



Pulling people, places, pages and pathologies together through farm health

Bianca Todd^{1,2}, Susan Brumby^{1,2}, Alison Kennedy²

¹School of Medicine, Deakin University; ²National Centre for Farmer Health, Western District Health Service

Abstract

Introduction: Geographical isolation, lack of access to internet connectivity, social isolation and poor quality information have been cited as influencing health, wellbeing and safety outcomes for rural and remote populations. Of particular concern has been the dearth of rural topics on the highly accessed Better Health Channel (BHC) website developed by the Department of Human Services with nil resources focussing on farmers' health, who represent a heterogeneous subset of rural populations generally.

This paper outlines the union of people, places, pages and pathologies by describing the collaborative process of developing a website and online resources to engage, improve access and make a real difference to farmers' lives.

Method: A search examined all sites providing farmer health information to identify gaps in Australia. A skills-based, consumer-focused advisory committee was established comprising farmers, (with varied levels of computer literacy), industry representatives, health professionals and IT specialists. Quarterly meetings were held over 3.5 years to design, develop, implement and evaluate a website devoted to addressing the health issues of farming populations. The website advisory group contributions were complimented by a survey assessing the preferred content and design of a farmer health website. A partnership was established with the BHC to increase agricultural content. To ensure credible and up-to-date health information, Health on the Net Foundation (HONcode) accreditation was sought. The HON Foundation is a non-government organisation ensuring adherence to a basic set of principles and certifying websites publishing reliable health information.

Results: The input from both the advisory group and the survey participants were utilised to develop a farmer health website. In April 2010 the HONcode accredited www.farmerhealth.org.au website was launched with over 80 fully referenced farmer health, wellbeing and safety fact sheets, shared through RSS feeds with BHC. Weather, videos, discussion forums, education and interactive learning tools were provided. Since 2010, www.farmerhealth.org.au has had over 90,000 unique Australian and international visitors and over 350,000 page views.

The most accessed pages are health and safety topics including: zoonotic diseases such as Scabby mouth (Orf), eye injuries, succession planning, crush injuries and depression. This reflects both the nature of the farming population's need for information and the health and wellbeing issues experienced by farmers. For example Scabby Mouth (poxvirus) is a disease of sheep which can also infect humans in a condition known as Orf. Previously information focussed on the animal health effects of Scabby mouth, failing to recognise its common effect on humans. The intersection of both conditions—Scabby mouth and Orf—highlights the importance of cross sectoral knowledge and dissemination.

The website has also been used to communicate with farmers in rural populations generally. One successful example was through the 'farming in focus' photography competition, attracting over 1100 digital submissions available for viewing on the website and via a touring public exhibition.

Discussion: Building on the original website, we now disseminate information and encourage engagement through a variety of platforms including Facebook, Twitter, YouTube, BHC, university webpage and a mobile-ready website.

Given the continuance of poor digital access in farming communities, the emphasis is to ensure that cross sectoral partnerships are fostered to further explore internet connected, web-based interventions to improve farmer health.

Introduction

Farming communities within rural populations have long been associated with the contradiction of 'social isolation', yet a high degree of 'social connectedness'. More recently social isolation has become increasingly evident as farms become larger, with fewer employees and smaller families. A lack of connectivity relates not only to social activity but mobile connectivity and the Internet. Recent research has highlighted that being socially connected has positive health, wellbeing benefits, while low level social connectedness and poor access to quality information negatively influences health, wellbeing and safety outcomes for rural and remote populations.¹ Whilst farming populations form part of rural populations and face some of the same challenges as rural populations, there is a difference between living in a rural town or city and living and working out on a farm. Farms, in many ways, are an ideal place for health promotion activities as they blend family and work, extended families and communities, and, with over 90% family owned or operated, can potentially affect future generations' health literacy. With rising Internet activity from the early 2000s, Australia's 3.8 million internet subscribers at the end of the September quarter in 2000² had grown to more than 12.5 million subscribers at the end of June 2014.³ Government departments have been keen to exploit the opportunities that the Internet provides to improve health, wellbeing and safety. In Victoria, the State Government Department of Human Services (as it was then known) developed the Better Health Channel in 1999, which provided independent, evidenced based health pages with quality medical and lifestyle information.⁴

