

Building toward High Stakes Objective Structured Clinical Examination (OSCE):

PRACTICAL ADVICE FOR SUCCESS

Objectives

By the end of this 90-minute session the participants should be able to:

1. Define objective structured clinical examination (OSCE)
2. Differentiate between standardized patients/participants and simulated patients/participants
3. Describe blueprint development for use of standardized patients/participants
4. Compare and contrast methods of standard setting
5. Describe resources required to develop and implement an OSCE
6. Identify barriers in implementing OSCEs and strategies to overcome them

**BUILDING TOWARD HIGH STAKES
OBJECTIVE STRUCTURED CLINICAL
EXAMINATION (OSCE):**

PRACTICAL ADVICE FOR SUCCESS

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Associate Professor in the Department of
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University of Maryland School of Pharmacy

Who is our audience today?

1. My school/college already uses OSCE, and we want to know more about how to make them high-stakes
2. My school/college does not use OSCE, but is seriously considering starting to use the technique
3. I'm just interested in the topic



Learning Objectives

- Insert session objectives here

Why the Interest?

- Slide with BRIEF information about ACPE guidelines and desire to have a more authentic way to evaluate clinical skills (these are usually the two reasons most people cite)

What is OSCE?

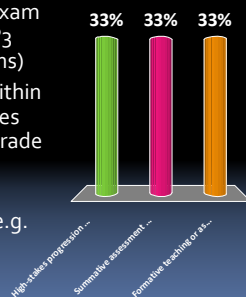
- 1-2 slides with description from Harden's work and listing of key components (e.g. blueprint, multiple stations, standardized, each station pass/fail, typically interactive, replication of authenticity, etc)

Standardized vs. Simulated

- 1-2 slides with information about differences between standardization and simulation

What is/ would be your primary goal for using OSCE?

1. High-stakes progression exam (e.g. must pass at end of P3 year to start APPE rotations)
2. Summative assessment within courses, but not high-stakes (e.g. exam worth 10% of grade in a practice lab course)
3. Formative teaching or assessment opportunity (e.g. for student and curricular feedback)



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What is the Current State of OSCE in US Pharmacy Curricula?

Deb's study – will have 5-10 slides with study results, potentially including information such as:

- % that have OSCE, hire SPs (but not OSCE), and no OSCE
- % high stakes vs. low-stakes
- data on where placed in curriculum, how many stations, if students all get same case or not
- general information about process of case development/validation
- general information about how scored (e.g. is standard used or not)
- information about who is SP – ability to assure standardization vs. simulation
- characteristics specifically of exams noted to be high stakes

Conclusion slide

- Conclusions from survey, including lack of standard interpretation of "OSCE"

High Stakes OSCE

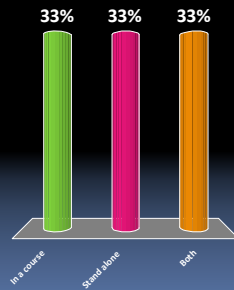
Cindy D. Stowe, Pharm.D.
Professor of Pharmacy Practice
Associate Dean for Professional Education
UAMS College of Pharmacy

Overview

- UAMS case study
- Blueprint development
- Standard setting

If using or planning to use OSCE technique for high stakes testing, is testing in a course, stand alone, or both?

1. In a course
2. Stand alone
3. Both



UAMS Experience

- Previous uses
 - Curricular evaluation/assessment low stakes
 - Disease state management
- Current uses
 - Formative assessment / teaching
 - High stakes in courses
 - P3 Therapeutics, Physical Assessment, & Advanced OTC
 - High stakes stand alone
 - P4 Summative Exam

Critical Factors

- Principle components
 - Administration
 - Faculty
 - Facility
- Innovation
 - Culture
 - Scholarly activity
 - Ongoing process

UAMS Evolution

- Process
 - External to internal expert case review
 - Faculty to SP scoring in real-time
 - Modified Angoff to borderline standard setting
- Outcome focused
 - Formative and summative
 - Course & stand alone

Post-test Questions

- What is a critical factor to using OSCE technique for high stakes assessment?
 - A. Supportive administration (*correct answer*)
 - B. A college of medicine on campus
 - C. An SP facility

