

Doctor of Osteopathic Medicine

1. Goal: Student Doctors will develop research-related skills

Goal Description:

The College of Osteopathic Medicine promotes research opportunities as a way to enrich the core curriculum of the DO degree program. Students engaged in research will develop applied critical thinking, investigation, and writing techniques. These opportunities will give students the opportunity to develop scholarship, receive recognition in their field of study, and ensure that they will be competitive applicants in the residency application process.

Providing Department: Doctor of Osteopathic Medicine

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

1.1. LO: Student Doctors will disseminate research during the academic year

Learning Objective Description:

COM Students will develop research dissemination skills through co-authorship of grant proposals, manuscripts, abstracts, & poster presentations.

RELATED ITEM LEVEL 2

1.1.1. Indicator: 100% student pass rate on writing assignments related to research

Indicator Description:

Students are assigned a variety of research and evidence-based medicine assignments in their Systems, Osteopathic Manipulative Medicine (OMM), Clinical Medicine, and Research courses. Assignments in (Research and Evidence Based Medicine (REBM 7301, attached), taken during their first 9 weeks of Year 1, include developing grant proposals and manuscript drafts that relate to current research at the COM or novel research proposed by the student.

Attached Files

 [REBM 7301 Syllabus.pdf](#)

Criterion Description:

All COM students complete and pass all research writing assignments in REBM 7301, taken during their first 9 weeks of Year 1.

Findings Description:

The criterion was met. All students in the Class of 2027 who took REBM 7301 (Research and Evidence Based Medicine) passed the course. As course requirements, students had to submit the following writing assignments, either individually, or a part of an assigned small group (attached):

- Research Proposal Plan
- Research Proposal Summary
- Two Journal Club Critical Assessments

In addition to the above writing assignments, students in REBM were administered four quizzes, including one focused on writing methods and results. All students passed their course quiz requirement based on the average of their quiz scores. However, for the quiz on writing methods and results, 2 students scored 50%, 9 students scored 60%, and the remaining 154 students scored at least 70%.

Attached Files

 [REBM7301011623 Writing Grades.xlsx](#)

RELATED ITEM LEVEL 3

1.1.1. Action: Writing Assignments Pass Rate

Action Description:

AY 2024-25, the COM will continue to offer the course Research and Evidence Based medicine (REBM 7301) to all OMS1 student doctors. As part of the course, students will continue to create a research proposal to a hypothetical award from the National Institutes of Health (NIH).

RELATED ITEM LEVEL 2

1.1.2. Indicator: Number of students disseminating research

Indicator Description:

Students are given multiple opportunities to develop novel ideas into abstracts, manuscripts, grants, and posters. Student doctor research at the COM will be tracked. In lieu of a tracking system, the COM will rely on self-reported data in ERAS residency applications. In 2022, 88.0% of OMS4s applying to residency programs reported on average 2.2 publications (attached, Chart 10, p. 13).

Attached Files

 [Charting-Outcomes-DO-Seniors-2022 Final.pdf](#)

Criterion Description:

By the end of their four years at SHSU-COM, students will surpass the national average of medical student research publications and presentations by the time of residency application.

Findings Description:

The criteria were met. The office of Assessment, Evaluation, and Accreditation analyzed the ERAS applications for the Class of 2024. For the Spring 2024 Match, 62 of 69 (89.9%) student doctors reported a total of 285 abstracts, presentations, and publications, averaging 4.6 per student.

RELATED ITEM LEVEL 3

1.1.2. Action: Students Disseminating Research

Action Description:

The COM will provide students opportunities to participate in research throughout the curriculum. Students will be encouraged to actively participate in faculty-led research, along with developing their own novel research ideas related to the COM mission. The COM's Director of Research is responsible for coordinating and promoting research opportunities at the COM. The Director of Research is continuing to develop a student research tracking system instead of relying on self-reported data from ERAS applications.

