



Development of web-based instructional materials for improving the research training of medical residents

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Background Due to demanding clinical responsibilities, individualized schedules, and other time demands on medical residents, class-based instruction is not always the best method for effectively teaching them about health research. The development of an online learning environment which can deliver instructional material about health research in a more individualized, time-flexible fashion will enhance the required instruction that residents receive about medical research methodologies. **Objective(s)** To develop, implement and evaluate the effectiveness of web-based research training modules for pediatric and obstetrics/gynecology medical residents that will support learning objectives related to the CanMEDS “Scholar” role of Royal College of Physicians and Surgeons. **Methods** Develop two interactive, online modules that will support two of the learning objectives within the CanMEDS “Scholar” role. The two learning objectives of interest are: (1) Developing a research question. (2) Critically appraising medical literature. Residents will complete each module in a flexible, individualized fashion during their research rotation. The training modules will present course content through a combination of on-line text and video lectures. The course material will also be put in the context of clinical cases. We will evaluate the effectiveness of the modules through the use of pre- and post- testing that will assess the residents’ knowledge of the research content. We will also conduct a qualitative evaluation of the content through focus groups conducted with both pediatric residents and faculty. **Anticipated Results** The development and implementation of a web-based course to facilitate research skills learning in residents will improve research-related learning outcomes and support the development of the “Scholar” role. **Conclusion(s)** If evaluations show that both pediatrics and obstetrics/gynecology residents benefit from using the training modules, it will be offered to other residency programs at Memorial. Given that this type of educational resource is not known to exist anywhere in the country, we will also offer it to other medical schools for their use.