ASSESSMENT OF COMPETENCE
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DAY FOUR
LOGBOOK

What is a logbook?
The purpose of evaluation in postgraduate medical education is to improve and enhance the skills of medical specialists and to identify and rectify identified deficiencies. A number of methods and techniques are in place for trainee evaluation one of which is the logbook. The logbook contains a trainee’s personal information, detailed account of experiences, clinical and educational, entered by the trainee and endorsed by the supervisor. It sometimes has comments from the supervisor referring to the quality of work.

Two types of logbooks are currently in use, manual and computerized.

What is a logbook used for?
A logbook is used for monitoring experiences. Logbook provides a clear profile of trainee’s experiences which is desirable in achieving a variety of goals including:

- Providing evidence of achievement and measuring progress against defined criteria based on the relevant curriculum. Hence it helps in certifying successful completion of training.
- Meeting specialty requirements for volume or variety of experience
- Ensuring exposure to procedures of particular management problems
- Providing records of training and running totals so that supervisor and trainees can easily determine what training has been achieved to date.
- Providing a vehicle for appraisal and feedback.

What are the sections of a logbook?
The typical logbook has the following content:
- Trainee’s personal and training information
- Instructions for trainees on how to fill the logbook
- Guidelines for supervisors on how to authenticate the entries made by the trainee
- Objectives of the training program
- A detailed competency chart listing all the procedures with the level of competence and the minimum number to be achieved by the end of each year of training
- Forms for recording cases, procedures, emergencies handled and academic activities
 What are the steps in developing a logbook?

The typical logbook has the following content:

- Development of log book is specialty specific
- Study the General Instructional Objectives (GIO) of the specialty training program given in the curricular document.
- List the Specific Learning Outcomes (SLO) of training program in terms of what you want your trainee to achieve in the cognitive, and psychomotor domains relevant to the objective. Different types of forms will be needed for these domains.
- For cognitive objectives the aim is to keep track of the progress in knowledge and its application. The supervisor has to be confident that the trainee knows the basics of the topic, is aware of the latest advancements and is able to use the knowledge in day-to-day patient management. This is possible by routine observations however specific time needs to be allocated for discussions and the observations noted in the log book with date and topic. Journal clubs and CPC’s are also a means to this and hence their number and topics should be recorded in the log book.
- For psychomotor outcomes it is important to note not only the number of specific procedures performed but also the level of competence for each instance with date and outcome of the procedure. Hence the forms in the logbook should be developed accordingly.
- A record should also be maintained of the academic achievements such as publications and presentations and research work undertaken with date and title/topic.
- A summary sheet helps in collating the trainee’s experiences over a period of time and gives a general idea of any omissions in training. This sheet may be used by the monitoring authority to gauge the quality and quantity of training received.
ASSESSING AFFECTIVE DOMAIN

Professionalism, integrity, humanism, compassion, empathy, respect, altruism and many such terms can be found throughout the medical education literature, often accompanied by concern on its disappearance in the physicians of today. These affective behaviors have now been combined together under the term "professionalism/professional behaviors".

However, there are inherent difficulties in defining and operationalizing the professional behaviors such as compassion. Hence behavioral criteria are difficult to define and even if one could define them, and agree on a definition, any evaluation of the presence or absence of these qualities in a given situation will be highly context-dependent. Another issue is that who will be the judge: the physician, patient, a sophisticated third party observer such as the nurse?

No single method exists for the reliable and valid evaluation of professional behavior. Different approaches have been taken by researchers. Some of them will be described briefly in the ensuing paragraphs.

1. **Learner’s assessment of peers.** Peer evaluation amongst medical students and residents may be an excellent source of information about the professional and non professional behaviors of learners because peers are in close contact with each other when no authority is present. However peer assessments may be subject to halo effect and the peers may be reluctant to assess each other. These rely mostly on rating scales.

2. **Physician’s assessment of colleagues, residents and medical students.** Such methods also rely on rating scales. Generally inter rater reliability of such assessments is low and it is said that at least 11 physician associates of each subject physician will be needed to have an acceptable level of reliability.

3. **Measurement of separate elements of professionalism.** Humanism has been evaluated through self reports, OSCEs and rating scales. Standardized patients are provided with itemized checklists to score the physicians behavior.
4. **Self assessment, self regulation and self reflection.** Self assessment of professional behavior may be suspect hence it is suggested that it should not be used for summative or certifying purposes.

Many aspects of assessing of affects are open to research and development of suitable instruments is going on in the world of medical education.

**Reference:**
Fincher RME. A longitudinal approach to teaching and assessing professional attitudes and behaviors in medical school. Acad Med 2002;76:511-512