EXPERIENCE WITH USE AND INTEGRATION OF A COMPREHENSIVE CAI PROGRAM

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Background: The Computer-assisted Instruction in Pediatrics Project (CLIPP) was designed to meet the current challenges in medical education through multi-institutional development of interactive Internet-based patient simulations that comprehensively teach the North American core pediatric clerkship curriculum.

Methods: The project adhered to four objectives: comprehensive coverage of the core curriculum, uniform approach to CAI pedagogy, multi-institutional development by educators, and extensive evaluation by users. An iterative process of case development separated content from effective use of the software and was followed by peer review. Case and program level evaluation was conducted during project development, and is ongoing with integration of the cases into the curriculum of 6 medical schools.

Results: After two years of open access to CLIPP over 6000 students at more than 50 institutions completed more than 55,500 case sessions. Peer review of the cases found them to be clinically authentic and focused at an appropriate level. Students found the cases enjoyable, realistic, and a valuable use of their time. Current studies of CLIPP integration suggest that increasing levels of integration increase student use and acceptance of the cases and improve perceived learning effectiveness.

Discussion: The shared development process was critical to the overall success of the project and is at the heart of the widespread adoption of the cases in pediatric clerkships. This project demonstrates that multi-institutional development and implementation of a peer-reviewed comprehensive CAI learning program in medical education is feasible and provides a useful model for other organizations to develop similar programs. Although CAI development is both time consuming and costly, the initial investment reduces significantly with broad use over time.