



# Developing an Instrument to Assess the Clinical Learning Environment (CLE) at Nebraska Medicine



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## Background & Purpose

The Clinical Learning Environment (CLE) impacts physician practice patterns and patient outcomes even after trainees have completed their training. The CLE also serves as a source of continuous learning and professional growth for clinical faculty and staff. Prior research on the CLE has focused on the perspective of a single discipline, level of learner or individual educational unit, when in reality, the CLE is a complex, multi-dimensional construct in which diverse learners of all professions and levels of learning interact to care for patients.

One attempt to understand and improve CLE's for residents / fellow physicians at teaching hospitals has successfully spotlighted the importance of the CLE but has fallen short of producing measurable data that can be tracked over time. To date, no single assessment tool has been designed to formally measure the various constructs of the CLE from the perspective of multiple professional learners.

The purpose of this project was to better understand the Clinical Learning Environment (CLE) in the hospitals and ambulatory clinics at Nebraska Medicine from the perspective of students, resident/fellow physicians, clinical faculty and health system staff with the goal of developing an actionable metric that can be tracked for improvement over time.

References available upon request

## Methods

Using a mixed-methods approach, we first conducted focus groups composed of health system staff, clinical faculty, residents and students to answer the question:

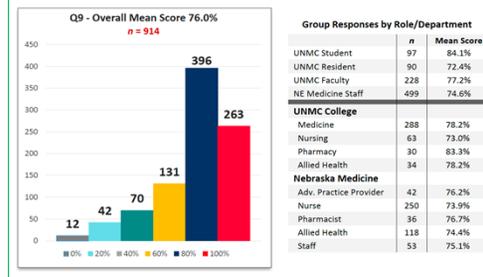
### What factors or attributes contribute to an optimal Clinical Learning Environment (CLE)?

The focus group identified a variety of factors that were grouped into CLE domains. Questions from existing tools were aligned with identified domains to guide development of the CLE assessment tool. A subset of the focus group participants provided respondent validation that the assessment questions accurately reflected the focus group discussions.

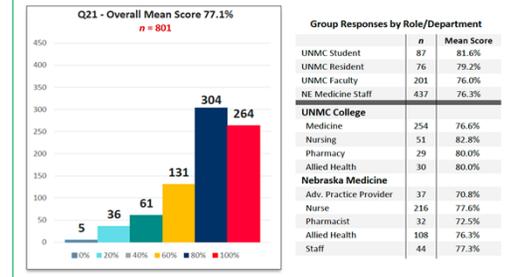
The survey consisted of 29 questions related to the CLE and was distributed to all UNMC and Nebraska Medicine clinical personnel and students. It was distributed via email with follow-up reminders for populations having sub-optimal response rate. A link to the survey was also distributed via the two daily newsletters.

## 2018 Nebraska Medicine CLE Assessment - Selected Scores

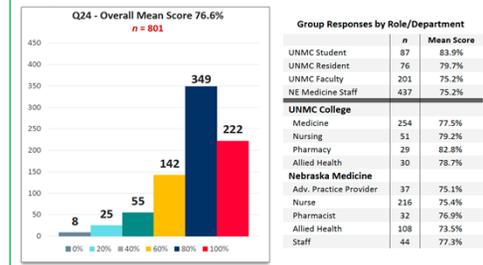
Q9: How often are individuals treated with respect?



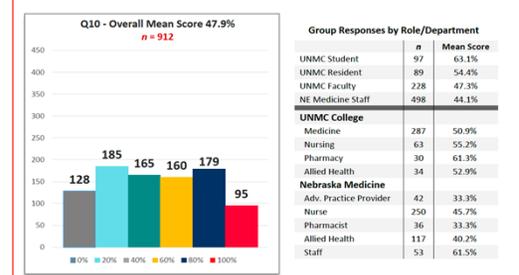
Q21: How often are all members of the care team encouraged to ask questions?



Q24: How often do care teams think in terms of the appropriate next steps for optimal patient care?



Q10: How often is structured time intentionally set aside for learning and reflection?



Survey Scale = Percent of time (0%, 20%, 40%, 60%, 80%, 100%)

## Results

A total of 918 people responded to the survey as follows: Nebraska Medical Center (72.0%), Bellevue Medical Center (4.4%) and Ambulatory Clinics (19.8%). In terms of professional role: Health System Staff/ Other (55.2%), Faculty (25.1%), Student (9.9%) and Residents (9.8%). See above for four sample questions.

Organizational strengths identified in the survey were a supportive environment to ask questions and learning from hands-on clinical experiences. Opportunities for improvement involved time and specific opportunities for learning.

Full survey results available upon request

## Conclusion / Future Directions

The results of this survey will be used to develop a singular metric of the Nebraska Medicine CLE that can be tracked and monitored over time. Identified trends and variations between perspectives within the survey will need to be explored in order to gain understanding and context with regards to specific ratings. From there, specific action plans will be developed with the goal of improving the CLE at Nebraska Medicine hospitals and clinics. We believe that this assessment instrument can be adapted for use by other academic health science centers to understand and improve the CLE at their institutions.