It was noted however, that a gap existed in the number of rural topics, particular those relating to farmer health, which, for the decade since 2003, had the highest or second highest rate of workplace deaths, when compared with other occupations in Australia.⁵ Not only did agriculture, farming and fishing have the highest rates of death in the work place, there were also other anomalies existing in rural populations, such as the shorter life expectancy and higher rates of suicide⁵. It was noted there were very few topics specific to rural populations on the successful, and increasingly accessed, Better Health Channel (BHC), with nil resources focussing on farmers' health.

According to the Australian Bureau of Statistics in 2007/2008, Australia had 4.3 million broadband subscribers (52% of all households).⁶ Furthermore, on average 17% of farms had dial-up subscriptions, and 48% used a broadband connection in 2007/2008, with 66% of farms utilising the Internet for business operations.⁷ The number of Internet subscriptions continued to rise in 2014 where Australia had 12.3 million subscriptions, 98% broadband and only 1.5% dial-up.³

In 2011, the median age of farmers was 53 years old, with almost a quarter of farmers over the age of 65.⁸ Colloquially, this age bracket is typically referred to as 'baby boomers', born between 1946-1961 in Australia.⁹ Surprisingly, older adults represent the largest and fastest growing group of internet users.¹⁰ General Practitioners (GPs) note that 'Baby Boomers' use the internet to search online to find remedies for their health issues before seeking the assistance of a GP.¹¹ In addition, those living in rural or remote areas are less likely to have visited a health professional in the last twelve months than their urban counterparts.¹²

Providing quality health resources online empowers farmers and farming families to make more informed decisions about their health and wellbeing, and assists in improving attitudes and help-seeking behaviours.^{13,14}

Project aims

The farmer health website had four main aims:

- To increase the availability of farmer health specific information unique to this sector of the workforce.
- To improve efficiencies in delivering health awareness for farming families and agricultural workers through flexible, innovative, interactive and fun techniques, while still being accurate and informative.
- To provide efficient access to quality information, without the barrier of a login process, was required to be available on any day, at any time.

- To benefit farmers and agricultural workers but also the rural and health professionals who see first hand the unique issues affecting farmers' health. The Farmer Health website was to be the 'one stop shop' for farmers and educators allowing for the dissemination of the latest research findings.

Method

A skills-based, fixed term consumer-focused advisory committee with 13 members was established, comprising six males and seven females. Five members were farmers (with varied levels of computer literacy), two were industry representatives, four were health professionals and two were communications and IT specialists. It should be noted that, of the five farmers represented, three held dual roles as professional or industry representative and farmer.

Terms of Reference were developed and quarterly meetings were held over 3.5 years to design, develop, implement and evaluate the website. It was envisaged that the task would take up to 3 years. The advisory committee completed its task in 3.5 years and has subsequently disbanded.

In September 2009, a survey of 9 questions was sent to a convenience sample of participants through the NCFH Advisory Committee networks (See Appendix 1). The survey was accessed via an email link to a Survey Monkey survey. Ninety-one (91) participants completed the survey to identify key areas to be included in a website about Farmer Health. Farmers represented 50% of those surveyed. Other representatives included rural health professionals (28%), rural agricultural professionals (2%), students (1%), academics (8%) and other (10%).

Results

Advisory Committee results

The advisory committee developed a number of recommendations and requirements for the farmer health website. Consideration was given to catering for the specific types of website connections farmers had—for example dial up, satellite, and broadband connections—which was imperative to the development of a website with quick to load pages to any device, and via any type of connection.¹⁵ A common complaint in Western Victoria was the interference of shorting electric fences with Internet access.