UAMS Case Outline

- Overview
- Instructions to student
- Instructions to SP
- Dichotomous checklist (Pass/Fail)
 - "What" – subject/content (80%)
 - "How" – communications (20%)
 - Global assessment: Outstanding, Clear pass, Borderline, or Clear fail

UAMS Case Example: "What"

Skill Checklist	PASS	FAIL
1. Instructs patient to shake the inhaler and place inhaler in spacer. (2.3b)	<input type="radio"/>	<input type="radio"/>
2. Instructs patient to 1) breathe out fully and then bring inhaler to lips; 2) begin to breathe in slowly and deeply, then press down on inhaler (may also state to breathe in within 3-5 seconds); 3) hold breath 10 seconds or as long as possible. (2.3b)	<input type="radio"/>	<input type="radio"/>
3. Instructs patient to wait at least 1 minute between puffs. (2.3b)	<input type="radio"/>	<input type="radio"/>
4. Demonstrates inhaler technique to the patient AND asks patient to demonstrate inhaler technique. (1.3f)	<input type="radio"/>	<input type="radio"/>
5. Counsels patient on appropriate use of Albuterol/ProAir™. – PRN (as needed) use of Albuterol for quick-relief/rescue when symptomatic – give symptom (such as shortness of breath, cough, etc.). IF confused or contradicts self during explanation then – mark FAIL (2.3b)	<input type="radio"/>	<input type="radio"/>
6. Counsels patient on appropriate use of Flovent®. – Scheduled daily use of Flovent® as a controller medication. IF confused or contradicts self during explanation then – mark FAIL (2.3b)	<input type="radio"/>	<input type="radio"/>
7. Counsels patient to rinse mouth after use of inhaled corticosteroid (Flovent®). (1.3h)	<input type="radio"/>	<input type="radio"/>
8. States that GERD (heartburn) can aggravate asthma so scheduled treatment is needed. (1.2b)	<input type="radio"/>	<input type="radio"/>
9. Student counsels patient to take famotidine (Pepcid) twice a day. (2.3b)	<input type="radio"/>	<input type="radio"/>

UAMS Case Example: "How"

Communication Checklist	PASS	FAIL
1. Introduced him/herself (1.5a)	<input type="radio"/>	<input type="radio"/>
2. Used the appropriate terminology (1.5a)	<input type="radio"/>	<input type="radio"/>
3. Was sensitive to me (patient) OR to the situation (MD) (2.3a)	<input type="radio"/>	<input type="radio"/>
4. Was confident (2.3a)	<input type="radio"/>	<input type="radio"/>
5. Was respectful (2.3a)	<input type="radio"/>	<input type="radio"/>
6. Was dressed professionally (1.5a)	<input type="radio"/>	<input type="radio"/>
7. Came to a satisfactory closure (1.5a)	<input type="radio"/>	<input type="radio"/>
8. Asked me if I had any questions (1.5a)	<input type="radio"/>	<input type="radio"/>
9. Put me at ease (2.3a)	<input type="radio"/>	<input type="radio"/>

Timeline for Test Development

- Test outline (weeks 1-2)
- Case development (weeks 3-12)
 - Writing
 - Review
 - Revision
- SP training with mock students (week 12-15)
 - Final case revision
- Pre-test review (1st day of test)

Blueprint

- Desired outcomes
 - Course syllabi
 - Curricular competency based
- Logistics
 - Knowledge – focused content areas
 - Application – assess, plan, and act
 - Lay or professional interactions

P4 Summative Exam Blueprint

Standard Setting

- Cutscore or pass/fail mark
- Approaches
 - Absolute/Fixed
 - Angoff, Modified Angoff, etc.
 - Relative/Not Fixed
 - Borderline, etc.
 - Combination
 - Hofstee

Standard Setting

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High Stakes OSCE

- USMLE Step 2 Exam – Clinical Skills
- Canadian Pharmacist Qualifying Examination Part II - OSCE

Accreditation Implications

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Conclusions

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Conclusions

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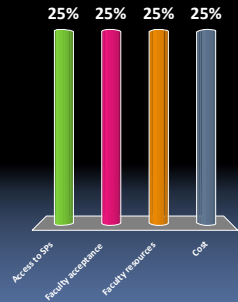
Post-Test Questions

Francine Salinitri, Pharm.D.
Clinical Assistant Professor of Pharmacy Practice
WSU Eugene Applebaum College of Pharmacy and
Health Sciences

TIPS TO TACKLE OSCES!

