Social media: opportunities to enhance communication and collaboration between allied health and other primary health care professionals

Social media is becoming increasingly popular in the fields of education and healthcare. Technologies such as social networking websites, blogs and podcasts can be adapted for use by primary health care professionals to enhance education, communication and collaboration. The main advantages of social media include increased opportunities for networking across geographical boundaries, facilitated knowledge exchange and portability of information. However, concerns about privacy, a potential increase in workload and lack of ongoing training and technical support limit the degree to which these technologies are adopted in the field. This article puts forward a number of strategies for addressing the current challenges and limitations.

Introduction
Social media is becoming increasingly popular in everyday social interactions and, more recently, education and healthcare. The use of social media technologies in health care and education is known as Health 2.0.1; 2 Central to Health 2.0 are the principles of open access, user-generated content and networking in order to personalise health care, collaborate and promote health education.1; 2 Social media technologies that are relevant to primary health care include social networking websites, blogs, microblogging websites such as Twitter, Wikis and podcasts.2; 3; 4; 5; 6; 7; 8 The current role of these technologies in the field of primary health care will be outlined, followed by a discussion of current limitations and future directions, including ways to increase use of social media among primary health care professionals to improve communication and collaboration. The benefits for particular sub-groups of health professionals, such as those working in rural and remote regions, will be highlighted.

For what purposes do primary health care professionals currently use social media technologies?

Social Networking
Social networking websites are online group-forming applications, where users can connect to others through shared interests or backgrounds.4; 8 Demographic and other information is collected for each user and stored in the form of user profiles, which can be shared amongst network members.4; 9 Thus, networks form as members link their profiles to other profiles or use the search function to find users with similar interests.4; 8 Perhaps the most well-known social networking service is Facebook9 (http://www.facebook.com), which is primarily used to facilitate social interactions, but has increasingly been used by businesses and other organisations to promote their products and encourage discussion among their networks of followers. On the other
hand, LinkedIn (http://www.linkedin.com/) is mainly used for professional networking, particularly in business. 9

Social networking sites have the potential to enhance communication and collaboration by bringing together people with similar backgrounds or interests, who can interact through a range of means, including private messaging between members or groups and public announcements. 4; 8 The nature of social networking means that health professionals are able to engage with fellow professionals, patients and other community members, thus enabling more inclusive discussion and debate on various issues. 4; 8 Furthermore, some social networking websites allow for contacts to be placed in distinct groups, thus enabling effective management of communication with different stakeholders.

**Wikis**

A Wiki is an online page or series of documents, where individuals are able to collaborate on a range of projects, by freely adding, editing and sharing information with other participants. 3; 4; 6; 7 Perhaps the most widely-known example of a Wiki is Wikipedia (http://www.wikipedia.org), which has been shown to be as accurate as non-editable online encyclopaedias such as Encyclopaedia Britannica. 3; 6; 7 Wikis are becoming increasingly popular in the field of health education, as they support active engagement in problem solving activities from a range of participants, including those located in rural or remote areas. As Wikis are web-based, no new software is needed in order to use these tools, 6; 7 meaning that they are virtually free for anyone with an internet connection. Another important advantage of Wikis is that the collaborative nature of this tool provides reliable quality control, in that outdated or inaccurate information can be rapidly edited or replaced by the community of users. 7 However, the accuracy of the information in any Wiki is dependent on the size of the community, their expertise and experience and the frequency of their engagement with the tool.

Wikis have the potential to enhance communication and collaboration between primary health care professionals, as they are easy to use and can be utilised to access and share knowledge at any time and place, facilitating collaboration across geographic boundaries. In particular, they are likely to benefit rural and remote professionals, as a means of addressing the isolation and access barriers experienced in these areas. 10 Current examples include the use of Wikis by numerous conference organisers, which enables delegates to exchange information and network prior to the event. 6 Similarly, Wikis can be used during a conference and can encourage participation and engagement from non-attendees. Outside of conferences, Wikis can be set up to share information in a particular subject area, incorporating the views of a range of experts worldwide. For example, the Flu Wiki (http://www.fluwikie.com) has been used as a source of reliable, up-to-date information that has been valuable in community planning efforts for a potential avian influenza outbreak. 3; 6
**Blogs and Microblogs**

Blogs are essentially content-management tools, with information and any accompanying links, audio and visual attachments presented in reverse-chronological order.\(^3\); \(^4\); \(^6\); \(^7\) There are numerous examples of blog networks, where users link to other blogs covering the same theme or topic, enabling easy navigation for users.\(^4\) Like Wikis, blogs are easy to create and update, with a range of free blogging tools available online.\(^4\) Croakey, the Crikey health blog (http://blog.crikey.com.au/croakey) is a widely read health blog, which appeals to health professionals, policy makers and lay consumers. Another example is the Kings Cross Doc blog (http://kingscrossdoc.blogspot.com), which provides an overview of issues encountered by an addiction medicine specialist, as well as more general discussion of current health and policy developments. Microblogging is essentially the same concept, only with briefer entries.\(^5\); \(^7\) The most widely used example is Twitter (http://www.twitter.com), which imposes a 140 character limit on each entry.\(^5\); \(^7\)

