ABSTRACT: 2017 ELAM Institutional Action Project Symposium

Project Title: Using a systems approach to develop a competency-based assessment program that fosters continuous quality improvement

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Collaborators and Mentors: Collaborators and Mentors: Members of the Assessment Committee, Objective Structured Clinical Exam Committee and Core Entrustable Professional Activities Team, Karin Esposito, MD, PhD, John A. Rock, MD

Background, Significance of project: FIU HWCOM was established in 2006 as South Florida's only public medical school. It began with an inaugural class of 40 and is now at full capacity with 480 students. A key ingredient in the success of a medical school is to develop and sustain a robust program of assessment that considers the system as a whole and prioritizes continuous quality improvement.¹ Our assessment program has strong components interspersed throughout curriculum, yet certain areas may be isolated or fragmented. Using a systems-based approach to strengthen our assessment program will lead to a deeper understanding of the system, its parts, how it communicates, and ultimately translates student assessment data into knowledge leading to informed decision-making and continuous quality improvement.¹

Purpose/Objectives: The goal of this project is to use a systems approach to enhance our program of assessment by evaluating the methods, quality, consistency, effectiveness and efficiency of the current student assessment program. We aim to develop a robust competency-based assessment program that fosters continuous quality improvement

Methods/Approach: Approach: This project is spearheaded by three subcommittees that report to the Curriculum Committee and include key stakeholders that span the curriculum. A needs analysis was conducted to explore the quality and consistency of current assessment methods. A comprehensive database was developed to capture key assessment information from every course/clerkship. Database analysis will provide quantitative information regarding assessments methods, trends across courses and guide assessment reform if needed. The second step involves analyzing the effectiveness and efficiency of the program. This step involved creating a map of all current assessment development methods, quality review and reporting processes. Mapping these processes will elucidate the sequence of work, committees and stakeholders involved, various communications pathways and reporting methods. Successful methods are being reciprocated where possible, identified gaps are being flagged and recommendations to improve processes, including periodic analysis with relevant stakeholders are currently underway. The third step will involve ensuring the assessment program is competency-based and selected outcome measures allow a judgement that competencies are being achieved. Efforts are underway to map, track and evaluate student performance by competency, longitudinally, throughout curriculum.

Outcomes and Evaluation Strategy: Outcomes data will quantify the number, timing, methods and weight of assessments per course; including amount of summative vs. formative assessment and the quantity, quality and timeliness of feedback. Trends will be identified within and across courses. Other initial evaluation strategies include adding items on all course evaluations and analyzing the LCME Student Analysis Survey to measure quality of assessments. Finally, competency-based performance will be evaluated by tracking and analyzing student performance across educational program objectives and competency domains longitudinally.

Conclusion with Statement of impact/potential impact: The approach described will create a robust, holistic program of assessment that will inform and guide curriculum, enabling stakeholders to make informed decisions, timely interventions or necessary change. This work will ensure that our students are well prepared for day one of residency, equipped with the knowledge, skills and attitudes they need to care for their future patients

1. Bowe CM, Armstrong E. 2016. Assessments for systems learning: A holistic assessment framework to support decision making across the medical education continuum. Acad Med, published online, July 2016, doi:10.1097





Using a Systems-Based Approach to Develop a Competency-Based Assessment Program that Fosters Continuous Quality Improvement

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Objective

- The goal of this project is to use a systems approach to enhance our program of assessment by evaluating the methods, quality, consistency, effectiveness and efficiency of the current student assessment program.
- We aim to develop a robust competencybased assessment program that fosters continuous quality improvement

Background

- A key ingredient in the success of a medical school is to develop and sustain a robust program of assessment that considers the system as a whole and prioritizes continuous Quality Improvement
- Our assessment program has strong components, yet certain areas are isolated or fragmented
- Using a Systems-Based approach to strengthen our program will lead to <u>a deeper</u> <u>understanding of the system, its parts, how it</u> <u>communicates and ultimately translates data</u> <u>into KNOWLEDGE</u>

Methods

- Spearheaded by 3 committees that report to CC and include key stakeholders that span the curriculum
- Define the System Needs analysis
 - Assessment Database 27 courses/7 clerkships
 - Year 1 3
 - Number, timing, methods, weights, summative vs. formative, quantity, quality, timing of feedback





- ☐ Define the Pathway Analyze effectiveness/efficiency
 - ☐ Map current Assessment Development Methods, quality review and reporting processes Traditional thinking Systems thinking

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- ☐ Improved Communication Pathways/feedback loops
- ☐ Included relevant Stakeholders
- □Implemented new Process Archive Question bank
- Implemented a new Exam Review committee process
- ☐Periodic Analysis by the Assessment Committee

- ☐ Connections Improving Communications Performance/Transitions
 - ☐Period meeting with all course directors/Longitudinal course aligned deadlines
 - □ Reporting Methods EPOs/OSCE Period meetings/Advisors/Deans
- Outcome measures
 - □ Assessment Database
 - Add Assessment Item to all course evals
 - □ Analyze LCME SAS measures quality of assessments
 - □ Analyze competency based performance by domains longitudinally
 - **DEPOS/OSCEs/EPAs**
 - □EPAs pilot in progress

Conclusion

The approach described will create a robust, holistic program of assessment that will inform and guide curriculum, enabling stakeholders to make informed decisions, timely interventions or necessary change.

Presented at the 2017 ELAM Leaders Forum