**Creation of an undergraduate teaching tool to address the availability-accessibility paradigm in medical education.**

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**Introduction**

The effects of resource expansion on undergraduate medical education are unclear. We evaluated the experiences of teaching amongst medical students to create tailored summative e-learning resources and improve teaching at our UK medical school.

**Methods**

Feedback spanning five years of clinical rotations through the NHS Lothian Ophthalmology department was analysed, highlighting three areas for the improvement of teaching resources: quality, utility and reliability. We assessed senior Edinburgh Medical School student perceptions of online ophthalmology resources using a nonrandomised pretest-posttest design. Our pretest responses (*n*=68) guided the creation of an online teaching tool mapped to the curriculum and hyperlinked to further content. We trialled this on the same group revising for summative examinations, followed by a posttest questionnaire (*n*=47; 31% attrition rate).

**Results**

Students highlighted the need for high quality, practical resources focused on immediate learning needs. After our intervention, the percentage of students who rated the online ophthalmology educational resources as *high/very high quality* increased from 25 to 96%, those who felt that the resources were *very/extremely helpful* in their revision increased from 16 to 69%, and those who felt that they were *very/extremely likely* to use the resources again increased from 36 to 94%.

**Conclusion**

Our results translate to immediate improvements in the perceived quality, utility and reliability of our University’s educational resources following implementation of a novel teaching tool. Adaptation of our summative teaching tool for Newcastle and Glasgow medical schools, with formal implementation in the curricula, will allow us to evaluate its impact on educational performance and clinical practice.

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**Figure 1** – side-by-side comparison of our eight teaching resources

