

Genomics blended learning short courses for medical specialists

Background

The Melbourne Genomics Health Alliance members are at the forefront of introducing genomics into diagnostic laboratory and clinical practice.

Experience with conducting 'Genomics in the clinic' workshops (see separate project summary) demonstrated the value of continuing education in genomics. However, the projected level of demand means there will be challenges with scaling and sustaining such continuing education workshops in genomics for clinicians across Victoria.

Online learning has the potential to provide foundational concepts in clinical genomics at scale, but the acceptability and effectiveness of this method of learning to clinicians was not known. Blended courses, combining online and face-to-face teaching, present a best practice format for adult learning.

Project description

The objective: to enable medical professionals at Melbourne Genomics member hospitals to apply genomics in their clinical practice, and to determine if online learning could provide foundational genomic knowledge.

As a first step toward use of online learning for continuing education of medical professionals in genomics, blended learning courses were developed. The courses were intended to enhance knowledge and practice of genomic testing in the clinic, alongside the 'Genomics in the clinic' specialty-specific workshops (see separate project summary).

The blended learning courses focused primarily on aspects of genomic sequencing before and after the actual test, for both genetic disease (germline) and cancer (somatic) testing. This focus was in response to feedback from medical professionals who had participated in 'Genomics in the clinic' workshops who expressed that they did not need to learn about laboratory testing steps and variant interpretation.

Curriculum development was overseen by clinicians and a steering committee drawn from Melbourne Genomics members, collaborating with the Melbourne Genomics education team. The goal was to select, prepare and present course content and real-world clinical cases that best illustrated the use of genomic testing in a range of disciplines and situations.

Activities, outcomes and lessons learnt

Findings from this project will be made available following publication of results.

Impact

The online modules were made available to students in the Master of Genetic Counselling and Master of Genomics and Health courses (The University of Melbourne), as preparation for the subjects 'Advanced Clinical Genomics II' and 'Frontiers in Genomics', respectively.

Workshop facilitators

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