UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

An Interactive Tablet Based Module on Applying Clinical Decision Rules in Cases of Suspected Pulmonary Embolism

Permalink

https://escholarship.org/uc/item/6rn8b23d

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 15(5.1)

ISSN

1936-900X

Authors

McNamara, R Knettel, C Wald, D

Publication Date

2014

Copyright Information

Copyright 2014 by the author(s). This work is made available under the terms of a Creative Commons Attribution-NonCommercial License, available at https://creativecommons.org/licenses/by-nc/4.0/

Peer reviewed

82 An Interactive Tablet Based Module on Applying Clinical Decision Rules in Cases of

Suspected Pulmonary Embolism

McNamara R, Knettel C, Wald D/Temple University School of Medicine, Philadelphia, PA

Introduction / Background: The ability to access up to date medical information in the emergency department is paramount to providing high quality patent care. With the advent of portable tablet devices such as the iPad, interactive, easily accessible educational resources can now be developed and brought seamlessly to the bedside.

Educational Objectives: Our objective was to develop an interactive module integrating primary sources from evidence based medicine. We focused on how to apply select clinical decision rules in the work-up of a patient presenting with a suspected pulmonary embolism (PE).

Curricular Design: We developed an educational module focused on the application of Well's PE Criteria and PE Rule Out Criteria. The module integrates clinical multimedia along with hyperlinks to PubMed abstracts and full text articles. The draft module was reviewed for accuracy and readability by two board certified emergency medicine (EM) faculty and then by five EM residents for clarity and ease of use. The module is formatted as an iBooks file. It can be viewed using the free iBooks app (version 2 or later) on an iPad (generation 2 and above with iOS5 or later) or iPad mini.

Impact /Effectiveness: With rapidly advancing educational platforms, tablet computers will play a role in bringing medical information to the bedside. Our module was pilot tested by 24 subjects (six medical students, 11 EM residents/fellows, seven EM faculty) and was evaluated for clarity, readability and ease of use. Twenty-one (95.5%, n=22) reported the module was organized and easy to follow, 100% (n=22) noted that it was clearly written and easy to understand. Twenty-two (100%, n=22) reported the iPad format was an effective modality for teaching this topic and 100% (n=22) noted that they were able to easily navigate through the module using an iPad. All (n=22) would recommend the module to another learner and were satisfied (45.5%, 10/22) or very satisfied (55.5%, 12/22) with the module.