



The Incidental Approach to Mobile Healthcare

A. Komninos, P. Barrie, J. Newman

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Mobile HCI

- People interact with mobile devices differently than desktop PCs
- Spontaneous information needs, distractions, fragmentation of attention
- “Bursts” of interaction (Oulasvirta 2005a, 2005b),
- Users abandon interactions likely to require lengthy attention spans (Sohn et al. 2008)

Issues with Mobile healthcare

- Lengthy “interaction” sessions are typically required (mUIA)
- Mental & physiological conditions of users
 - Reduced cognitive ability
 - Limited IT literacy
 - Combination of medical conditions
 - Conflicting requirements
 - Socio-economic & organisational issues
- Focus on *intervention* than *prevention* (Orwat et al. 2006)

Incidental mHealthcare

- Prevention sometimes the best cure
- Opportunities to provide healthcare-related information & services by exploiting natural patterns of interaction

Incidental mobile healthcare

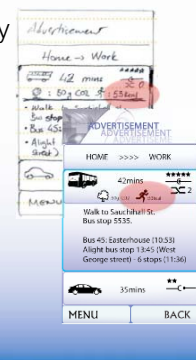
the **implicit** provision of healthcare-related information snippets (*healthy info-snacks*) to mobile device users through non-dedicated applications or means of interaction.

Healthy info-snacks

- Symbiotically embedded within other non-health related applications
- Adding value to other applications
- Do not necessarily aim to help with a particular condition but can be “tuned” to do so
- Visual, auditory, haptic cues to convey health-related semantics

Case study 1: Transport Assistant

- Calories expended per journey
- Planning mode to include physical activity as criterion
 - “I want to go from A to B and I can spare a maximum of 25 minutes. Can you give me the route that involves the most physical activity?”



Case Study 2: SportsHero

- Taking advantage of walking time
- Monitoring user physical activity
- Distorting music to help users meet physical activity targets



Further Work

- Concept Evaluation
- Symbiotic re-design of popular apps (the mobile calendar, address book)



Thank you

w : <http://www.mucom.mobi>

e : mucom@gcal.ac.uk

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