patient safety, interprofessional team work, health policy, and structural competence. Ongoing projects include measuring the impact of student QI projects, and determining the impact of HSS on professional identity formation, along with other consortium partners.

Competency-based Assessment and Progress
The entire grant team continues to work on several aspects of competency-based assessment (CBA). A "Ready for Residency" committee is exploring ways to analyze data from multiple sources, including milestones, EPAs, qualitative comments and standard grades, to determine readiness for post-graduate training. We have a special interest in measuring trustworthiness. We are also continuing faculty development efforts to increase confidence and reliablity in use of CBA approaches.

Grant team members

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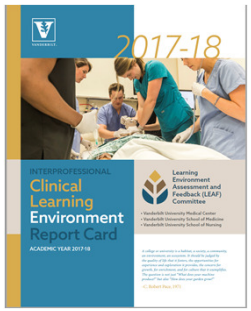
The Interprofessional Clinical Learning Environment Report Card (I-CLERC)*



WHAT ARE THE DATA SOURCES?

Survey items are selected based on their alignment with selected learning environment topics. Sources with regular data collection mechanisms and those with longitudinal and/or national comparative data were prioritized. Data is collated and shared for internal improvement purposes. It should not be shared with external audiences and selected metrics should not be interpreted as an overall measure of organizational effectiveness. When available, national comparison data is listed in (parentheses) next to Vanderbilt data in the data addendum.

Medical Students
- Association of American Medical Colleges Graduation Questionnaire, Course and Clerkship Evaluations, Annual Learning System Survey

Nursing Students
- Vanderbilt Annual Learning Environment Survey

Medical Residents
- Association of Graduate Medical Education Annual Resident Surveys, Clinical Learning Environment Reviews (CLER)

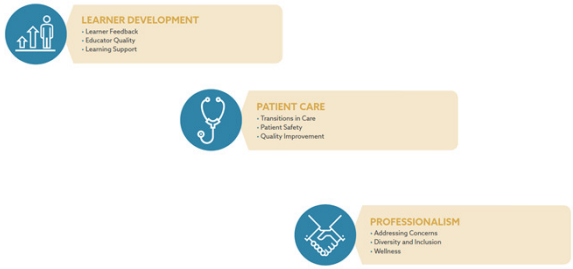
Medical Faculty
- Association of Graduate Medical Education, Annual Faculty Survey, Clinical Learning Environment Reviews (CLER)

Medical Center Employees
- VUMC Human Resources, Annual Climate and Pulse Surveys

Medical Center Patients
- VUMC Patient Experience, Press Ganey Patient Experience Surveys

Negative Behaviors
- Center for Patient and Professional Advocacy Veritas reporting, School of Nursing Dean's Office

Key Domains



OUR LEARNERS AND EDUCATORS

All people working and receiving care in an academic health center should be considered learners and educators. However, for practical purposes, the learner population for this report card is defined as students, residents, and faculty in the professional fields of medicine and nursing enrolled or employed at Vanderbilt University and the Medical Center Academic Enterprise. There are thousands of additional clinical and administrative staff who are acknowledged to serve both formal and informal educational roles.

SCHOOL OF MEDICINE	FEMALE	URM*	TOTAL
Students	172 (45%)	78 (21%)	379
Residents/Fellows	486 (46%)	104 (10%)	1049
Faculty	1474 (50%)	170 (6%)	2972
SCHOOL OF NURSING	**FEMALE**	**URM***	**TOTAL**
Students	749 (88%)	163 (19%)	847
Faculty	141 (88%)	16 (10%)	160

*Member of a racial or ethnic group that is under-represented in Medicine and Nursing

Need/Gap Addressed

Improving the quality of the clinical learning environment is a major concern for all institutions and organizations involved in medical education. The LCME reaccreditation processes and ACGME's Clinical Learning Environment Review visits have pressed medical schools and sponsoring institutions to appropriately address negative experiences and promote more positive cultures for clinical learning.

In addition, overlaps exist between the characteristics of environments that are safe for learners and those that are safe for patients, such as "speaking up" culture. Finally, our clinical learning environments are shared by multiple stakeholder groups, including medical students, nursing students, residents and fellows, faculty, staff and patients, all of whom measure their experiences with a variety of national and local surveys.

With this in mind, a group of faculty, staff, students, and residents began meeting five years ago to build a framework for measuring the clinical learning environment that would take into account multiple perspectives and create a holistic vision for positive learning environments. The group spent the first year defining the vision and determining the key domains based on a comprehensive literature review, expert opinion and educational enterprise priorities.

The core principles for measurements are to use existing data sources, prioritize sources with national or longitudinal benchmarking and those that could map to the identified domains. The second and third years were spent identifying specific items that matched each sub-domain and building additional measurement where needed. For example, the School of Nursing created an annual survey for their students with items aligned with the AAMC Graduation Questionnaire and ACGME Annual Resident and Faculty surveys. Also, we added questions to medical school course evaluations to allow the identification of hotspots. Items about speaking up are particularly important given its centrality to improvement in all domains,

A fully populated I-CLERC has been created for the past two years and shared with leaders across the medical and nursing schools as well as the medical center. Each year, we use this data to identify the most critical areas of needed improvement. This year, the medical center charged a taskforce to review these reports and recommend actions to address ongoing areas of concern.

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* Kennedy, B, et al, Development of an interprofessional clinical learning environment report card. *Journal of Professional Nursing.* Epub ahead of print.

AMA AMERICAN MEDICAL ASSOCIATION

VANDERBILT SCHOOL OF MEDICINE