RELATED ITEM LEVEL 2

1.1.3. Indicator: Student research self-assessment for writing skills

Indicator Description:

Students will complete a self-assessment to indicate their knowledge related to disseminating research before and after each stage of the research thread. This assessment will be administered in a question in the End-of-Year Student Survey (attached).

Attached Files

 [AY 2023-24 End-of-Year Student Survey.pdf](#)

Criterion Description:

Students on average indicate that their knowledge related to disseminating research has increased.

Findings Description:

The criterion was met. An End-of Year OMS Survey was distributed to all COM students in Summer 2024. The Class of 2027, on average, indicated that their writing proficiency related to research increased (attached, Q32_2 and Q33_2). Prior to Year 1, OMS1's average self-reported proficiency was 1.7 (scale: Low = 1, Moderate = 2, High = 3). After completing Year 1, OMS1's average self-reported proficiency increased 0.2 points to 1.9.

Attached Files

 [AY+2023-24+End-of-Year+Survey_Anon.csv](#)

RELATED ITEM LEVEL 3

1.1.3. Action: Student self-assessment on writing skills

Action Description:

The COM will continue to require the course Research and Evidence Based medicine (REBM 7301) for all OMS1 student doctors, as well as provide students opportunities to participate in research throughout the curriculum. Students will be encouraged to actively participate in faculty-led research, along with developing their own novel research ideas related to the COM mission.

RELATED ITEM LEVEL 1

1.2. LO: OMS1s will learn how to present and publish research during the academic year

Learning Objective Description:

COM Students will learn academic presentation and publication skills in preparation for residency applications during their Year 1 Research and Evidence-Based Medicine (REBM) course.

RELATED ITEM LEVEL 2

1.2.1. Indicator: Number of students presenting or publishing research

Indicator Description:

Students are given multiple opportunities to develop novel ideas into abstracts, manuscripts, grants, and posters. In lieu of a tracking system, the COM will rely on self-reported data in ERAS residency applications. In 2022, 88.0% of OMS4s applying to residency programs reported on average 2.2 publications (attached, Chart 10, p. 13).

Attached Files

 [Charting-Outcomes-DO-Seniors-2022_Final.pdf](#)

Criterion Description:

By the end of their four years at SHSU-COM, students will surpass the national average of medical student research publications and presentations by the time of residency application.

Findings Description:

The criteria were met. The office of Assessment, Evaluation, and Accreditation analyzed the ERAS applications for the Class of 2024. For the Spring 2024 Match, 62 of 69 (89.9%) student doctors reported a total of 285 abstracts, presentations, and publications, averaging 4.6 per student.

RELATED ITEM LEVEL 3

1.2.1. Action: Students Presenting or Publishing Research

Action Description:

The COM will provide students opportunities to participate in research throughout the curriculum. Students will be encouraged to actively participate in faculty-led research, along with developing their own novel research ideas related to the COM mission. The COM's Director of Research is responsible for coordinating and promoting research opportunities at the COM. The Director of Research is continuing to develop a student research tracking system instead of relying on self-reported data from ERAS applications.

RELATED ITEM LEVEL 2

1.2.2. Indicator: Student research self-assessment for presenting or publishing skills

Indicator Description:

Students will complete a self-assessment to indicate their knowledge related to presenting or publishing research before and after each stage of the research thread. This assessment will be administered in a question in the End-of-Year Student Survey (attached).

Attached Files

[AY 2023-24 End-of-Year Student Survey.pdf](#)

Criterion Description:

Students on average indicate that their knowledge related to presenting or publishing research has increased.

Findings Description:

The criterion was met. An End-of Year OMS Survey was distributed to all COM students in Summer 2024. The Class of 2027, on average, indicated that their presentation proficiency related to research increased (attached, Q32_4 and Q33_4). Prior to Year 1, OMS1's average self-reported proficiency was 1.9 (scale: Low = 1, Moderate = 2, High = 3). After completing Year 1, OMS1's average self-reported proficiency increased 0.2 points to 2.1.

