

Utilizing the OSCE Assessment as an Additional Curriculum Management Tool at LECOM School of Dental Medicine

Katie Dinh, D.M.D.

Lake Erie College of Osteopathic Medicine, School of Dental Medicine



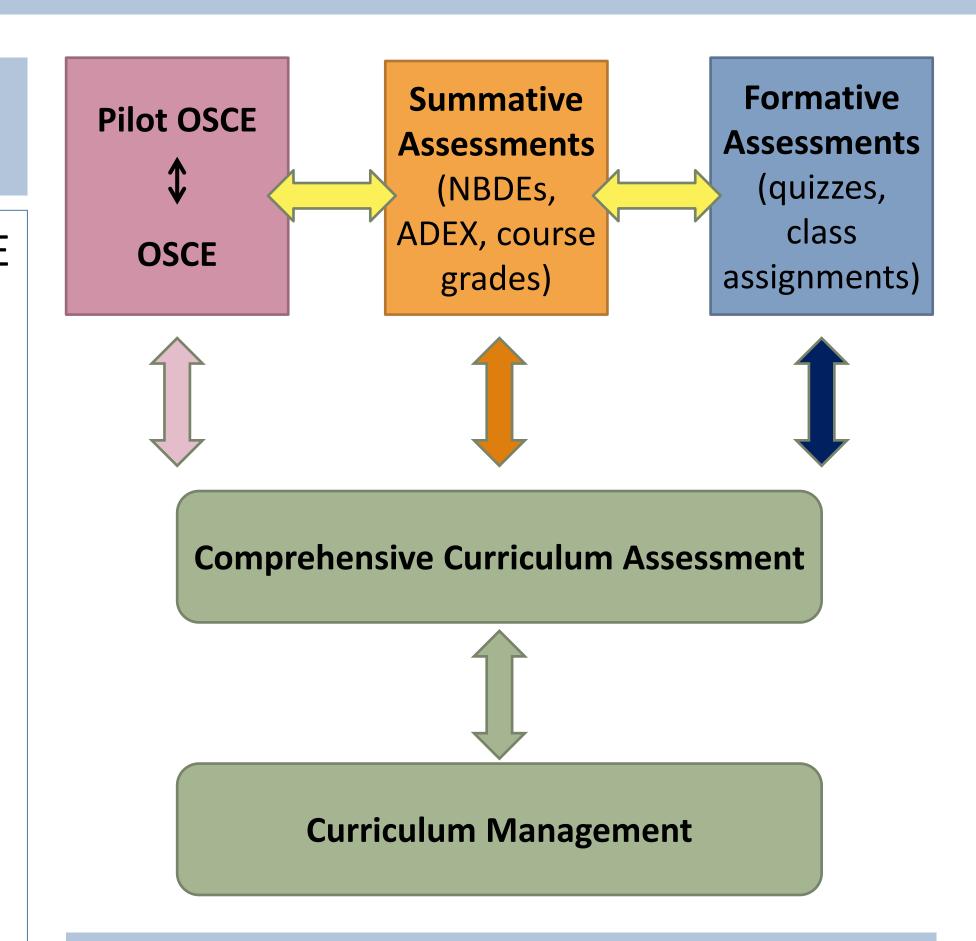
BACKGROUND

LECOM-SDM began incorporating the OSCE into its curriculum as a pilot project in March 2016. However, the OSCE is not designed by the SDM solely for student performance assessment but as an additional tool in the curriculum review and revision process.

Using an OSCE-based testing format is time-consuming and labor-intensive, but this type of benchmark testing provides unique feedback regarding students' achievement of learning outcomes and isolates areas of weakness in the curriculum.

Besides being a valuable mechanism to assess the students' progress toward competency, the OSCE can be used in conjunction with other summative assessments such as the National Board Dental Examination and licensing exam results to identify the strength and weakness of the school's curriculum.

These evaluations will form the foundation to create a comprehensive curriculum assessment plan at LECOM-SDM.



