Making The Social Mobile: Mobile Access to Online Patient Communities

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Abstract
This paper describes an approach to extending a social use of technology to the mobile sphere. The target social application is online patient communities, which provide many potential applications for mobile access.

Keywords
Online health communities, mobile technology

ACM Classification Keywords
H5.3. Information interfaces and presentation (e.g., HCI): Group and Organization Interfaces.

Introduction
Online patient communities have long been a source of comfort and information to people with health conditions, particularly if those conditions are life altering or chronic. These communities are as much places of social interaction as they are sources of information, and 'sociability' is very important to a useful and informative site [3]. Furthermore, patients who use online communities arguably have better emotional outcomes than those without support [2].

Patient communities are special in that their focus is on providing support and information for patients (and sometimes support people) dealing with a specific

health condition. Communities are interactive, allowing members tell their stories and share experiences with each other; this distinguishes them from information-based sites. Communities that are based on chronic conditions in particular (e.g. lupus, arthritis) may result in deep ongoing friendships. The reason for this is threefold; first the chronic nature of the conditions means the need for support is ongoing; second many conditions affect patients in a way that they cannot or will not talk about in public—the community is a site of shared experience and a place where they may talk freely; third, many conditions make it hard for a patient to leave their home to attend 'live' support groups.

Interaction with these sites, however, is largely restricted to a desktop or laptop computer, with little facility for interaction 'on the move'. Despite this, there are several situations in which such 'on the move' access may be useful, including:

- A patient needing support from a hospital bed, for example in a late-night case of nerves prior to surgery
- A patient needing information from their hospital bed that their healthcare professionals may not be able to give them, such as what exercises other patients found useful post-surgically for recovery.
- A patient requiring urgent information in their doctor's office (information that their doctor may not be able to give, them, such as how painful a procedure is).
- A patient on holiday wishing to keep up with their online friends by posting pictures or text.

Much of the new work on mobile social software investigates new applications of mobile software for social purposes. Conversely, this author's interest and focus is providing mobile access to and existing social technology—that is online patient communities.

Issues Surrounding Mobile Access

Recently, advances in technology have made it possible to visit and interact with some websites using almost any mobile phone; however such interactions are negatively affected by the small screen size and awkward input methods of standard phones [1].

The problems with mobile access are compounded by certain aspects of online health communities, including:

- Interactivity – many sites require patients to enter text to interact; entering text on a mobile phone can be slow and difficult. This may be compounded by health conditions that make fine movements difficult (for example Parkinson's disease).
- Information volume – when urgent information is required he sheer volume of information available from a community may become unmanageable on a small screen (small screens present problems for anyone with a health condition affecting their vision); and searching is limited by the interactivity of mobile phones.

These issues must be addressed with respect to the needs of the patients in online health communities rather than using a blanket small screen usability approach. First the services patients would use or want must be determined, and the mobile access to these must be designed specifically for these services.

Past work

Background work for this project involved studying how people use their mobile phones on a day-to-day basis. This will inform design of any services relating to online communities by allowing insight into the experiences and frustrations of mobile phone users. The groups studied were businesspeople with newly acquired email phones, fourteen-year-old high-school students, and third year university students.

Present work

The current focus of this work is establishing the needs and preferences of online community users with a large-scale survey. Questions addressed include:

- In what situations would patients most like to access their community from their mobile phones?
- What is the nature of the online communities; how social are they?
- How do patients use their phones in their day-to-day lives?
- What method do patients want to use to access their communities from their mobile phone?

This survey will provide a starting point for designing a mobile social service based on the existing community. This service will be designed based on what users of the existing technology (that is, patients) say they would like from a mobile extension of their community.

Ethno-methodological techniques will be used to determine the uptake and use of the services provided. Important areas to assess include the usefulness of mobile access; whether patients like having mobile access, and whether this access benefits the community.

Because the focus of this work is extending an existing social technology to the mobile sphere, not creating a novel application, it is especially important that the impact of mobile access is positive.

Conclusion

This author is not creating a novel social application for mobile technology. Instead advances in mobile technology are being used to attempt to extend existing social technologies in the form of allowing patients mobile access to their online communities.

Author Background

The author has a research background in digital libraries and HCI, and is presently a doctoral student in social HCI; specifically making online patient communities available in a mobile context. The author has a history of interest in mobile research and is a long-standing member of a patient community.

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