Attached Files

[AY+2023-24+End-of-Year+Survey_Anon.csv](#)

RELATED ITEM LEVEL 3

1.2.2. Action: Student self-assessment on presenting or publishing research

Action Description:

The COM will continue to require the course Research and Evidence Based medicine (REBM 7301) for all OMS1 student doctors, as well as provide students opportunities to participate in research throughout the curriculum. Students will be encouraged to actively participate in faculty-led research, along with developing their own novel research ideas related to the COM mission.

2. Goal: Student Doctors will develop learning strategies to pass COMLEX-USA exams

Goal Description:

Students will sit for the COMLEX-USA Level 1 examination at the end of OMS year 2. Passing Level 1 is required to progress into clinical clerkships in OMS years 3 and 4. At the end of OMS year 3, students will sit for the COMLEX-USA Level 2 CE examination. In order to prepare for these examinations required for graduation, students will be given time and resources to adequately prepare themselves to perform well.

Providing Department: Doctor of Osteopathic Medicine

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

2.1. LO: OMS2s will perform adequately on simulated board exams at the end of the academic year

Learning Objective Description:

Prior to sitting for the COMLEX-USA Level 1 board examination, all students will take simulated board exams to identify areas of strength and opportunity.

RELATED ITEM LEVEL 2

2.1.1. Indicator: Performance on simulated board exams

Indicator Description:

[COMSAE Phase 1](#) is a simulated COMLEX-USA Level 1 prep exam developed and administered by NBOME using retired items from the COMLEX-USA Level 1 item pool. All student doctors enrolled in their final pre-clerkship course, Systems Integration, are required to take COMSAE until they achieve a 450, or they reach the maximum number of attempts (4).

Criterion Description:

98% of OMS2s enrolled in Systems Integration will pass COMSAE Phase 1 in no more than four attempts.

Findings Description:

The criterion was met. OMS2s were given 4 opportunities to achieve 450 or higher on COMSAE Phase 1: 4/8/24, 5/13/24, 5/28/24, and 6/10/24. On attempt #1 35 of 138 (25.4%) passed, on attempt #2 40 of 105 (38.1%) passed, on attempt #3 51 of 64 (79.7%) passed, and on attempt #4 11 of 13 (84.6%) passed. In total, 137 of 139 (98.6%) achieved 450 or higher in no more than four attempts. Two students failed the course as a result of not achieving the cut score in four attempts.

RELATED ITEM LEVEL 3

2.1.1. Action: Average Score on Simulation Board Exams

Action Description:

As part of the evaluation of the FUSION board-prep sessions and Systems Integration course, faculty determined that students, in general, need up to 10-weeks after their first COMSAE experience to coordinate their study efforts, consolidate their knowledge, and pass the exam. For AY2024-25, the Systems Integration Course Director (CD) will continue to work with other CDs to offer the first COMSAE earlier in the semester, still allowing 10 weeks until its final offering.

RELATED ITEM LEVEL 2

2.1.2. Indicator: Student self-assessment of board readiness

Indicator Description:

Students will complete a self-assessment to indicate their readiness for board examinations. This assessment will be administered in a question in the End-of-Year Student Survey (attached).

Attached Files

 [AY 2023-24 End-of-Year Student Survey.pdf](#)

Criterion Description:

A majority of OMS1 students indicate that they are 'Slightly Ready' or more for the COMLEX-Level 1 exam.

Findings Description:

The criterion was met. An End-of Year OMS Survey was distributed to all COM students in Summer 2024. 61.3% of OMS1s reported they were slightly or moderately ready to pass the exam on the first attempt. The average Class of 2027 self-reported readiness to pass COMLEX-USA Level 1 was 1.8 (attached, Q24_1, scale: Not at all = 1, Slightly = 2, Moderate = 3, Very = 4, Extremely = 5).

Attached Files

 [AY+2023-24+End-of-Year+Survey_Anon.csv](#)

RELATED ITEM LEVEL 3

2.1.2. Action: Self-assessment on board readiness

Action Description:

While the feedback from students was positive and a slight increase from the previous year, the number of students replying to the survey was not acceptable. The Office of Assessment, Evaluation, and Accreditation (AEA) is responsible for administering the survey. AEA took credit for the late start in initiating the development of the updated version of the EOY survey,

mainly due to a staffing issue and an increased office workload due to events pertaining to the graduation of our inaugural cohort. Due to the delay, many students had already transitioned to post-semester plans by the time the EOY survey was administered.

