Medical Student Educational Resource Utilization During the EM Clerkship

Byrne RG, Saks M, Patel S, Nocera R, Wald D/Cooper Medical School of Rowan University, Camden, NJ; Drexel University, Philadelphia, PA; Temple University, Philadelphia, PA

Background: Medical students access various sources of information during their clerkships. It is unknown which resources are most frequently utilized during the emergency medicine (EM) clerkship and which of them have the most perceived impact.

Objectives: To evaluate resource utilization by medical students during their EM clerkship and to determine the perceived relative usefulness of these resources. We hypothesized that electronic resources would be favored over hardcopy texts.

Methods: We undertook a multi-center survey study of fourth year medical students during their EM clerkship in three urban, tertiary care academic centers over one academic year. Subjects were surveyed at the completion of the rotation to determine the frequency of usage. The impact of each resource was scored on a 10-point Likert Scale.

Results: A total of 181 surveys were completed. For prior rotations, 68% of students reported using smartphone apps for most or all of their patients while only 35% had purchased or borrowed a book for the EM rotation, and only 4% had a subscription to an EM journal.

Subjects reported using each resource for most or all patients as follows: smartphones 46%, Epocrates® 28%, Up to Date® 24%, Emedicine® 9%, pocket books 21%, review books 10%, online textbooks 15%, hardcopy textbooks 4%.

The resources with the highest impact were: attendings (8.6), residents (8.2), Up to date (7.7), online textbooks (7.5), and smartphones (7.4). Resources with the lowest impact included: other students (5.0), textbooks (6.5), review books (6.3), Google (6.3), and blogs/podcasts (5.3).

Figure 1. Resource Utilization Frequency.

*Data set 1: % Students utilizing resources
†Data set 2: % Students utilizing resource for “Most” or “All” patients
Conclusions: Electronic resources, especially Epocrates® and Up to Date®, were utilized more frequently and had a greater perceived impact on patient care than any printed books. Attending and resident physicians had the greatest impact. The most important limitation to the study was student recall bias.