Report | Phase I
Clinical Assessment Workgroup

University of Washington School of Medicine
Curriculum Committee

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Introduction

Research into assessment in higher education has provided ample evidence that our assessment practices may show considerable weaknesses. Often, the reliability and validity of assessments leave much to be desired, and assessment often has undesirable and unintended effects on student learning and/or teacher behavior. Acknowledging that there is no single assessment modality that meets all quality criteria, assessment practices must shift from a focus on isolated assessment methods toward a whole systems approach. Assessment programs intertwined with the educational program and students' learning trajectories, then, aim at serving purposes of assessment of, for, and as learning.

Workgroup Charge

On March 7, 2022, the UWSOM Curriculum Committee, acting upon the recommendations of the Program Evaluation and Assessment Committee (PEAC) and feedback from the Patient Care Committee, charged a workgroup to explore making broad changes to clerkship grading, centering equity and transparency.

The charge included the need to:
- Create an equitable assessment strategy
- Center transparency
- Implement competency-based assessments
- Assess a comprehensive and holistic skill set
- Make the MSPE reflect assessment
- Encourage a growth mindset/lifelong learning

It was additionally determined that the initial implementation of any changes to the clinical assessment system would be limited to required third- and fourth-year clerkships.

Workgroup Process

Members of the Clinical Assessment Workgroup were recruited from a wide range of stakeholders, including:

- Students
- Fellows
- Career advisors
- Academic & Learning Technologies (ALT) staff
- Clerkship directors
- Clerkship administrators
- Program directors
- Clerkship site leads
- Clinical deans
- College heads
- Student Affairs deans
- Curriculum staff
- Curriculum deans

The inaugural meeting of the Clinical Assessment Workgroup was held on December 15, 2022. To help support the work of the committee, the Curriculum Office and the Director of Educational Evaluation conducted a literature review and gathered examples of all the assessment methodologies used to assess medical students. Content experts were recruited for selected assessment systems to present to the workgroup.

Over the course of the next six months, workgroup members defined the guiding principles for any new assessment strategy at the UWSOM and compared models of assessment, including overarching philosophies and specific methods of assessment. The members of the workgroup formulated the following strategic recommendations for consideration.

Key Issues and Recommendations

Theme 1: Principles of Assessment

The workgroup identified the following principles for the future clinical assessment program:

Transparency

Our clinical assessment program should be centered around learners and structured in a way that cultivates trust from all users. Assessment methods should be publicly available and transparent to students, faculty, and the organization. Assessment data should be available to individual students throughout the curriculum, and students should expect the outcome of high-stakes decisions given the transparency in the process and the accessibility of their academic assessment data. There should be clear communication to both students and preceptors in how students will be assessed, the outcomes of those assessments and what those outcomes mean (1).

Equity

Our aim is to create an equitable assessment program in which all students have an impartial opportunity to learn, be assessed, be coached, and graduate. All students must have a just opportunity to develop and demonstrate entrustment that is free of bias related to personal or social factors (7). Our assessment program should be criterion-referenced, rather than normative based, and intentionally built on an EPA framework that encompasses multiple dimensions of patient care with a programmatic focus. Decisions should be based on multiple data points and assessment events with a deliberate mix of assessment methods, and the stakes of assessment decisions should be proportional to the number of assessment data points needed. High-stakes decisions should be made by committee rather than by individuals, and learners should be engaged in their own assessments to develop self-directed learning (5). Further, our assessment program should be designed in the context of longitudinal relationships. This includes both individual coaches who focus on a specific group of students' growth and development, and clinical competency committees who decide student progress for a dedicated group of students over the entire clinical curriculum.

Trustworthiness

The ultimate goal of our medical education program should be to effectively provide safe healthcare to patients. As such, it is important that our assessment program be credible and defensible in order to

protect the public and maintain the health professions' social contract to self-regulate (3). Students who graduate from our program must be entrusted to safely assume the responsibilities that society expects of them as medical doctors.

Utility

Our program of assessment should be designed to reflect students' strengths and areas for growth accurately and continuously. Longitudinal assessment data will allow for both timely intervention in individual student cases where additional competency development is required and for differentiation and individualization in areas of special interest or particular strength. Failure to meet benchmarks for learner progression, including entrustment, should lead to proportional remediation opportunities coupled with support and guidance from mentors and institutional teams.

Co-Production and Continuous Improvement

In order to achieve effective implementation and to ensure ongoing improvement to assessment processes, students and faculty integral to its success should be intentionally involved in the initial design of and any ongoing changes to the assessment program. By prioritizing co-production of the assessment program with these key stakeholders, we aim to create a shared vision, foster a sense of responsibility, and develop a common language and understanding for all involved (6).

Recognizing that any clinical curriculum assessment program provides both affordances and constraints to what it means to be an ideal physician and how we think about the ideal physician, all elements of our programmatic assessment should be evaluated on an ongoing basis through a program of continuous quality improvement. This process of review and continuous improvement understands that our assessment program is based on assumptions and limitations that, while well intended, must be intentionally, indefinitely, and critically evaluated in order to endure and maintain excellence.

