

**Project Title:** Data-Driven Evaluation and Refinement of the Osteopathic Medical Pre-Clinical Curriculum at the Philadelphia College of Osteopathic Medicine: A Tri-campus Initiative

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**Project Category:** Education

**Background/Significance:** An essential component of the quality improvement process of the osteopathic medical curriculum involves the continuous evaluation and refinement of courses. This is especially critical for the preclinical courses to ensure student success, both in terms of longitudinal progression throughout medical school, as well as on the national board examinations. There is currently a need to streamline the process of data-driven evaluation of the curriculum across all three campuses of the Philadelphia College of Osteopathic Medicine (PCOM).

**Purpose/Objectives:** The goal is to create a streamlined process for evaluating curricular outcomes with specific timelines. In the short-term, a process will be created for annual post-course reviews, allowing for course improvements every year, to be approved by the curriculum committee. This data will be compiled for a 3-year curriculum review, which is a longer-term goal. To assess how the PCOM curriculum prepares the students in preclinical foundational courses relative to other institutions nationally, standardized assessments by the National Board of Osteopathic Medical Examiners (NBOME) will be administered to students. The long-term goal of this project is to strive for curricular enhancement that result in improved first-time pass rate on the COMLEX examinations.

**Methods/Approach/Evaluation Strategy:** A holistic and systematic review of course performance includes analyses of various subjective and objective elements to ensure a data-driven enhancement of the curriculum.

- A. Post-course reviews: conducted annually; will include input from students and faculty; and will be approved by the curriculum committee.
  1. Input by students:
    - Course evaluations will be updated to reflect best practices in medical education
    - Strategize to improve student completion of course evaluations
  2. Input by faculty: Post-course review initiated by the tri-campus course directors will include data from:
    - Faculty involved in course instruction, who will provide input on course design, lecture sequence, quality of assessments, pedagogical methods, and content
    - Summary of student assessment averages from each campus
    - Course evaluation analysis based on qualitative analysis of student comments
  3. Course directors will present the post-course review form and their recommendations to the curriculum committee for approval. Approved recommendations will be implemented in the next offering of the course.
- B. Three years' worth of assessment data, student course evaluations, and post-course reviews will be analyzed for the three-year evaluation of the preclinical curriculum as a whole.
- C. Standardized assessments by the National Board of Osteopathic Medical Examiners (NBOME) will be administered to second year D.O. students to assess how the PCOM curriculum prepares them relative to other institutions nationally. These exams, which include the COMAT Foundational Biomedical Sciences exam (COMAT FBS) and the Comprehensive Osteopathic Medical Self-Assessment Examination (COMSAE) will allow us to measure student progress toward the COMLEX-USA Level 1.

**Results to date:**

1. Updated course evaluations
2. Annual post-course review process developed; approved by the curriculum committee
3. COMAT FBS and COMSAE approved to be administered to the current second year D.O. students

**Conclusion and Potential Impact:** Continuous evaluation and refinement of the preclinical osteopathic medical curriculum for an improved first-time pass rate on the COMLEX examinations on all three campuses.