Background Information

Quality control and quality assurance of examination questions for assessing and certifying medical student achievement is crucial. It is the responsibility of institution to seek ways to ensure quality of high-stakes examinations.

Teaching and Learning Resource Centre (TLRC) of The Chinese University of Hong Kong (CUHK) completed a major revamp of items used in its final surgical examination in Year 2013.

An internal review of examination item completed in 2007 revealed that half of the items (311 out of 625) that were used in final surgical examination from 2002-2005 were flawed¹.

TLRC attempted to remediate the situation through providing bi-annual item writing workshops, reorganization examination committees, and most importantly, implementation of an item bank from which items for assessments can be store and viewed.

Summary of Result

A follow-up study on the items used in the final surgical examination for 2008-2011 was performed and number of flawed items reduced to 7% (54 out of 742).

Repeated exam items are dramatically reduced from Year 2008 to 2011. Psychometrical data stored with individual item in IDEAL item bank helped on item quality assurance.

Conclusion

TLRC interventions greatly improved the quality of the items that are used in high-stakes examinations in the Faculty of Medicine of CUHK.

More departments in the faculty adopted IDEAL as the database to store their own examination items. Item analysis is regularly done after exam to ensure the quality assessment of high-stakes examinations.

Take-home Message

- The use of an item bank with item analysis program is extremely useful and important for identifying problematic items before and after examination. It ensures the examinations quality and provides a qualified assessment for students.
- Training on item writing can help teachers to write quality questions for medical examinations

What to Expect

- The IDEAL item bank is under revamp to make it more user friendly. It may help users to improve quality items more easily.

Reference:

1. Item Writing Guidelines: Case SM., Swanson DB. Constructing written test questions for the basic and clinical sciences. NBME, Philadelphia. 2001.

Contact: tlrc-elearning@med.cuhk.edu.hk