Lifelong Learning

Entrustment is not an end state, but rather a dynamic, context dependent, demonstration of a specific performance (3). As such, it will always, continuously, need to be pursued, assessed, and developed. Self-regulation of entrustment and clinical competence is a lifelong endeavor of every healthcare professional (16). Rather than discrete, modular assessments focused on the achievement of individual clerkship learning outcomes, our clinical assessment program should emphasize longitudinal expertise development and lifelong learning. Because the provision of feedback does not equate to the use of said feedback, our assessment program should provide a structure of feedback dialogue with assessment data and dedicated coaches, based on principles of the educational alliance and credibility judgments (10). By engaging learners in their own assessments, thus maximizing the likelihood that learners will make meaningful use of their feedback, learners should be able to develop self-resilience and practice the self-directed learning and self-regulation skills that will be required throughout their careers in medicine.

Theme 2: Competency-Based Medical Education

Recommendation 1: *Implement a competency-based, criterion-referenced assessment system in required clerkships.*

Rationale: CBME is an approach to preparing physicians for practice that is fundamentally oriented to graduate outcome abilities and organized around competencies derived from an analysis of societal and patient needs. The national shift toward competency-based medical education is driven by the need for a more precise and objective evaluation of medical students' skills and knowledge. This approach ensures that assessments are aligned with predefined competencies and benchmarks, providing a clear and transparent framework for evaluating performance. Unlike traditional methods that may rely on subjective measures, a competency-based system focuses on specific, observable behaviors and outcomes, offering a standardized and fair assessment process. By establishing explicit criteria for success, educators and students gain a shared understanding of the expected standards, fostering accountability and promoting a culture of continuous improvement. This model also allows for personalized feedback, enabling students to identify their strengths and areas for growth, ultimately enhancing the overall educational experience and better preparing students for experiences in GME and beyond.

Recommendation 2: *Utilize entrustable professional activities (EPAs) as a formative, workplace-based assessment.*

Rationale: Integrating EPAs as a formative, workplace-based assessment in undergraduate medical education stems from the recognition of the evolving nature of medical education and the necessity to bridge the gap between theoretical knowledge and practical application in clinical settings. EPAs serve as a valuable tool by delineating specific, observable tasks and responsibilities that medical students should be able to perform independently as they progress in their training. This approach allows educators to gauge students' readiness for practice in real-world scenarios, providing a more authentic and contextually relevant evaluation. By incorporating EPAs into the assessment framework, medical schools can tailor their educational strategies to address individual student needs, fostering a more personalized and competency-driven learning experience. This formative assessment model not only guides students' professional development but also enables continuous feedback and targeted interventions, creating a dynamic and responsive educational environment that prepares future physicians for future educational opportunities and the complexities of contemporary healthcare practice.

Theme 3: Pass/Fail Grading

Recommendation 3: *Convert required clerkships to pass/fail grading.*

Rationale: The decision to convert required clerkships to a pass/fail grading system is rooted in the pursuit of fostering a more supportive and learner-centered educational environment. Shifting away from tiered grading mitigates the undue stress and competition among medical students, allowing them to concentrate on their learning experience and personal and professional growth rather than solely on achieving high grades. This approach promotes collaboration over competition, encouraging a culture where students are more inclined to share knowledge and collaborate on patient care. By adopting a pass/fail system, educational institutions aim to create a psychologically safe space where students can embrace a growth mindset, take risks, and learn from their mistakes without the fear of adverse consequences on their academic record. This grading model aligns with a broader pedagogical philosophy that values the development of clinical skills, professionalism, and a comprehensive

understanding of patient care over a strict adherence to a competitive grading scale, ultimately contributing to a more holistic and equitable medical education experience.

Theme 4: Programmatic Assessment

Recommendation 4: *Design and implement a programmatic assessment model to comprehensively evaluate the program objectives established for the MD Program.*

Rationale: The transition to a competency-based curriculum will require a comprehensive evaluation of competence that no single instrument can measure. Unlike isolated assessments, a programmatic approach allows for a holistic examination of students' progress across various dimensions, encompassing clinical skills, knowledge acquisition, professionalism, and other critical competencies, utilizing multiple low-stakes assessments to form a more complete picture of performance that can be used as a basis for promotion or graduation decisions. By adopting this model, educational institutions gain a more nuanced understanding of how well the curriculum aligns with its overarching goals and how effectively students are meeting the desired outcomes. A programmatic assessment system that allows students to demonstrate longitudinal growth across multiple domains of competence is essential to adequately support the transition to pass/fail grading in core clerkships.

Programmatic assessment facilitates continuous improvement, enabling educators to identify strengths and weaknesses in student performance and make informed adjustments to support targeted learning and development. This approach also supports the cultivation of lifelong learning skills, as students are encouraged to reflect on their performance and actively engage in their educational journey.

Conclusion

Entrustment development and assessment is complex, and full of many acceptable solutions to real life problems while also full of clearly non-acceptable solutions to these same problems (9). Our programmatic approach to assessment is an attempt to create a meaningful holistic assessment system by triangulating information from a combination of assessment methods that map to a theoretical competency framework within longitudinal relationships with both coaches and decision makers. In doing so, we hope to create, and continually improve upon, an assessment system that is equitable, trustworthy, and transparent.

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