

Reforming radiopharmaceutical science training through a programmatic approach to assessment

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Abstract

The Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM) is responsible for the certification of physicists, scientists and engineers working in medicine in Australia and New Zealand. In 2019, the ACPSEM Board requested reform of their 3-year Training, Education and Assessment Program (TEAP). The Radiopharmaceutical Science (RPS) reform began in 2022, with the aim of ensuring a flexible curriculum to cope with changing technology and that training be feasibly completed within 3 years.

Although a progressive assessment approach had been implemented in the original TEAP, many areas were not functioning well. The original TEAP lacked checkpoints to ensure progression, had issues with ‘over-assessment’, and did not focus enough on the learning functions of programmatic assessment, with too many assessments feeling ‘high-stakes’. Some skills and content were assessed on multiple occasions unnecessarily, while some skills required more observation and evaluation to ensure progressive judgements about the registrar’s proficiency.

We revised the RPS TEAP by adapting some of the latest findings from programmatic assessment implementations (1-3). The Australian Council for Educational Research worked closely with the lead of the TEAP and an expert group of radiopharmaceutical scientists to adapt programmatic assessment approaches to their context. The result was a revised 3-year TEAP program with a new evidentiary framework, including clearly delineated low-stakes and high-stakes assessment moments, checkpoints, and a suite of assessment types best suited to the learning outcomes. These assessment types included entrustment scale ratings for workplace-based assessment, presentations, formal and reflective reports, short-answer questions, and annotated records. Structured learning activities were also developed.

This work highlights the importance of adapting programmatic assessment to specific training contexts, embracing blurred boundaries between training and assessment, engaging supervisors, management and registrars in the importance of the changes, and importantly, the cultural change needed in thinking about assessment in allied medical education.

References (maximum three)

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