The website needed to be easy to navigate, with clear areas of importance and clear visual hierarchy. An emphasis on the use of whitespace to improve readability and providing the option to switch to a text-only version of the website was also flagged.¹⁶

Content was written to provide health information in easy to understand terminology, with quality ensured by a three-step review process before publishing. Topic pages were written and referenced by the Web Content Manager, with supplementary references added by a research assistant before being reviewed by an academic then a clinician.

The website also had to be visually appealing to female farmers as they were identified as the main disseminators of health information in farming networks and, more immediately, in the home.

In sum, the Farmer Health website was to be the 'website of choice' for students, farmers, researchers, government, rural and health professionals who used the website to access up-to-date, accurate health information peculiar to farming populations. Primarily, the website would transfer knowledge by providing web-based information and developing professional networks.

Survey results

Complementing the recommendations made by the advisory group, the survey results provided further detail as to what those involved in agriculture were looking for in a health website. Among those surveyed, participants were most likely to be seeking fact sheets about farmer health issues (81.1%), reliable links to health information (74.3%), and latest research findings pertaining to health (70.3%). Specific content requested by participants also included weather information, current rural news items, mental health advice (including contact numbers for emergency care), financial counselling/farm succession planning guidance, information about best practice, as well as safety

information for children on farms. More generally, participants valued content when it was considered reliable and practical. Particular design emphasis was placed on ease of navigation and a clear layout, with participants seeking an ability to search for further detail in an intuitive and efficient manner.

Website development

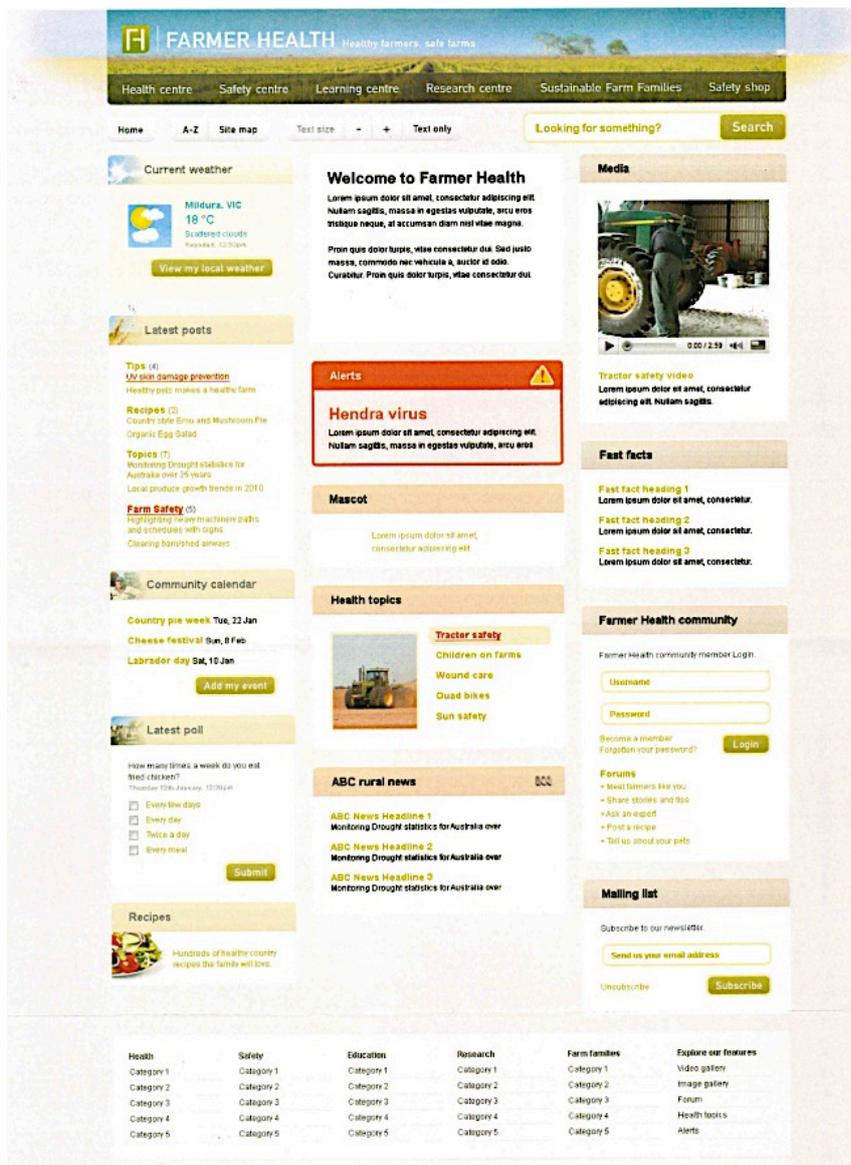
A content management system (CMS) was sought to allow the regular upkeep of the website to maintain and promote content, while also allowing for functionality into the future. A tender brief was put out and, following rigorous discussions with various hosts and developers, a company was engaged.