Blogs provide an opportunity for primary health care professionals to communicate ideas to their peers, and to build new connections and partnerships by following blogs that are of interest to them. Currently, the majority of health-related blogs are created and accessed by lay users, with little or no input from health professionals.\(^4\) Opportunities exist not only to increase professional participation in these blogs in order to improve their accuracy and create a new means of communication with consumers, but also to establish networks of blogs that are particularly relevant to primary health care workers. Examples include blogs focusing on professional education, policy reforms and discussions about specific areas of primary care incorporating clinical cases and images.\(^6\)

Similarly, microblogging tools such as Twitter can be used by primary health care professionals to keep up to date with the latest developments in various professional organisations, be alerted to new medical information and keep colleagues informed with regard to their own activities.\(^5\); \(^11\) Examples include the Primary Health Care Research and Information Service Twitter account (http://twitter.com/#!/phcris), which provides updates on the latest information relevant to primary health care and the 6 Minutes Medical Twitter account (http://twitter.com/#!/6_minutes), which updates Australian doctors on the latest news and developments. Twitter may be particularly beneficial for busy professionals, who can judge whether a topic is relevant to them from 140 characters, rather than having to read through lengthier blog posts or news articles. Twitter can also be used to disseminate conference updates to non-attendees,\(^5\); \(^11\) providing a real-time account that may be particularly useful for geographically isolated professionals.

**Podcasts**

Podcasts are audio or visual (vodcasts) content that can be downloaded by users and listened to either directly through the computer or by transferring it to a portable device such as an iPod or smartphone.\(^3\); \(^4\); \(^6\); \(^7\) Examples include the New England Journal of
Medicine’s weekly audio summaries (http://podcast.nejm.org/nejm_audio_summaries.xml), which provide an overview of the content that is published in new issues of the journal, while ABC Radio Health podcasts (http://www.abc.net.au/services/podcasting/subject.htm#Health) cover a range of health topics relevant to both health professionals and lay users. Information delivered in this format is portable and ideally suited for busy individuals who can incorporate listening to podcasts into their regular commute or long-distance travel.

Currently, podcasts are widely used as one method of educating medical school students by providing lecture recordings, audio recordings of textbook chapters and libraries of heart and respiratory sounds. There are obvious advantages for rural and remote students, who may have difficulties in attending every lecture and who would benefit from being able to listen to textbook materials while commuting. This technology can be adapted to provide ongoing professional development and education to primary health care professionals. Making learning materials available in a portable format may be particularly beneficial for time-poor health care workers and those situated in remote locations, for whom physically attending seminars and workshops may be problematic.

Current limitations and challenges
While many primary health care professionals understand the benefits of using emerging technologies, uptake is generally low. Common barriers include a lack of ongoing and comprehensive training, costs associated with buying or upgrading equipment, concerns about a potential increase in workload and a preference for the traditional approach to medicine and collaboration. Learning to adopt these new technologies into everyday practice can be frustrating and is likely to require an investment of time when first implemented.

One important limitation of social networking sites is the potential for users to be distracted by the seemingly infinite web of connections, resulting in continual aimless perusal of profiles based on common links. Furthermore, concerns about privacy may limit the utility of social networking, making it increasingly difficult to form new connections if users choose to hide their personal and professional details from their searchable profile. The use of tools such as Facebook for both personal and professional purposes has the potential to impact negatively on individuals’ work/life balance by blurring the distinction between work and other aspects of life.

The main issue pertaining to blogs and Wikis is the lack of moderation. Any individual is able to upload and edit information, which may compromise accuracy. As users have the option of being anonymous, it is difficult to make judgments regarding the credibility of the available information. Podcasts typically involve large file sizes, which may exclude individuals with unreliable internet connections, such as those in remote areas of Australia.
Future directions
Primary health care professionals need to be actively involved in the design and implementation of social media tools in order to address the identified barriers. The design needs to be streamlined, integrated and interoperable, as busy primary health care providers do not have time to use a variety of technologies that all need to be opened in separate windows and operated differently.\textsuperscript{7, 13, 17, 18} In order to make these technologies user-friendly, they could be integrated into one application, which can be customised according to need.

Financial incentives are likely to encourage adoption of new technologies,\textsuperscript{13, 14, 15, 19, 20} particularly in rural and remote areas where access to technology is poor\textsuperscript{10} and smaller practices, where the relative financial burden will be greater.\textsuperscript{21} In remote areas, the poorer telecommunication and internet access and infrastructure issues in some locations would need to be addressed.\textsuperscript{10, 13} Ongoing and comprehensive training and technical support is essential, particularly in rural settings where staff turnover is high and external sources of IT support are limited.\textsuperscript{10, 13}

If the identified barriers are successfully addressed, these technologies have great potential for increasing and improving communication and collaboration between primary health care professionals, particularly those located in rural and remote areas.

References


