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REPLY TO LETTER TO THE EDITOR

Reply To Letter to the Editor

Smartphone Apps for Orthopaedic Surgeons

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I appreciate and agree with the comments shared by Rohman and Boddice regarding the expanding library of useful orthopaedic applications. In fact, since the initial publication of "Smartphone apps for Orthopaedic Surgeons" in July 2011 [3], much has changed in the realm of available orthopaedic apps. A followup study specifically examining iPad apps [4] and another review of orthopaedic apps [1] were published. I and others are continuing to examine the role that mobile technology will play in the lives of orthopaedic surgeons and patients.

Rohman and Boddice identified an important concept: that the world of apps is in a state of constant change. With this in mind I launched www.TopOrthoApps.com in December 2011 to serve as a continuously updated resource of orthopaedic mobile apps. The site currently includes more than 200 apps for iPhone, iPad, and Android devices, a substantial increase from the 74 apps identified for my original article just 18 months ago. The website includes a listing of peer-reviewed apps and current literature on the topic of orthopaedic applications. In addition, the recent release of the "Top Ortho" app from the iTunes App Store (https://itunes.apple.com/us/app/toportho/id553738826?mt=8) now allows users to read reviews and download apps directly from their mobile devices.

I also appreciate the authors' mention of many newer apps and general surgical and anatomy apps that were not included in the initial review. To expand on their list, it is worth mentioning new educational resource apps such as AAOS eBooks, a plethora of online journals (*Spine*, *Journal of Hand Surgery*, *JBJS Image Quiz*, *Journal of Orthopaedic Trauma*, etc), TraumaLine, and EBSS.Live from AO. There also exist new reference and decision-management apps, such as OrthoRef, Septic Hip, SLIC, and eSplint. Newer apps have been released that focus on patient information and education, including the "Decide" series (SpineDecide, HandDecide, FootDecide, KneeDecide, etc) and DrawMD Orthopedics. Some publications [5, 7, 8, 11–13, 15] have started validating particular apps, which to this point have focused mostly on goniometer-based devices for angular measurements (ie, simple gait or function analysis measures). Finally, the number of non-English apps has been increasing and currently includes apps such as OmbroCotov, OrtoClas, and TumorOsseo (Portuguese).

With the prevalence and use of clinical apps on the rise, concerns have increased regarding app validation [6, 10], the risk of decreased hand hygiene [2, 14], confidentiality [9], and physician distraction [16]. Ultimately it is the responsibility of the physician to make decisions based on appropriate medical information and to ensure the safety of his or her patients. I encourage all providers to consider how apps influence their own practice and to remain diligent about ensuring patient safety and care.

(Re: Franko OI. Smartphone apps for orthopaedic surgeons. *Clin Orthop Relat Res.* 2011;469:2042–2048.)
The author certifies that he has or may receive payments or benefits, during the study period, an amount of less than USD 10,000, from TopOrthoApps.com; an amount of less than USD 10,000, from Visible Health Inc (Austin, TX, USA) and CARE for Patients, LLC, an amount of USD an amount of less than USD 10,000; Lineage Medical LLC, an amount of less than USD 10,000; Rady Children's Hospital (San Diego CA, USA), an amount of less than USD 10,000; and UCSD Department of Orthopaedic Surgery (San Diego, CA, USA), an amount of less than USD 10,000.
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