The website was developed on a test server to allow for styling and functionality to be trialled before going public. The website was launched publicly after a nine month development phase. The advisory committee evaluated the changes made to the website during this development phase.

Drawing on the latest usability research by Jakob Nielsen¹⁷, the website was drafted to be compatible across various popular web browsers such as Internet Explorer, Mozilla Firefox etc., with content and navigation tools that were left aligned, to follow users' natural eye flow. To improve use by farmers, and assist navigation throughout the website, emphasis was placed on making the website easy to use. Optimal navigation was achieved by drawing on previous research about predictable eye-tracking patterns¹⁸. What a user first sees in the viewport is the most important area to situate significant information such as navigation and content¹⁸.

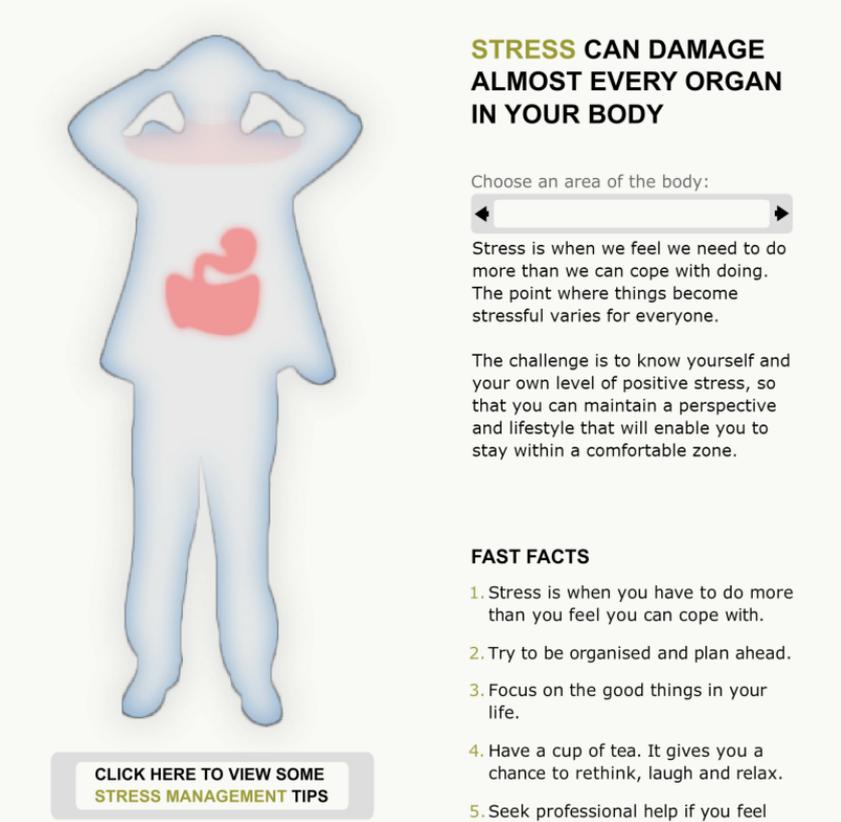
Six key centre aligned sections of Farmer Health were established as the main navigation items. These included the Health centre, Safety centre (both centres featuring farmer focussed topic pages), Education centre, Research centre, the Sustainable Farm FamiliesTM program and the Safety Shop. Secondary navigation options were placed down the left hand side of the site, such as weather information, links to advisory groups, community forums and login section of the website. This layout ensured that content pages were not too busy, and would not disturb the natural eye flow of the user (Figure 1).

