

Summary of the status of the Ophthalmic Clinical Exam (OCEX) as an evaluation tool

I. Validity

A. Process of tool construction

1. The tasks for evaluation of the Ophthalmic Clinical Exam (OCEX) were selected from educational objectives and from generally accepted and previously published norms of practice including previously published objective structured clinical exams (OSCE).
2. The specific tasks in OCEX were selected using a formal task analysis that was based in part on previously published OSCE data
3. The OCED checklist tasks represent the important issues in examining the ophthalmic patient
4. The working group for the evaluation tool construction included experts in ophthalmology and is in press for publication in the peer reviewed literature (Ophthalmology)

B. Formal statistical validation

1. Preliminary data from multiple institutions (to be published) show a statistically significant relationship between training year and rating on the task
2. There is no data that faculty do better than initial trainees on the evaluation tool
3. Preliminary data shows that residents improve over time on repeated testing with the tool
4. The OCEX data is kept in a portfolio but linkage with chart audit and change in performance over time has not been studied yet.
5. Task performance improvement in a post-intervention assessment has not been assessed yet
6. The OCEX tool has external validity and similar standardized checklists have been studied in other learner populations (OSCE)
7. Statistical analysis of individual tasks is not recommended by the ACGME

II. Reliability

A. Process of evaluation

1. The OCEX reviewers were trained with a CD-ROM
2. The scoring rubric was appropriate for the measure (quantitative assessment)

B. Statistics (at least two measures)

1. The preliminary data shows internal consistency and inter-rater reliability
2. The preliminary data show reasonable test-retest reliability data
3. The preliminary data show a reasonable G-coefficient analysis for generalizability

III. Feasibility

A. The residents and faculty completed the evaluations in a useful way

B. The evaluations are useable in a quality improvement model (e.g. repeat OCEX over time)

C. There is a modest time burden for one faculty member per month (1.5 hours) that is reasonable for most faculties

Andrew G. Lee, MD
University of Iowa, Dept. of Ophthalmology & Visual Sciences

IV. Objectivity: The OCEX tool conforms to reasonable standards of objectivity (standardized checklist)

V. Fairness: All trainees of equal ability achieve the same score on the instrument

VI. The OCEX tool addresses the competency of patient care, medical knowledge, professionalism, and interpersonal skills and communication. It is strengthened by linkage with self-documentation in a resident portfolio and could be correlated with a repeat OCEX documenting change in behavior over time to demonstrate improved skills over year of training (discriminative validity). The OCEX could also be correlated with global evaluations (concurrent validity).