LECOM-SDM OSCE Benchmark <u>Tests</u>

- NOT a graduation requirement (under review)
- NOT embedded into any course grade
 - Low stakes for students, low anxiety
- LECOM follows PASS/FAIL grading system
- D1 Benchmark is given at the end of D1 year
- Transition from basic sciences into dentalfocused education
- D2 **Benchmark** is given at the end of D2 year
- Transition from pre-clinical to clinical education
- **DEVELOPMENT**: 1-hour per test, in multiple sessions due to scheduling, use standardized patients

CREATING THE COMPREHENSIVE CURRICULUM ASSESSEMENT PLAN

- LECOM School of Dental Medicine (SDM) develops a curriculum review and revision process:
 - Systemically collect, review, and use the information for the purpose of continually improving student learning and overall program effectiveness.
- As the result, the Comprehensive Curriculum Assessment Plan (CCAP) is in development to serve as the SDM's foundation system for academic assessment.

CURRENT CURRICULUM ASSESSMENT TOOLS AT LECOM-SDM

- National Board Dental Examinations
 - NBDE I Results
 - NBDE II Results

- Licensing exams
 - ADEX/CDCA
- WREB

- Course grades
 - Midterm/final exams
 - Competency exams

OSCE ASSESSEMENT AS AN ADDITIONAL CURRICULUM MANAGEMENT TOOL

OSCE benchmark assessment results are used to evaluate curriculum contents and instructional effectiveness. The tables below show the blue print for designing OSCE stations.

| | | TOPIC | LECOM-SDM competency addressed | # of Stations | Level |
|--------------|------------|---|--------------------------------------|---------------|-------------|
| D1 Benchmark | Assessment | Dental Anatomy & Lesions | 2 | 1 | Knowledge |
| | | Behavioral Sciences (patient-centered approach) | 5 | 1 | Knowledge |
| | | Domestic Violence | 5 | 1 | Knowledge |
| | | STDs and AIDS | 5 | 1 | Application |
| | | Multicultural Environment | 6 | 1 | Application |
| | | Ethics | 10 | 1 | Application |
| | | Patient Assessment | 14-a | 1 | Application |
| | | Head & Neck | 14-b | 1 | Application |
| | | Health Promotion | 14-d | 1 | Knowledge |
| | | Dental Impressions | 14-g | 1 | Knowledge |

| | | TOPIC | LECOM-SDM competency addressed | # of Stations | Level |
|----------|------------|--|--------------------------------------|---------------|-------------|
| | Assessment | Ethical Decision Making | 10 | 1 | Application |
| <u>×</u> | | Radiographic Interpretation | 14-a | 1 | Application |
| ar | | Informed Consent | 14-a | 1 | Application |
| Ë | | Diagnosis | 14-a | 1 | Knowledge |
| ch | | Patient Assessment | 14-a | 1 | Application |
| en | | Treatment Planning | 14-a | 1 | Application |
| M | | Oral Pathology | 14-k | 1 | Knowledge |
| 2 | | Health Promotion | 14-d | 1 | Knowledge |
| | | Local anesthesia; pain and anxiety control | 14-e | 1 | Application |
| | | Medical Emergencies | 16 | 1 | Application |

DISCUSSION

SIGNIFICANCE: The objective structured clinical examination (OSCE) provides more in-depth feedback of students' learning than summative assessments alone. Hence, its use enhances curriculum assessment and contributes significantly as a curriculum management tool.

RESOURCES: LECOM-SDM's OSCEs will be developed by collaborative effort of all faculty members: pre-clinical (basic sciences and dental education disciplines) and clinical sciences course directors. Standardized patients are shared between the College of Medicine (COM) and SDM.

OUTCOME MEASUREMENT: By using the OSCE benchmark tests to monitor and revise the curriculum, we hope to see significant improvement in NBDE and licensing examination results.

REFERENCES

- 1. Kramer et al. J. Dent. Edu. **2009**, *73(1)*, 12.
- 2. Park et al. J. Dent. Edu. **2016**, *80(3)*, 334.
- 3. Zartman et al. J. Dent. Edu. **2002**, *56(12)*, 1323

CONTACT INFORMATION

Katie Dinh, D.M.D.

Assistant Professor of Restorative Dentistry **LECOM School of Dental Medicine**

4800 Lakewood Ranch Blvd- Bradenton, FL. 34211

kdinh@lecom.edu Office: (941) 405-1536