Figure 1 Mockup of the Farmer Health website homepage



Interactive elements were also developed, including recipe pages (with users contributing recipes checked by a Nutritionist before being published), a community calendar (where users could upload their event), community forums, quizzes and polls. Password protected content was developed to allow advisory committee members and health professionals to access information, such as meeting minutes or Sustainable Farm Families™ (SFF) workshop materials. In addition, interactive tools were created. A stress tool allowed users to click on the areas of the human figure to highlight associated symptoms of stress, and provide tips to alleviate known stress triggers (Figure 2).¹⁹ An interactive windmill allowed users to click on the spinning sails (or blades) each with a clickable topic that displayed information about associated health and safety facts (Figure 3).²⁰

Figure 2 Interactive stress tool



STRESS CAN DAMAGE ALMOST EVERY ORGAN IN YOUR BODY

Choose an area of the body:

Stress is when we feel we need to do more than we can cope with doing. The point where things become stressful varies for everyone.

The challenge is to know yourself and your own level of positive stress, so that you can maintain a perspective and lifestyle that will enable you to stay within a comfortable zone.

FAST FACTS

1. Stress is when you have to do more than you feel you can cope with.
2. Try to be organised and plan ahead.
3. Focus on the good things in your life.
4. Have a cup of tea. It gives you a chance to rethink, laugh and relax.
5. Seek professional help if you feel

[CLICK HERE TO VIEW SOME STRESS MANAGEMENT TIPS](#)

Figure 3 Interactive windmill safety tool



FARM SAFETY

Click on the windmill to choose a topic:

Children

Fact
Around 20 children under 15 years of age die each year as a result of injuries on Australian farms. Many more are injured.

Fact
Four wheel bikes (sometimes called ATVs) are the most common cause of injury for children aged 5-14 on farms.

Fact
Drowning is the cause of around 35%-40% of all on child deaths on the farm. Children under five are at greatest risk.

[CLICK HERE FOR RELATED SAFETY TIPS](#)

EXTERNAL LINK

Website content

Topic pages were written so that farmers could absorb health information quickly by ensuring content length was short and succinct, using non-medicalised terms to ensure the language was appropriate and not intimidating. Key summary points were further reiterated at the end of each topic page. All

information on the page was referenced and offered a list of links categorised into three subheadings: 'More information', 'Clinical guidelines' and 'Peer reviewed publications'. Images were also sought from internal photo libraries and Creative Commons collections to add visual relevance and interest for each of the topic pages.

Social media

Investing time into developing a presence on Twitter and Facebook were rejected as effective means of reaching the target farmer group when first discussed in 2009. The advisory committee believed Twitter to be a technology that would not be overly applicable to the end-user. In 2011, Farmer Health adopted a social media presence on Twitter, an information sharing application using messages limited to 140 characters. A presence on Facebook commenced in 2012. Farmer Health has found this cross-sectoral, collaborative platform effective in promoting content and enriching relationships between farmers, health agencies and stakeholders. Farmer Health social media accounts now have over 1500 followers.

Partnerships

A partnership and memorandum of understanding (MOU) was established on BHC to increase agriculture specific content. Farmer focussed pages were to be published with content reviewed annually. An agreement was formed with BHC to allow relevant RSS ('really simple syndication') feeds to be inserted into Farmer Health topic pages to provide further credible content. The secondment of the Web Content Manager from the Department of Health also assisted with the creation and appraisal of suitable content.

An annual review of content was implemented to ensure ongoing currency and relevancy of information. A broken link checker was also employed in the background of the website to ensure the list of links, provided on each topic page, were current.

