"iPads on!" – Does the provision of iPad devices within an Emergency Department improve the frequency of access to departmental web KT resources?

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Research, Knowledge Translation, Informatics

Background:

Barriers to implementing effective Knowledge Translation (KT) in Emergency Departments include lack of awareness, lack of time and limited access to resources.

In our teaching hospital emergency department (ED), we implemented a new department website (www.sjrhem.ca) to provide improved access to our KT resources. Having published the website, we wanted to know if the addition of conveniently situated pre-configured iPads would increase access to the website from within the department.

Methods:

The website was developed and first published in April 2014. Two iPads (Apple Inc.) were preconfigured with icons linking directly to targeted pages on our website, including the physician schedule, academic calendar. The iPads were securely located at physician charting desks in October 2014. We used Google analytics to record of webpage visits for 25 weeks before and after the installation of the iPads. Comparisons of mean weekly visits were made using the Student T test (GraphPad Prism).

Results:

The mean weekly page views for the website increased after the installation of the iPads from a baseline of 103 (95%CI 83.9-121) to 198 (181-215); an increase of 95% (71-120; p<0001). Limiting analysis to devices utilising our hospital IP address we saw a 403% increase in mean weekly page views from 6.4 (4.35-8.45) to 32.2 (26.7-37.8; p<0001). There was a clear step increase in website access from the date of iPad installation.

Comparing the increases in average weekly views for those pages with direct link iPad icons (Clinical 11.4 before, 16.6 after, 46%, Schedule 30, 39, 30%, Calendar 10.7, 46.3, 330%, Home 84.1, 115.4, 37%) to the top accessed pages without iPad icons (Research 4.3, 6.2, 44%, Ultrasound 4.9, 9.8, 100%) did not, other than for the calendar page, demonstrate an observable difference. However, when analysed by views originating the hospital IP address, the pages with iPad icons were responsible for 88% of landing pages.

Over the last two years the department iPads were responsible for 17% of our page views, with 6 of the department guideline pages featuring in the top 20 pages viewed.
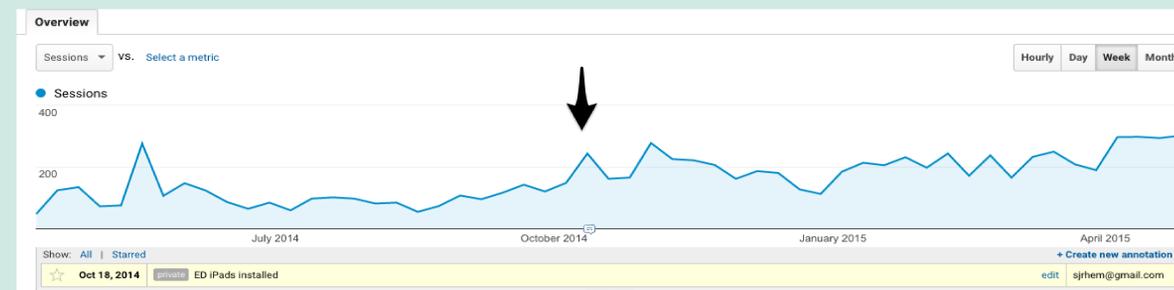
Weekly page views – all sources – iPads installed Oct 2014
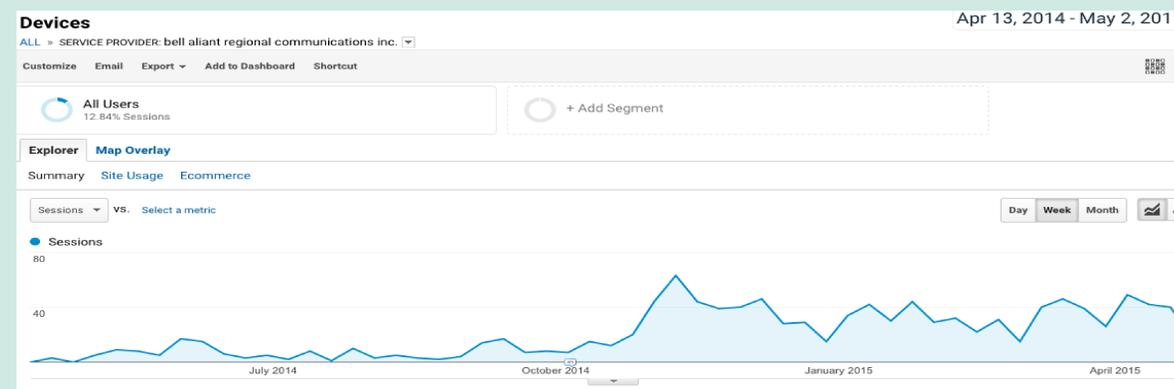
Weekly page views – from hospital IP address– iPads installed Oct 2014

Conclusion:
Provision of preconfigured iPad devices within the clinical environment of a busy ED significantly increases access from within that environment to a department website including the department clinical guidelines.