

Clinical Evidence Summary Apps: Definition, Role, and Unknowns About a Novel Medical Content Delivery Genre

The tremendous uptake of smartphone technology among US clinicians and trainees allows for nontraditional publication of medical reference resources as mobile applications (“apps”).¹ Ozdalga and colleagues² reviewed the published literature on smartphone app use by physicians and described a wide range of clinical applications. Here we describe a new genre of medical education smartphone apps we call *clinical evidence summary apps* (CESAs).

In an era of innumerable trials that can be difficult to identify using traditional web-based searches, CESAs aggregate, summarize, and appraise landmark clinical trials across a range of medical specialties. CESAs are not intended to be exhaustive collections of the literature, but to provide easier context to allow users to find and digest relevant work in each field. Prior to the development of CESAs, identifying important trials required reading editorials, textbooks, or using more definitive online platforms, such as UpToDate, all of which can be costly and not readily accessible without institutional support.

CESAs gain functionality from well-developed mobile operating systems, resulting in simple interface design, integrated search, categorization, rapid update deployment, and Internet connectivity for integration with resources like PubMed and publishing journal websites. CESAs harness a unique educational technology to meet the needs of novice and advanced learners. They provide quick access to the medical literature that most influences

clinical practice, which we believe translates to improved evidence-based patient care. Usage data are lacking, but Heart Failure Trials (Clinical AppStracts LLC), ICU Trials (ClinCalc LLC), and Journal Club (Peripheral Brain LLC) are 3 CESAs independently developed by us that are becoming popular among students and trainees internationally.

There are many unanswered questions about CESAs that warrant further investigation. Who uses CESAs? In what medical domains are they used? What is the uptake in the developing world? How are the apps integrated into practice? Given these unanswered questions and the importance of improving the quality and efficiency of medical education, this area is ripe for additional research.

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