To ensure credible and up-to-date health information, Health on the Net Foundation accreditation was sought. The HON Foundation is a non-government organisation, ensuring adherence to a basic set of principles, referred to as the HONcode, and certifying websites publishing reliable health information. A review of site content and conduct is performed biannually to retain HONcode accreditation.²¹

Launch

In April 2010, the HONcode accredited www.farmerhealth.org.au website was launched with over 80 fully referenced farmer health, wellbeing and safety fact sheets, shared through RSS feeds with BHC. Weather, videos, discussion forums, education and interactive learning tools were provided.

Engagement

Since 2010, www.farmerhealth.org.au has had over 90,000 unique Australian and international visitors viewing over 350,000 pages (Table 1). The majority of Australian visitors are Victorian (Table 2).

Table 1 Total number of unique visitors to Farmer Health website between April 2010 and March 2015

Country	Unique visitors	Percentage of total
Australia	56,581	59.48%
International	38,539	40.52%

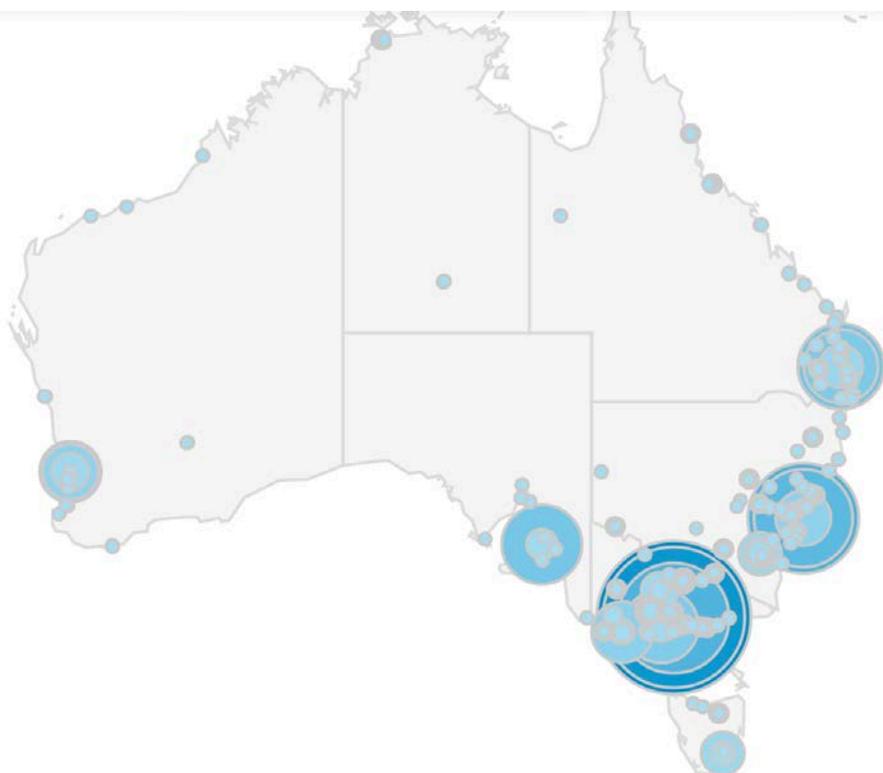
The most highly accessed pages have consistently been the zoonotic disease Scabby mouth (Orf), a common zoonotic disease spread from sheep to humans²², eye injuries, particularly Weld Flash²³, succession planning²⁴, crush injuries²⁵ and depression.²⁶ This reflects both the nature of the farming population's need for information and the health and wellbeing issues experienced by farmers.

Table 2 Total number of sessions (visits) per Australian state/territory to Farmer Health between April 2010 and March 2015

State/Territory	Sessions	Percentage of total
Victoria	48,879	54.86%
New South Wales	17,231	19.34%
Queensland	9,690	10.88%
Western Australia	4,941	5.5%
South Australia	4,590	5.15%
Australian Capital Territory	2,056	2.31%
Tasmania	1,460	1.64%
Northern Territory	179	0.20%

While the primary aim was to engage with farmers, the website has also been used to communicate with rural people generally. One successful example was through the 'farming in focus' photography competition 2010²⁷ and 2012²⁸, attracting over 1100 digital submissions across all Australian states and territories, and 30 submissions internationally. These photographs were available for viewing on the website, via a touring public exhibition, and were also showcased in a coffee table book. The topic of farming life was explored nostalgically, but also outlined the harsh realities experienced by farming populations.

