



MoMed

Mobile Medical Education at BSMS

Jethin Rafique, Mark Packer, Jil Fairclough, Tim Vincent, Lateefah Adesanya, Inam Haq

INTRODUCTION

In 2005 Brighton and Sussex Medical School (BSMS) became the first UK medical school to introduce the widespread use of personal digital assistants (PDAs) by its students, beginning with those in Year 2. PDA use is increasing in medicine, and the use of mobile technologies has been shown to increase adherence to medical guidelines and reduce discharge medication errors¹. The "USP" of these devices is that information can be accessed at "point of need".

¹ Grasso BC, Genest R, Yung K, Arnold C. Reducing errors in discharge medication lists using PDAs. *Psychiat. Ser.* 2002 Oct;53(10):1325-6.

Software on PDA:

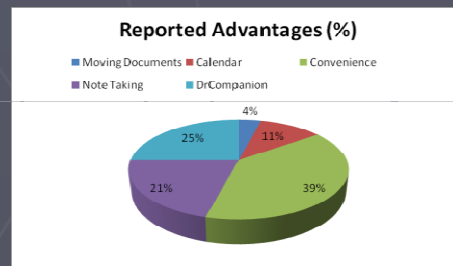
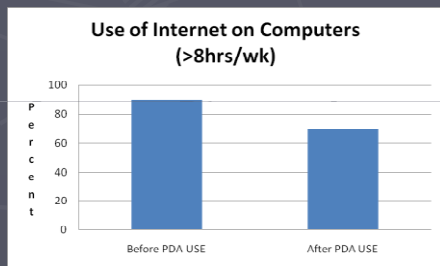
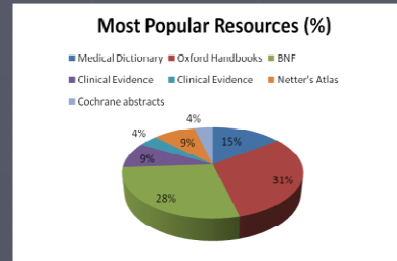
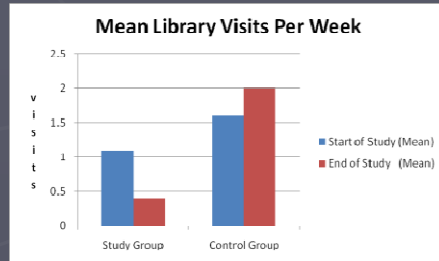
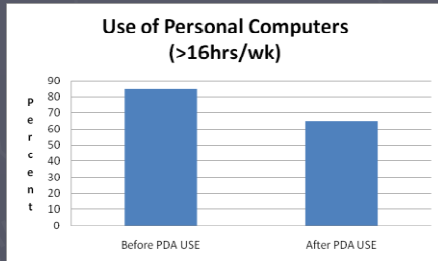
Medical Calculator
Medical Dictionary
Cochrane Abstracts
Netter Anatomy Atlas
Clinical Evidence (BMJ)
British National Formulary
Oxford Handbook of Medicine



METHODS

At BSMS, 20 Year 2 medical students were loaned a Palm Tungsten E2 PDA loaded with a suite of software known as DrCompanion (produced by MedHand International) containing various medical education resources. A qualitative analysis was possible as the group was given questionnaires at the start and end of term looking at expectations, ease of use, effect on computer and library use and perceptions on the future benefits of PDA use in later medical training. There were regular focus group meetings which were videotaped and transcribed. Transcripts were analysed for general emerging themes.

RESULTS



EMERGING THEMES FROM FOCUS GROUP ANALYSIS:

- (i) General increased utility
- (ii) Overall enhancement of learning experience
- (iii) Few technical problems such as small screen size, synchronisation issues, accessing PDF files and concerns with connectivity (i.e. WiFi & Bluetooth)

"You have relevant information at the time you need it!!"

"Now you learn as you go along rather than leaving things till later in the term!!"

"It's good not to have to carry books around with you!!"

FUTURE

Since the success of the initial pilot project, we have designed and rolled out a more robust ongoing study in 2009 involving a much larger sample group [YEAR 3 & YEAR 4 students, N= 222] along with tools for both qualitative AND quantitative analysis. We have also increased the amount of software available on DrCompanion.

Qualitative analysis will be carried out through periodic surveys/questionnaires and regular focus group meetings. We will carry out quantitative analysis with a logging system which logs the user's use of the DrCompanion material on the PDA. This will help identify usage patterns and use them in correlation with new electronic questionnaires which can be distributed on synchronisation and retrieved when completed. We hope this will give a more accurate and thorough academic and technical evaluation with concrete outcomes underpinning the importance of mobile handheld technology in medical education.

SUMMARY

Initial analysis of surveys revealed reduced time spent on library visits, less computer use and much easier access to relevant knowledge when needed.

PDAs show promise as a valuable learning tool for convenient, user friendly learning support. A further more detailed and rigorous study looking at the impact on students in the clinical setting is ongoing.

CONTACT: MoMed : momed@bsms.ac.uk