Which of the following are barriers to implementing an OSCE at your institution?

1. Access to SPs
2. Faculty acceptance
3. Faculty resources
4. Cost



National Findings from Colleges of Pharmacy

1. Lack of faculty resources
2. Cost
3. Lack of access to SP program
4. Limited curricular role if unable to do properly and validate as a testing method
5. Lack of faculty awareness, acceptance or interest in method
6. Scheduling issues
7. No facilities in which to conduct exam
8. Unawareness of technique
9. Simple lack of interest
10. Concern over SP quality

Shurpe, D., et al. 2009

What these barriers entail?

1. Lack of faculty resources (#, time, etc):
 - o Planning development – blueprint
 - o Case writing - SP script, student stems
 - o Case validation
 - o Standard setting
 - o Training – observers, SPs, students
 - o Administering the exam – logistics, setup
 - o Scoring the exam
 - o Remediation
 - o Updating yearly

What these barriers entail?

2. Cost

- Video taping
- *Food*
- Cost of SPs
- ? External reviewers?

3. Other logistics

- Rooms
- Number of students
- Lack of access to SP program

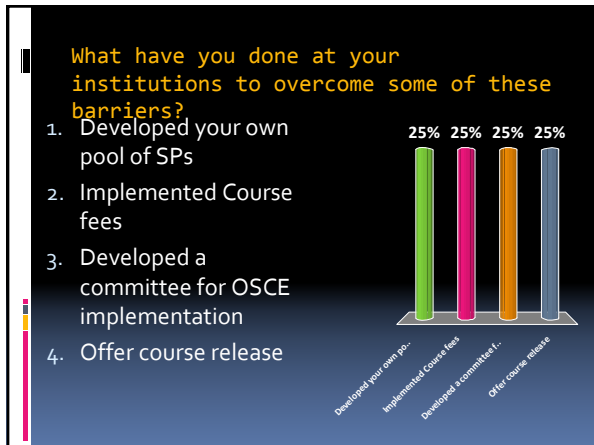
The WSU Experience

- Currently used in;
 - Patient Care Lab – formative and summative, low stakes
 - Key Stone Pharmacotherapeutics Module – summative, low stakes
- Design in Module
 - 4 osce stations, cases related to 4 PBL cases
 - Angoff method for setting standards
 - No remediation
 - 11% of final grade

Faculty and Adjunct Perceptions

- *Will discuss results from 3 years of survey data (still in the process of aggregating data)*
- *Plan to discuss*
- *Time.....*
- *SP's not oriented to pharmacy program (give Wayne experience)*
- *Use residents*
- *Use SPs as observers (talk about Cindy's experience)*





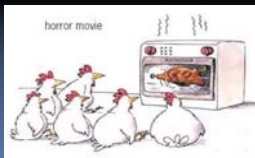
- What are the strategies to overcome these?
- Faculty time/buy in
- Recognition of time
 - Assigned by committee
 - Scholarship of teaching
 - Recognition towards promotion
 - Course release
 - Assessment of curriculum

What are the strategies to overcome these?

- SP Program
 - Work with ASPE
 - Partner with your medical school
 - Develop your own SP program

What can be done?

- Training
 - What is an appropriate amount of time
 - What is an appropriate amount of training
- SPs
- Observers
- Students
 - Focus group discussions



Overcoming students issues

- Rational for OSCE
- Exemplars
 - Videos
 - Sample analytical checklists
 - Sample global assessment
 - A continuum of experiences

Overcoming students issues

- Realistic
- Stress related too
 - Involvement of volunteer faculty
 - preceptors expectations on rotations
 - *Discuss data from WSU's survey and focus group discussions*

Cost Efficiency

- Canada's experience (licensure exam)
- Medical Schools experience
- course fees....
- Video Systems
 - B-line
 - Web SP
 - Third?

Further Assessment

- Banking resources
- Creating a secured resource website
- Recognizing excellence
- Monitoring & assessing progress
- Accreditation