Figure 4 Farmerhealth.org.au access areas throughout Australia



Source Google Analytics 23 March 2015. Please note: there is difficulty in obtaining accurate locations regarding access by rural and remote users.

The most highly accessed pages have consistently been the zoonotic disease Scabby mouth (Orf), a common zoonotic disease spread from sheep to humans²², eye injuries, particularly Weld Flash²³, succession planning²⁴, crush injuries²⁵ and depression.²⁶ This reflects both the nature of the farming population's need for information and the health and wellbeing issues experienced by farmers.

While the primary aim was to engage with farmers, the website has also been used to communicate with rural people generally. One successful example was through the 'farming in focus' photography

competition 2010²⁷ and 2012²⁸, attracting over 1100 digital submissions across all Australian states and territories, and 30 submissions internationally. These photographs were available for viewing on the website, via a touring public exhibition, and were also showcased in a coffee table book. The topic of farming life was explored nostalgically, but also outlined the harsh realities experienced by farming populations.

Videos have also been an integral part of Farmer Health. As part of a *beyondblue* grant (grant reference no. 2009/215)²⁹ to explore farmer stress and physical activity, a video was produced for farmers, showing farmers completing exercises that could be incorporated into every day farming activities. Farming Fit was made available as a DVD available via the website for farmers and organisations. Over 3000 DVDs were distributed between 2010 and 2014. The video was also made available in a two part series on YouTube, enabling immediate access nationwide.

Internet usage

During the past five years, mobile handsets and tablet ownership—and their use to access the Internet—have increased substantially. This is clearly reflected in statistics on how Farmer Health is accessed. Since 2010, desktop access of the website has decreased by 21%, whereas mobile handset access has increased from 175 sessions in 2010-11 to 2883 sessions—an increase of 1,547 % in 2014-15. Similarly, tablets used to access the website were not reflected at all in 2010, but in 2014-15 had increased to 1569 sessions (Table 3). This provides impetus for the website to be more responsive for mobile device usage, and prompted a mobile friendly update to the website in March 2014.

Table 3 Denotes device types that access to Farmer Health website overview

Device	Sessions 2010-2011	Sessions 2014-15
Desktop	15,403	12,066
Mobile handsets	175	2,883
Tablets	0	1,569

Discussion

Building on the original website, we now disseminate information and encourage engagement through a variety of platforms including Facebook, Twitter, YouTube, BHC, a university webpage and a mobile-ready website. This increasing reach allows Farmer Health to keep pace with the growing dissemination of health information via Social Media.³⁰ The variety of Farmer Health platforms available also service a growing Australian public use of social media, with 69% per cent of internet subscribers using social media (95% on Facebook).³¹ Twitter, Facebook and YouTube channels adopted by Farmer Health have sought to reach a wider audience of farmers and farming families, and overcome geographical boundaries to develop virtual communities and establish reimagined levels of connectedness.^{32,33} Continuing improvements will reflect the patterns of distribution and engagement of health information.

Farmers will use social media if they find practical benefit. However, the preference of rural people is to engage via face-to-face contact.³⁴ Contrary to this, males have been found to prefer internet-delivered treatments for mental health rather than face-to-face contact.^{13,33} Given that suicide was the leading cause of death in young rural Australian males in 2010³⁵, health professionals could be trained to better facilitate Internet-delivered health models to complement available rural health resources.^{13,32,36}

While typical website user patterns have been identified, a study by Romano¹⁰, found that older adults scan websites differently to younger users, who tend to focus on the centre of the viewport while ignoring the peripheral content. Future development of Farmer Health will need to consider this, as our target audience is aging.⁸

User feedback highlighted the need to simplify the process of contributing to forums, and uploading recipes, photographs or abstracts. To simplify this process, contributions were made possible without

the need to login or register.³⁷ Health professionals—nationally and internationally, with the roll out of Sustainable Farm Families™ program in Canada—and advisory group members, still retain the need for a login. Staff rather than users managed login registrations for the site.

