Case study: boosting the involvement of medical students in research at Cambridge

A new and innovative Medical Student Systematic Reviews Group, at the University of Cambridge School of Clinical Medicine, enabled 53 medical students to contribute directly to ongoing systematic reviews in 16 different research groups during 2018/9.

Systematic reviews are designed to provide a complete, exhaustive summary of current evidence and are a key tool in health research. Being able to identify relevant literature and critically appraise findings are essential skills for all future doctors and for those interested in pursuing an academic clinical career path.

This scheme, funded by Wellcome and the Academy of Medical Sciences as part of the Cambridge Inspire programme, gives students a secure grounding in designing precise research questions, and identifying, appraising and synthesising relevant studies.

Students have access to a newly designed training course and a matching service to connect them to researchers who could supervise their involvement in current systematic reviews.

The scheme is a response to enthusiasm from medical students and follows successful publications with students in the Primary Care Unit over the past few years. We wanted to provide basic training in a supportive environment, with structured opportunities to contribute to systematic reviews, be co-authors on research publications and present at national conferences" – Juliet Usher-Smith, lead for the scheme, Clinical Senior Research Associate and GP, Primary Care Unit

The scheme involves a balance of lecture-based sessions and hands-on practical sessions. In 2018/2019, 79 students attended at least one training session and 65 came to all four. Feedback from students indicated that they felt the sessions were worthwhile and that they would recommend the training to other students. 65% of students surveyed reported that they felt very, or extremely, confident to contribute to systematic reviews after the training, a substantial jump from the 19% who said they felt confident at the start.

53 students were then matched with a researcher to work on a specific systematic review. Six months later, over 80% of those students who responded to an electronic survey said they had enjoyed it and all said they would recommend getting involved in a systematic review to other students.

Thank you so much for such a brilliant scheme – it has taught me so much! The whole process has really solidified the fact I would like to do some research in the future." – student responding to post course electronic survey

Researchers who supervised the students to contribute to a systematic review going on in their groups were also asked about the experience. On average they had met with students between once a fortnight and once a month and they had spent up to 10 hours supervising them.

"All the researchers who responded to our survey felt having the student working on their project had been helpful and all say they will put forward another project for this group in future. Some of the suggestions we received have helped us to redesign the course, highlighting that we needed content to strengthen the training component of the project, such as including additional practice applying inclusion/exclusion criteria for different review types," said Isla Kuhn, co-creator of the scheme and Head of Medical Library Services, University of Cambridge.

About the Medical Student Systematic Reviews Group

The Medical Student Systematic Review Group is designed and led by Dr Juliet Usher-Smith and Professor Simon Griffin at the Primary Care Unit and Isla Kuhn, head of Medical Library Services.

This blog by final year students Madi Fairey and Max Bayne details the experience of conducting a systematic review.