

How to test trust in clinical competence

Seiler Christian

Vice Dean of Teaching Affairs, Medical Faculty of the University of Bern, Switzerland

Introduction

In an article now published in *Swiss Medical Weekly*, Sohrmann and coworkers reflect on a genuinely important subject of our profession [1], indeed of any profession or even society, that is, how to best educate the offspring or, in particular, how to ascertain the pupils' trustworthiness in their professional actions for the care of patients. Bluntly speaking, how can society be sure that the rooky physician won't kill an unconscious patient out of professional ignorance (lack of knowledge) or practical incompetence? The answer is: medical students have to be educated on the basis of predefined professional competencies. These competencies are listed in a new catalogue of learning objectives for the undergraduate medical curriculum, the PROFILES document (Principal Relevant Objectives for Integrative Learning and Education in Switzerland [2]), which was endorsed in 2018 and which – as a clinically oriented curricular design instrument – will become operative at the faculty level in 2021 and during the federal licensing examination (FLE) in 2024. Sohrmann et al. describe a number of key elements essential for successful implementation of competency-based, namely, PROFILES-based medical education in Switzerland [1]. These are: a well-defined curricular design, of which PROFILES is an integral part; a system assessing the students' performance before and during the FLE; a faculty development programme (teach the teachers); and a soft-ware based system for mapping all curricular activities. At one point in their manuscript, it is stated that “the evolution of the assessment system ... towards a programmatic assessment approach is probably the most essential one” (of the abovementioned key elements [1]).

Although I fully agree with the core content of this statement, I could not disagree more with their proposal on how such an assessment system would function, namely based on a summative clinical skills test with standardised instead of real patients. The students' contact with real patients would be probed just formatively.

The PROFILES document

The mentioned assessment gauges the students' performance with respect to PROFILES, the “meta” Swiss Catalogue of Learning Objectives (SCLO) [3]. The relevant term in PROFILES is entrustable professional activity

(EPA), and the main issue of testing a candidate's abilities is whether she or he can be trusted to act medically correctly when starting postgraduate training.

EPAs are defined as units of professional tasks that a medical student can be trusted to perform without supervision once sufficient ability has been demonstrated [2]. EPAs are one of three conceptual pillars of PROFILES, the other two being general objectives concerning the roles a physician should master at graduation and a list of 265 situations as starting points. Whereas the so called CanMEDS roles (the physician as medical expert, communicator, collaborator, leader, health advocate, scholar, professional) are in their sum beyond the reach even of a seasoned physician, the chapter on situations as starting points (SSPs) provides a helpful though incomplete set of circumstances under which a patient presents her-/himself to the doctor. Being confronted with any of the SSPs, the physician should be able to manage them for the benefit of the patient from the first day of her/his postgraduate training. The meaning of “ability to manage SSPs” is specified in a list of EPAs – the tasks a student can be trusted to carry out well and unsupervised once ability has been demonstrated. The central question in the entire concept of PROFILES and its introduction into the medical curriculum is how the demonstration of abilities to perform medical tasks is assessed.

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Should the student's demonstration of abilities to perform medical tasks unsupervised be assessed qualitatively or with which medical knowledge as key to performing a medical task are concerned (e.g., EPA 3 “prioritise a differential diagnosis”), summative assessment in the form of multiple choice questions is the rule. When it comes to practical, clinical skills (EPAs 1 and 2 “medical history taking” and “assessing the patient's status”), Sohrmann et al. – in my mind wrongly – propose qualitative, formative testing of the student's abilities plus a summative “simulator” test 1, which has been the format of clinical skills assessment used since 2011 [4]. The “simulators” are actor patients mimicking diseases more or less clumsily, but uniformly so that none of the examination candidates is challenged by – natural – chance with the full spectrum of biological variability. Thus, the actual practical medical examinations on the national and faculty level are fair tests in the juridical sense, but grossly unrealistic tests in the medical-biological sense.

Correspondence:

Prof. Christian Seiler, MD,
Department of Cardiology,
Inselspital, Bern University
Hospital, University of
Bern, CH-3010 Bern, christian.seiler[at]insel.ch

Accordingly, the current format of the practical medical licensing examination runs smoothly, the fact of which might raise the question of why to change a winning horse. Because introducing PROFILES in the undergraduate medical curriculum is an opportunity to revisit the concept of maximally just versus biologically authentic clinical skills tests. In their review article on the – then – new Swiss licensing examination with its clinical skills “simulator” tests, Guttormsen et al. declared that “high standards for psychometric measures had to be balanced against feasibility and authenticity” [4]. If “authenticity” means the broad biological reality of the patients’ ailments, then this has to be taken as a given, which is not balanceable against psychometric artefacts. The test of trust in clinical competence has not to be primarily just but realistic. It should reflect the very issue of clinical medicine, that is the judgement and therapy of the wide spectrum of disease (and health), and ought to take place on a summative basis with real instead of simulated patients.

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References

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