



# RESEARCH TO PRACTICE 2016

14-16 APRIL 2016, MELBOURNE, VIC

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## Determination of clinical competencies for exercise physiology students

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**Introduction:** Clinical placements and assessment are a key part of health professional education. However, quality assessment in a clinical environment is difficult to achieve without a clear picture of what constitutes competence. The aim of this study was to establish a set of competencies that describe the attributes considered critical to ensuring an entry-level exercise physiologist (EP) can practice safely and effectively with a client-centred philosophy.

**Methods:** This study used a mixed methods, multiphase approach. The competencies, which are organised into units of competency with underlying elements, were developed following online surveys and focus groups involving those with expertise in the area, with additional refinement provided by the project team. A first-stage validation was conducted via electronic survey where (i) participants rated the importance of each unit of competency to practice as an entry-level EP; and (ii) those participants who were recently graduated EPs rated the extent to which they perceived they were competent in each unit.

**Results:** The final set of competencies is described as 19 elements organised into 6 units. The units are: (i) Communication, (ii) Professionalism, (iii) Assessment and Interpretation, (iv) Planning and delivery of an exercise and/or physical activity intervention, (v) Lifestyle Modification and (vi) Risk Management. The majority of survey participants (93-97%) considered each unit of competency as being important to practice successfully as an entry-level EP. The majority (78-95%) of the sub-group who identified as new EPs considered themselves competent in each unit, suggesting the competencies are articulated at the level of a new EP.

**Conclusion:** The competencies resulted from an extensive, iterative process involving those with expertise in the area followed by initial validation. The competencies will have a range of applications, including informing the development of a student placement assessment tool.