

Introduction

- Unlike other healthcare professions, pharmacist licensing exams in the United States do not include a practical component.
- A practical component, such as objective structured clinical exams (OSCEs), simulate situations which allow students to demonstrate their ability by applying their knowledge in a clinical setting.
 - Students are tested in an unsupervised environment using a circuit of timed, standardized "stations" that can assess diverse clinical reasoning content areas and tasks.
- The Pharmacy Examining Board of Canada (PEBC) incorporates an Objective Structured Clinical Exam (OSCE) component in its pharmacist and pharmacy technician licensing exams.
- The United States Medical License Exam (USMLE) Step 3 board exams for physicians include practical components similar to an OSCE.

Objectives

- To determine the benefits and barriers with implementation of a practical component, such as an OSCE, in pharmacy licensure.
- To evaluate the feasibility and practicality of an OSCE in the entry-to-practice context for pharmacy.

Methods

- A literature review was conducted to identify studies describing a practice component in pharmacy licensure using Google Scholar, NIH, Taylor & Francis, PubMed, Academic Search Premier, New York State Education Department, Change.org, and The State Education Department/The University of the State of New York.
- We investigated the current literature to evaluate the benefits and assess the barriers to implementing a practical component to the Pharmacist Licensure process.
- The following terms were used: "Objective Structured Clinical Examination," "implementation," "generalizability," "OSCE," "practice component," "pharmacy," "large-scale," "medical," "residency," and "resident."
- Articles without the aforementioned MeSH terms, written previous to 1993, or articles pertaining to effects of COVID-19, non-congruent USMLE subject matter, and OSCE examinations of first or second year pharmacy students were excluded.
- Competencies provided by the accrediting bodies of pharmacy were evaluated to determine which competencies might be better evaluated by an OSCE than a written examination.
- An interview was conducted with Dr. John Pugsley, one of the pioneers of the Canadian OSCE within the Canadian Pharmacist licensure process to evaluate the history of how the PEBC established their practical component to their licensure process.

Benefits and Barriers with Implementing a Practical Component in Pharmacy Licensure Examinations: A Literature Review Calib Hale, Minh Tran, Adrienne Uhlyarik, Cassie Moua, Steven Doan, Christina Shum, Kevin Doan, Richard Chong california Faculty Advisors: Stephanie Kourtakis, PharmD, BCACP; Amanda Tran, PharmD, BCACP pharmacy student leadership

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Results



Relevant Accrediting Body Competencies

North American Pharmacist Licensure Examination® (NAPLEX®)

Competency Area 3 – Develop or Manage Treatment Plans - 3.3: Medication Reconciliation

Competency Area 5 – Compound, Dispense, or Administer Drugs, or Manage Delivery Systems - 5.2: Techniques, procedures, or equipment for sterile products

- 5.3: Techniques, procedures, or equipment for non-sterile products
- 5.4: Equipment or delivery systems
- 5.5: Instructions or techniques for drug administration
- Competency Area 6 Develop Manage Practice Medication-Use Systems to Ensure Safety and Quality
- 6.1: Interdisciplinary practice, collaborative practice, or expanded practice responsibilities

American Association of Colleges of Pharmacy® (AACP®)

- Core Entrustable Professional Activity Domains - Domain 1: Patient Care Provider
- Domain 2: Interprofessional Team Member
- Domain 3: Population Health Promoter
- Domain 4: Information Master - Domain 5: Practice Manager
- Domain 6: Self- Developer
- **CAPE Educational Outcome Domains:** - Domain 1: Foundational Knowledge
- Domain 2: Essentials for Practice and Care
- Domain 3: Approach to Practice and Care
- Domain 4: Personal and Professional Development

Pharmacy Examining Board of Canada® (PEBC®)

Competency Area 2: Patient Care - 2.1: Develop a professional relationship with the patient **Competency Area 5: Health Promotion** - 5.1: Engage in health promotion with the patient - 5.3: Contribute to the maintenance of health public environment Competency Area 6: Knowledge and Research Application - 6.1: Apply knowledge, research skill and professional judgement Competency Area 7: Communication and Education - 7.1: Establish and maintain effective communication skills Competency Area 8: Interprofessional Collaboration

- 8.1: Create and maintain collaborative professional

relationships

Discussion

- integrity.

Conclusion

In conclusion, the value of adding a practical component such as an OSCE to pharmacy licensure examinations in the United States is still unclear and will require further investigation and research. Our team has identified key competencies of accrediting body areas and outcomes where such a component would be more useful than traditional testing methods. However, the resources of implementing practical exam might not be feasible in the modern testing landscape. More data is necessary to make a clear decision in adding a practical component to licensing examinations, but with the research presented, our team believes future practicing pharmacists will be even more capable of practicing at the top of their license, in patient and interprofessional partnerships, with such an addition.



"Content validity is established by expert consensus and alignment with clinical practice. Systematic and representative sampling with multiple cases is necessary to overcome context specificity (i.e., blueprinting). Whole task exercises may increase use of diagnostic reasoning." • The present findings add to current understandings of assessors' interpretations of narrative performance data by identifying the strategies and different perspectives used by expert assessors to frame and bring meaning to written comments. Assessors' perspectives affect their own respective interpretations of assessment grading criteria and comments, which are likely to be influenced by a grader's individual beliefs, interpretations of the assessment setting and personal performance theories. These results call for the use of multiple graders to account for variations in assessor perspectives in the interpretation of narrative assessment data.

• Our team compiled and analyzed peer-reviewed articles outlining the potential benefits and barriers of implementing a national practical examination component. • The most promising benefits of such an implementation include superior pharmacist preparation, improvement with interdisciplinary teamwork, comprehensive coverage of current standardized pharmaceutical competencies, enhanced bedside manner, and better patient outcomes. • The most detrimental barriers of implementation of a practical component include cost, manpower, training, and practicality barriers such as redundancy of existing licensure examinations and maintenance of examination

References