For AY2024-25, AEA will begin the development of the updated version of the EOY survey earlier, ensuring all stakeholders have sufficient time to review the survey. In addition, because each cohort ends their Spring semester on different dates, AEA will adapt the roll out of the EOY survey to each cohort: OMS4s on 4/4/25, OMS1s and OMS2s on 5/16/25, and OMS3s on 6/27/25.

RELATED ITEM LEVEL 1

2.2. LO: OMS2s and OMS3s will perform well on the COMLEX-USA exam at the end of the academic year

Learning Objective Description:

Student Doctors must pass the COMLEX-USA Level 1 exam in order to enter clinical rotations in Years 3 & 4. Student Doctors must also pass the COMLEX-USA Level 2 CE exam in order to complete clinical rotations and graduate.

RELATED ITEM LEVEL 2

2.2.1. Indicator: First time pass rate for COMLEX-USA Levels 1 and 2

Indicator Description:

From [COMLEX-USA · Level 1 - NBOME](#): "COMLEX-USA Level 1 is a one-day computer-based examination that integrates foundational biomedical sciences with other areas of medical knowledge relevant to clinical problem-solving and the promotion of health maintenance.

"Competency domains assessed include application of osteopathic medical knowledge, osteopathic patient care, osteopathic principles and practice, communication skills, professionalism, and ethics. Competency assessment occurs in the context of clinical and patient presentations and systems-based practice as required for entry into the supervised practice of general osteopathic medicine and for readiness for lifelong learning and practice-based learning and improvement."

From [COMLEX-USA · Level 2 - NBOME](#): "The COMLEX-USA Level 2-Cognitive Evaluation (Level 2-CE) is a one-day, computer-based assessment that integrates application of knowledge in clinical and foundational biomedical sciences with other physician competencies related to the clinical care of patients and promoting health in supervised clinical settings.

Competency domains assessed include application of osteopathic medical knowledge, osteopathic patient care, osteopathic principles and practice, communication skills, systems-based practice, practice-based learning and improvement, professionalism, and ethics."

Criterion Description:

Students will first-time pass the COMLEX-USA Level 1 and Level 2 exams at rates higher than [national averages](#) (For AY 2023-24, 93.0% for Level 1 and 92.5% for Level 2).

Findings Description:

The criteria were met. The Class of 2024 who took COMLEX-USA Level 2 between Years 3 and 4 had a first-time pass rate of 97.1%, and the Class of 2025 who took COMLEX-USA Level 1 between Years 2 and 3 had a first-time pass rate of 99.0%, as [published on the SHSU-COM website as required by COCA](#).

RELATED ITEM LEVEL 3

2.2.1. Action: First time pass rate

Action Description:

The COM is pleased to report that not only did it meet its criteria, its first-time pass rate for Level 1 is [the highest in the nation](#).

The Systems Integration (SI) course requirements will continue to require taking multiple simulated board exams, and to achieve a score greater than or equal to 450 on the COMSAE to qualify for the COMLEX-USA Level 1 exam. The COM will continue offering FUSION board-prep sessions to OMS1s and OMS2s to give students test-taking skills and to provide context regarding the individual preparation required for board exams.

The COM is investigating an unexpected drop in the first-time pass rate for the Class of 2025, which will be included in our AY 2024-25 assessment plan. Measures are currently being taken to prevent the drop from continuing to the Class of 2026.

Update to Previous Cycle's Plan for Continuous Improvement Item

Previous Cycle's Plan For Continuous Improvement (Do Not Modify):

Closing Summary

SHSU-COM welcomed our third cohort of student doctors in August 2022. For this past academic year, we continued to focus our DO Degree assessment efforts on measuring student doctors' research and board preparation skills. For AY 2022-23 the COM did not change our two DO Degree assessment goals from the previous academic year, which were:

1. Student Doctors will develop research-related skills.
2. Student Doctors will develop learning strategies to pass the COMLEX-USA Level 1 Exam.

