

## A casuistic model of evidence-based clinical decision making via blended learning

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Learning through experience is an important approach employed by humans to comprehend new problems. Medical practice management is facing a challenge of knowledge discovery from the growing volume of information. Recently, there has been a hot debate about the role of casuistry in the context of evidence-based decision-making. Case-based reasoning (CBR) matches the natural reasoning model similar to that used by physicians: "I have seen a patient like this", and provides recollection of past cases revlevant to the present case. A general CBR life cycle consists of 4 processes: (1) retrieve the most similar case or cases; (2) reuse the infromation and knowledge in that case; revise the proposed solution; and (4) retain the experience for future problem solving.

Current medical students have grown up with computers and expect learning materials to be available electronically. It is a rapidly expanding field with systems evolving from simple computer storage of learning materials to sophisticated web-based multimedia interactive modules. In medical education, a portion of face-to-face approach seems indispensable which led to introduction of a blended learning design, i.e. development of online modules combined with didactic lectures. These learning opportunities encourage dynamic interplay between learners and teachers with e-learning and may help to obviate some of the potential pitfalls of purely online instruction.

Case stories of real patients supplemented with evidence-based literature reviews may serve a valuable resource to develop hypermedial learning objects. Educational principles must be given priority and include: relevance, reliability, validity of content, clarity of delivery, effective use of time and appropriate assessment.