

# ABSTRACT: 2013 ELAM Institutional Action Project Poster Symposium

**Project Title:** Development of a Competency Based Clinical Curriculum for BCM Medical Students

**Name and Institution:** Elizabeth Nelson, MD; Baylor College of Medicine

**Collaborators:**

- James Owens, MD, PhD; Chair, Curriculum Committee
- Nadia Ismail, MD MPH; Chair, Core Clerkship Committee
- Stephen Greenberg, MD; Dean of Medical Education (mentor)
- Cayla Teal, PhD; Director, Medical Student Evaluation and Research

**Background, Challenge or Opportunity:**

The clinical curriculum at Baylor College of Medicine has not been substantially revised for over 20 years. External pressures on medical student clinical education include resident duty-hours changes; ACGME competency assessments; technology; student debt; and the desire to decrease the length of medical education; are important concerns that are informing our approach to clinical education revision.

BCM's Educational Strategic Planning process was initiated with kickoff in Sept. 2013 and has involved multiple faculty stakeholder meetings to gather perspective. Review of current literature for clinical innovations has been done within the UME Office. Student facilitated town hall meetings discussing the strengths and weaknesses of the existing curriculum were additionally solicited from the MS2 and MS3 classes. Formation of a working group to more thoroughly develop the proposals will begin May 2014.

**Purpose/Objectives:**

The goal of this clinical curriculum revision is to move to a competency based methodology and increase the educational rigor within the MS4 year. Ultimately, we hope to move to a competency based curriculum that would allow for self-pacing through the core clerkships.

**Methods/Approach:**

By the ELAM meeting, the needs assessment and stakeholder meetings will have occurred. New evaluation tools have been developed including revised clerkship forms and the use of standardized patient/simulation exercises to evaluate the students' competency. The working group, will move forward with more granular curriculum development including decision making about clerkship length and the revision of the MS4 years curriculum that include expectations of higher level performance demonstrated through higher student expectations in clinical assessment and decision making. Continued assessment tool development will allow students to demonstrate competency attainment at variable speeds.

**Timeline:**

Academic Year 2012-2013-needs assessment, initial evaluation tool development, working group formation.

AY 2013-2014-working group develops recommendations, presents to curriculum committee for approval and implementation

January 2015 – roll out of new clinical curriculum for students beginning clerkships.

**Outcomes and Evaluation:**

Evaluation of new clinical education will include comparisons of NBME scores pre-and post-changes for individual clerkships and the USMLE step 2 exams. We will survey BCM residency program directors about R1 student performance pre- post changes as well.

Student satisfaction will also be explored along with measures of burnout and lifelong learning skill development.

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# The Strategic Revision of Clinical Education

ELAM Fellow: Elizabeth Nelson, MD

Collaborators: James Owens, MD, PhD; Nadia Ismail, MD; Cayla Teal, PhD,

ELAM Mentor: Stephen Greenberg, MD

Baylor College of Medicine, Houston, TX



## BACKGROUND

- The clinical curriculum at Baylor College of Medicine has not been substantially revised for over 20 years.
- External pressures on medical student clinical education include:
  - Resident duty-hours changes
  - ACGME competency assessments
  - Technology
  - Student debt and the
  - Desire to decrease the length of medical education

## GOALS

*How should BCM's clinical Curriculum be altered to achieve these goals?*

1. To move to a competency based clinical teaching and assessment model.
2. To increase the educational expectations of competent performance within the MS4 year.
3. Ultimately, to allow for self pacing through the core clerkships based on attainment of defined milestones.

## METHODS

- Creation of new evaluation tools beginning 2011
- Faculty Stakeholder Meetings kickoff BCM's Educational Strategic Planning process beginning Sept. 2012
- Needs assessment through review of current literature for clinical innovations has been done within the UME Office and informed the strategic planning process.
- Student-facilitated town hall meetings discussing the strengths and weaknesses of the existing curriculum are scheduled with the MS2 and MS3 classes.
- Formation of a working group to more thoroughly develop the proposals will begin May 2014.
- Role out of new clinical curriculum anticipated January 2015

## PROJECT OUTCOMES

### Evaluation Tools and Data

- Revision of Core Clerkship and Sub-internship student evaluation form in competency based language.
- Increased use of Simulation/Standardized Patient assessments in clerkships.
- Initial faculty development in clinical assessment strategies.
- Benchmarking student evaluation data in progress data to allow better competency tracking.

### Education Needs Assessment

- Flexible clinical scheduling is perceived by students as a strength.
- Core Clerkships are too long.
- Clerkship scheduling into MS4 is not ideal.
- MS4 sub-internship experiences should be increased.
- Students need move integration and longitudinal experiences with patients.
- Multiple hospital partners complicate number of viable options for revision.

### Education Stakeholder Strategic Planning Meeting

#### Recommendations

- All 8 and 12 week clerkships will be shortened.
- All core clerkships must be completed by end of MS3 year.
- Time taken from Core Clerkships will be re-allocated to rigorous electives and sub-internships.
  - Students should demonstrate greater autonomy, decision making, and leadership skills.
- Core Clerkships will be "paired" to provide longitudinal experiences.
  - Core OB/Gyn and Pediatrics paired to allow a student to follow a pregnant woman through delivery and 6 week well baby check.

## DISCUSSION

- Competency based education is challenging to implement. Evaluation tools must be developed and faculty must buy into a new style of assessment. At BCM, we have developed new evaluation tools and begun faculty development .
- Decreasing the focus of clinical education away from the core clerkships and increasing the expectations of higher level clinical performance, should allow our students to move comfortably into residency.
- Our goal is to institute these changes and track both educational and student satisfaction outcomes. This data driven evaluation process should add to the educational literature

## NEXT STEPS

- Working Group will further develop curriculum over next year.
- Educational Retreat scheduled May 2013.
- Continued communication with departmental leadership for buy-in and support.
- BCM is a finalist for the AMA Educational Innovations grant.
  - If funded, this grant award would provide visibility internally and nationally for these educational changes.