

National Licensure examination Key Processes

The Ethiopian Health Professional's licensure examination involves several key steps to ensure the quality and reliability of the examination. Here is a brief description of the general process:

Task Analysis:

The first step involves conducting a comprehensive task analysis study, which identifies the tasks, knowledge, skills, and abilities required from a competent practitioner in the specific profession. The analysis is typically done through surveys, interviews, and observations of practitioners in the field as well as through Delphi method with Subject Matter Expert.

Test Blueprint:

Based on the task analysis document, a test blueprint is created which outlines the content areas to be covered in the examination and the weight or emphasis given to each area. This ensures that the exam reflects the key competencies and knowledge needed for competent practice in that specific profession. Blueprint or test specification is the matrix or chart reporting the number and type of test questions represented across the topics in content area, consistent with learning objective and relative weight on test given to each topic. The blueprint also identifies the percentage weighting of cognitive dimensions as the level of competence tested in each knowledge domain.

Key Components a Blueprint are

- Domain of Competencies
- Sub Domains
- Task to be performed & assessed (Process)
- Learning Outcome (LO)
- Assessment Methods/ Activities
- Assessment Tools/ Instrument (test format)
- Relative Emphasis (%)

Item Development:

Expert item writers are selected to develop test questions (items) that align with the test blueprint. These writers should have subject matter expertise and experience in the field. The items are developed following specific guidelines to ensure clarity, relevance, and fairness. The exam questions will focus mainly on “knows how” competency level of the Miller's pyramid. The items are produced in a secure location on designated computers which are free from any internet connectivity and all reference materials to be used are published books and teaching materials. Items are single response (one best answer) type of MCQ items that address the Learning Outcome defined in each content area that are constructed with Stem, Lead-in and four options Options/Alternatives.

Item Review:

Once the items are written, they undergo a rigorous review process. The main purpose of the exam review process is for evaluating content relevance, technical accuracy, clarity and sensitivity related to culture and religion. Subject matter experts as well as psychometric experts will do the review to ensure the items meet psychometric standards. Subject matter experts shall review the items to confirm that they are accurate, clearly stated, and correctly keyed using the checklist. Psychometric experts shall review the items to ensure that they are not technically flawed. There should also be editorial review to check grammar, punctuation and spelling errors. This helps ensure the reliability and validity of the items.

Standard setting method

The standard setting or cut-off point of the Ethiopian Health Professionals Licensure (EHPLE) is determined using the Modified-Angoff method which is one of the widely used and legally defensible standard setting approaches to set a cut-off point for high-stake competency examinations.

The method involves a panel of subject matter experts who examine the content of each test question and then estimate the probability that a minimally competent examinee would answer each test item correctly. The average of the experts' predictions for a test question becomes its predicted difficulty. The sum of the predicted difficulty values for each item averaged across the experts and items on a test is the recommended cut-off point. This score indicates the minimum level of knowledge and skill required to pass.

Insert picture here of standard setting being conducted (from the Web not actual)

Exam Administration:

The Ethiopian Health Professionals Licensure examination (EHPLE) is administered to the candidates following established protocols and guidelines. This ensures proper test administration procedures, appropriate security measures, and appropriate accommodation for test-takers with disabilities who have reported prior to the exam. The exam is administered in selected Government Higher Education Institutions nationally where candidates can choose based on their convenience during time of registration. Once an examinee has selected his/her exam centre during registration window, application for centre change will not be allowed. The exam is mostly scheduled on working days with the schedule posted ahead of time on MOH website and also on the day of examination on all centres. Examinees who have registered for the current exam and those who have received their ID number are eligible to sit for the exam. The mode of exam administration is Computer based Testing.

Scoring and Reporting:

Once the exam is completed, the scoring process begins. Depending on the type of exam, scoring may involve computerized scoring or manual scoring by Scanners. After scoring,

individual score reports are generated and provided to candidates, indicating their performance on the examination.

Post exam analysis:

It is a process of analyzing examinees' responses to individual test items in order to assess the quality of the items and of the exam as a whole. This phase helps to identify any poorly performing items that may need revision or removal from the exam. Item difficulty, discrimination index, destructor analysis and reliability coefficient are elements of exam analysis. The findings of this analysis will help in the removal of poor items from the scoring.

Result dissemination and appeal management:

After scoring and analysis, individual score reports are generated and provided to examinees through the website www.hple.moh.gov.et. After result notification, examinees can submit their appeal through phone or email within 10 days after result notification.

Overall, the exam development process in licensure exams in Ethiopia emphasizes the use of rigorous methods and involvement of subject matter experts to ensure that the examination accurately assesses the knowledge and skills required for competent practice in the given field.