

Scottish School of Primary Care Conference

Carnoustie Golf Hotel

Wednesday 23 January 2008 Abstract Submission

Submissions are invited from SSPC partner institutions and all those conducting high quality research of relevance to primary care, to be presented at the SSPC relaunch conference. Please e-mail your completed form to <u>m.c.pitkethly@chs.dundee.ac.uk</u> by 16 November 2007. Boxes will expand as necessary to accommodate the content but please do not alter the format.

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Title of abstract

Pocket Interview - a handheld data collection tool

Main body of abstract (up to 500 words)

Presentations of research should use headings: background, aims/questions, method, results, conclusions/points of interest, references

Workshops (lasting one hour) should include: background/introduction, workshop aims, content, audience participation

Since their introduction in the 90's handheld computers have become increasingly popular within the healthcare community. The devices are portable, unobtrusive and discreet in nature and provide the potential to view, store, organise and synchronise large amounts of data.

A handheld computer based system (Pocket Interview) has been developed which provides the ability to administer questionnaires and collect data using mobile devices. There are 2 main parts of the system: 1) the client - used for data collection and run on a Personal Digital Assistant (PDA) or Smartphone 2) the desktop-based administration tool - used for defining questionnaires, schedules and collecting and organising the data from the devices in a suitable manner. Administrators can configure and update the data they would like to be collected and the client's interface is

subsequently created dynamically. The system is configured via a graphical user interface which is easily usable by non-computing users.

The client software can also be used to prompt the user, via audio alarms, to provide entries at fixed times and preset intervals. This method of recording data in real-time and in the users natural environment has previously been referred to as 'ecological momentary assessment' (EMA) in medical fields (Stone & Shiffman 1994) and 'experience sampling' (ES) in social and clinical psychology (Larson & Csikszentmihalyi 1983). The user carries a device (usually a PDA) in their everyday life which prompts them to record their thoughts, feelings or actions in the moment, rather than at a later time retrospectively. These experiences are therefore reported before a person has had the time to reflect and reconstruct their experiences after the fact. The client's interval prompts follow a fixed schedule with an optional element of randomness to prevent predictability. The device also allows the users to record personally significant incidents out with the schedule at any time point.

Computerised data-collection tools have been shown to be less susceptible to recall errors and encourage higher user-compliance than pen and paper alternatives (Stone et. al. 2002). However, the users will be interrupted during their daily activities which may prove irritating especially when prompts are more frequent (Ho & Intille 2005). A 'snooze' function is included to allow for situations when the user wants to delay their response.

Initially, the system will be evaluated with a group of researchers who have previously used computerised diaries to monitor work-related stress (Johnston et. al, 2006). There are also plans to use Pocket Interview to design and administer a study with student nurses to monitor nursing stress-levels both at work and at home. It is envisaged that there are many potential health-based applications for Pocket Interview and to encourage its adoption the software will be freely available.

References (if applicable) – maximum of six

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Larson, R., & Csikszentmihalyi, M. (1983). The experience sampling method. New Directions for Methodology of Social and Behavioral Science, 15, 41-56.

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