The COM's first DO Degree goal focused on developing student research skills. Student doctors clearly indicated through self-assessment that their proficiency in all research skills has improved over the course of their first year of study. The COM hired a new Director of Research, who will coordinate research efforts, develop research opportunities for student doctors, and direct the Research and Evidence Based Medicine course for OMS1s. The COM will also continue to provide students opportunities to participate in research throughout the curriculum. Students will be encouraged to actively participate in faculty-led research, along with developing their own novel research ideas related to the COM mission.

The COM's second DO Degree goal focused on board preparation and performance. COM's FUSION board prep programming was a coordinated, collaborative effort across departments to provide additional learning opportunities and resources to student doctors prior to their first attempt of the COMLEX-USA Level 1 exam. Through this collaborative effort, COM was able to provide a robust review of key concepts from the Pre-Clerkship (Years 1-2) curriculum and give students multiple opportunities to assess their board preparation progress. COM leadership and other stakeholders are very pleased with student outcomes and plan to further develop our FUSION programming and other board prep resources to maintain our exceptional first-time pass rate.

For AY 2023-24, the COM's inaugural cohort, the Class of 2024, will be engaging in a variety of clinical experiences in preparation for our first NRMP Match, graduation, and post-graduation placement as resident DO physicians. The COM also matriculated its fourth cohort, the Class of 2027, resulting in our on-site pre-clerkship curriculum running at full capacity. Toward the end of AY 2022-23, the COM welcomed a new Dean, who brings with him a renewed vision for the COM, its graduates, and the impact the COM will have on healthcare in our region. In the upcoming months, the COM will reflect upon our accomplishments and adjust our DO Degree assessment goals for AY 2023-24 under the guidance our new leadership and anticipated changes in structure.

Update of Progress to the Previous Cycle's PCI:

Under the leadership of a new Dean, the COM continued to develop research-related skills for incoming student doctors, primarily through the Research and Evidence Based Medicine course. The Director of Research continued to foster research opportunities for faculty and students and encourage collaboration. The COM's Systems Integration course and FUSION board prep programming helped produce an increase in our first-time pass rate for COMLEX-USA Level 1 and set a high standard for our first-time pass rate for COMLEX-USA Level 2. All 69 students who entered Year 3 core clerkships in 2022, continued to their Year 4 clinical electives during AY 2023-24, graduated in May 2024, and were placed into residency programs across Texas and the United States throughout Summer 2024.

Plan for Continuous Improvement Item - DO Degree

Closing Summary:

SHSU-COM welcomed our fourth cohort of student doctors in August 2023 and graduated our inaugural cohort as osteopathic physicians in May 2024. Along with our first graduation, the COM celebrated a first-ever-for-a-new-program [10-year Accreditation with Exceptional Outcomes](#) from the Commission on Osteopathic College Accreditation (COCA).

For the first four years, the DO Program's assessment plans have focused on pre-clerkship objectives, such as the acquisition of research-related skills, research opportunities, board prep initiatives, and board exam first-time pass rates. The COM will continue to track and report on these outcomes, especially those required by our accreditor, COCA, such as first-time pass rates and match results.

Starting with AY 2024-25, the COM will begin targeting outcomes specifically related to student doctors in Year 3-4 clerkships. While our students taking COMLEX-USA Level 1 have maintained exceptional outcomes, the COM had an unexpected drop in the first-time pass rate for COMLEX-USA Level 2, which will be included in our AY 2024-25 assessment plan. Currently, the Assessment Sub-Committee (ASC) of the COM Curriculum Committee is analyzing data to determine if there are early indicators that could be used to predict performance on COMLEX-US Level 2 and a successful match in a competitive residency program. It is expected that a new goal and related learning objectives will result from this investigation to be included for AY 2024-25 and beyond.