m-Health: “the future of health is mobile”?

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These are exciting times in health information technology and in the emerging field of mobile health (m-Health). m-Health is a reasonably new term that has been defined as “the delivery of health-related services via mobile communications devices” [1,2]. New Zealand’s recently released Draft National Health IT Plan was remarkably silent on mobile health (m-Health) although ‘mobility’ of patients (and health care providers) may have been implied in the vision for Shared Care [3]. The omission of m-Health was mentioned by three contributors to the excellent discussion forum on the health innovation exchange website (http://www.hive.org.nz/content/national-health-it-board-draft-national-health-it-plan) with the authors replying that this would be addressed in the final plan. Surely m-Health is capable of contributing significantly to “better, sooner, more convenient health services for New Zealanders” [4]. m-Health is really about putting the individual at the centre with mobile technology as a tool to support access to appropriate health services and health information. This is starting to be recognised in the literature with recent reviews examining the effects of mobile handheld technologies for hospital physicians [5], the use of mobile phones for health interventions, disease management and improving the process of care [6], text messages for delivering health behaviour change interventions [7], and mobile phones in smoking cessation interventions [8].

This issue of HCIRO has an m-Health theme and draws from presentations made at last year’s m-Health NZ conference and HINZ mobile health workshop. A great variety of presentations were made including an evaluation of the national text message smoking cessation programme (txt2quit, www.quit.org.nz/txt2quit), a telemedicine pilot at Auckland District Health Board, and the incorporation of mobile into Lifeline’s National Depression Initiative. Some of the presentations are available at http://www.slideshare.net/chrispaton/slideshows/4.

Audiences at the both events could not help but be impressed by Tiwari’s account of his work in India establishing a mobile health system. This is a fascinating story of trying out various methods, determining what would not work in this environment, and finding different methods to overcome the challenges. The result is a system that is based around local consultations by village health champions (VHCs) with the support of a mobile communications device with built-in clinical decision support and tools. The system appears to deliver benefits for all by minimising the time involvement of city-based doctors, utilising existing infrastructure for deliveries and assisting VHCs to support themselves by selling supplies. This is inspiration indeed that mobile health programmes can really make a difference.

More inspiration comes from Parry’s vision of RFID-enabled smartcards as the key to all personal health information. This allows the identification of where health information is held, patient-led access rules which can be easily updated as required, and the provision of emergency health information when patients cannot. As the national (and international) discussions become centred on how to simplify the sharing of health information between different providers and patients, this is a valuable contribution to be considered.

Chhanabhai and colleagues found Gen Y students are using text messages to talk about health topics with their friends and family. Although mental health and sexual health topics are still less likely to be discussed in this manner, as they are in other methods of communication. Just over half would be happy to discuss health with their health care provider via text messaging. Our research experience is similar with the majority of our young adult and adolescent participants happy to communicate with research staff by text message, but smaller proportions answering calls or completing web-based forms [9].

Finally, Searchfield and colleagues remind us that any m-Health solutions need to work for everyone, including the hearing impaired and older adults. Indeed m-Health programmes and services should particularly target and be appropriate for those who are unable to access current services for reasons such as geographic isolation, their own mobility, inappropriateness of traditional services, and lack of time or transport.

As presented at the m-Health NZ conference, our team (with the Werry Centre for Child and Adolescent Mental Health) is trialling a multimedia depression prevention intervention that is proactively delivered to adolescents via their mobile
phones. This led into an interesting discussion about the place (and pace) of research in developing innovative interventions. It would be great to keep this conversation going, perhaps via www.hive.org.nz, and for readers to suggest a theme and a host organisation for the next m-Health NZ conference.

The future of health is, to some degree, mobile. Individuals are mobile, and tend to have a mobile communications device in their pocket or bag at most times. Therefore a patient-centred health system needs to have m-Health tools in order to be able to provide the right health information and services at the right time.

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References