The General Surgery Clerkship - There's An App For That!

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INTRODUCTION

The transition of a medical student from their pre-clinical years of education to their clinical rotations can be quite difficult due to new and increased demands in an unfamiliar environment. A mobile phone application was created to provide students with easy-to-access information which would help them acclimate to the General Surgery clinical rotation more quickly and thus enable them to dedicate more time towards the development of skills and a knowledge base with which they will be better prepared to provide for their patients.

BACKGROUND

As the clinical environment changes with the use of smartphones, medical student education can be facilitated with the use of mobile applications (provide reference). There are increasing numbers of mobile applications, “apps”, which are used in medicine for education.1-3 Despite surgical literature describing the difficult transition of medical students from pre-clinical classroom education to clinical rotations, there is no literature describing apps used to assist them.4 In a complex learning environment such as a general surgery rotation, there is substantial logistical and educational information to learn quickly and an ongoing need to easily access such information throughout the rotation.

RESULTS

Sixty-six students responded to the survey prior to the creation of the app. Fifty percent reported feeling not at all or minimally prepared for all aspects of the clerkship at the start of the rotation. However after the app implementation, no students responded feeling not at all prepared. After six months of evaluation, data currently show a trend in the reduction in student’s acclimation time, especially with respect to student’s daily logistical expectations, the elements of disease work-ups, boundaries of being a student, and interpretation of labs. Data collection will continue through June 2015.

CONCLUSIONS

In the medical field, there is an increase in use of mobile apps that serve as educational tools. By creating an app customized to the UAMS surgery clerkship, students have a more efficient way to acclimate to the demands of a busy rotation. Our goal is to reduce the students’ anxiety generated by starting a new clinical rotation, thereby allowing them to focus on the development of skills and learning which will ultimately provide higher quality care for patients.

METHODS

A smartphone app was developed to expedite a student’s acclimation to the surgery clerkship, i.e. what is expected of them in surgical clinics and hospital wards, how rounds are conducted, operating room etiquette and location, lab values, preferences of attending surgical staff, etc. (Figure 1). To guide content, a needs assessment survey was conducted of preclinical (M2) students, and information was obtained from students who completed their clinical rotation, surgery residents, and surgery faculty. The app was offered to students prior to starting the surgical rotation. Surveys were obtained post-implementation of the app to determine students’ subjective acclimation to the clerkship.

REFERENCES


Figure 1. Screenshot of myUAMS from iPhone. A) Mobile application home screen displaying different options from which students can select and read; B) Description of “Acute Cholecystitis,” one of many pathophysiologic entities presented in the “Diseases” section of the mobile application; C) Description of the “Colorectal Surgery” clinic, detailing the location and times of the clinic, as well as expectations of the students working in the clinic.

ACKNOWLEDGEMENTS

Special thanks to MEFFA for providing funding for the creation of this mobile application.