

Title:

Connecting Clinical Reasoning theories with optimal performance measurement in Continuing Education

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Objectives:

The objective of this presentation will be to discuss how CR should be considered in the measurement of performance in CE. In particular, the speaker will explore integration of CR theories in design of, and performance measurement with, virtual patient cases that are historically algorithmic and analytic in nature.

Key Points:

CR theories have identified two distinct systems of reasoning strategies that are used, either separately or concurrently by a clinician. System 1 is non-analytic, implicit and based on "pattern recognition", as the clinician compares the pattern of the case with the mental database of cases they have built through their experience. System 2 is analytic and more explicit, as the clinician uses hypothesis testing and deductions to navigate through a decisional algorithm. Novices rely mostly on System 2 or analytic reasoning. As they gain clinical experience and expand their mental database of cases, they rely increasingly on pattern recognition, enabling them to skip steps in their analyses and reach their clinical decisions faster. As each system of reasoning strategies tends to produce different types of errors, it appears logical to hypothesize that clinical performance evaluation in a continuing education (CE) context, could be biased towards one or the other.