Low cost and rapid usability evaluation of CMS IPMOE on iPad

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Introduction
The CMS IPMOE on iPad with Chrome as web browser will be deployed to HA Hospitals in June, 2015. Invitations to join this usability test are sent to PMH doctors with different IT knowledge. The usability testing take place in PMH with iPad, using Production CMS for simulating the daily ward round scenario, and viewing IPMOE History; Usability testing for IPMOE with iPad will be on Virtual Hospital CMS.

Objectives
• Determine design inconsistencies and usability problem areas within the user interface and content areas of IPMOE on iPad. • Exercise CMS IPMOE under controlled test conditions with representative users. Data will be used to access whether usability goals regarding an effective, efficient, and well-received user interface have been achieved. • Establish baseline user performance and user-satisfaction levels of the IPMOE user interface for future usability evaluations.

Methodology
Convenience sample of 3 participants are selected to carry out this usability test. They are recruited from PMH dept of M&G. These participants are medical doctors and have completed the user training on IPMOE in March 2013. They are also doctors that have been using IPMOE in clinical settings throughout the past year. The participants’
responsibilities are to attempt to complete a set of representative task scenarios presented to them in as efficient as possible, and to provide feedback regarding the usability and acceptability of the user interface. The participants are directed to provide honest opinions regarding the usability of the IPMOE. Verbal consent is obtained before the test. The participant’s interaction with IPMOE are monitored by the facilitator. Participants are encouraged to "Think aloud" with running commentary so that a verbal record exists of their interaction with IPMOE. Note takers monitor the testing procedure and the test sessions are videotaped. The facilitator has also observed and documented user behavior, user comments, and system actions on data log sheet. After all task scenarios are attempted, the participant have to complete the post-test satisfaction questionnaire.

**Result**

Time on Task (TOT) to complete the preset scenario and Subjective measures by using a post-test questionnaire are collected for data analysis. A usability test report is provided at the conclusion of the usability test. It is found that this low cost and rapid usability testing would be useful and allow for earlier detection of errors in a health information system.