As the National Centre for Farmer Health is physically located in Victoria it is not surprising that a majority (54.86%, see Table 2) of users are based in Victoria. However, since the delivery of the SFF program to every state in Australia, distribution of users has slowly grown with more international interest over the last two years.

Acknowledgments

Ms Josephine Williams from the Department of Health contributed substantially to the development of Farmer Health and her assistance and ongoing support has been much appreciated.

IT Hub Advisory Committee members Hugh Macdonald, Lucy Ayers, Tim Baker, Kathleen Felling, Dale Ford, Lyn Golder, Scott McCoombe, Cate Mercer-Grant, Anton Neal, Damian Thompson, Jan Weaver, Susan Brumby, Bianca Todd and Josephine Williams.

Conflict of interest statement

There are no potential conflicts of interest in this paper.

References

1. Wainer, J, Chesters J. Rural mental health: neither romanticism nor despair. *The Australian Journal Of Rural Health*. 2000;8(3):141-7.
2. Australian Bureau of Statistics. Internet Activity, Australia, Dec 2000 [Internet]. 2014 [Cited 23 Mar 2015]. ABS cat. no. 8153.0 [Available from URL: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/8153.0/>]
3. Australian Bureau of Statistics. Internet Activity, Australia, June 2014 2014 [Cited 09 Mar 2015]. ABS cat. no. 8153.0:[Available from URL: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/6445F12663006B83CA256A150079564D?opendocument>]
4. Department of Health Victoria. About us [Internet]. Victoria, Australia1999 [Cited 21 Mar 2015]. Available from URL: https://www.facebook.com/BetterHealthChannel/info?tab=page_info.
5. Safe Work Australia. Work related traumatic injury Fatalities Australia 2010-11 [Internet]. 2011 [Cited 25 Mar 2015]. Available from URL: <http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/730/WorkRelatedTraumaticInjuryFatalities2010-11.pdf>
6. Australian Bureau of Statistics. Household Use of Information Technology, Australia, 2007-08 [Internet]. 2007-08 [Cited 10 Mar 2015]. ABS cat. no. 8146.0:[Available from URL: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/A6CCA61410C0B988CA25768D0021D429?opendocument>]
7. Australian Bureau of Statistics. Use of the Internet on Farms, Australia, 2007-08 [Internet]. Australian Bureau of Statistics; 2009 [Cited 17 Mar 2015]. ABS cat. no. 8150.0 [Available from URL: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/8150.0>]
8. Australian Bureau of Statistics. Australian Social Trends, Dec 2012: Australian farming and farmers [Internet]. 2012 [Cited 10 Mar 2015]. ABS cat. no. 4102.0:[Available from URL: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features10Dec+2012>]
9. Australian Government. Baby boomers 2007 [updated 2nd December 2007; Cited 20 Mar 2015]. Available from URL: . <http://www.australia.gov.au/about-australia/australian-story/baby-boomers>.

10. Romano Bergstrom, JC, Olmsted-Hawala EL, Jans ME. Age-Related Differences in Eye Tracking and Usability Performance: Website Usability for Older Adults. *International Journal of Human-Computer Interaction*. 2013;29(8):541-8.
11. Kennedy, S. DIY health for baby boomers [Internet]. (AU): Australian Broadcasting Corporation; 2014 [Cited 24 Mar 2015]. Available from URL: <http://www.abc.net.au/local/stories/2014/11/10/4125328.htm>.
12. Australian Bureau of Statistics. Australian Health Survey: Health Service Usage and Health Related Actions, 2011-12 [Internet]. 2011-12 [Cited 23 Mar 2015]. ABS cat. no. 4364.0.55.002 [Available from URL: <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/F758234080C6F33BCA257B39000F296E?opendocument>].
13. Handley, TE, Kay-Lambkin FJ, Inder KJ, Attia JR, Lewin TJ, Kelly BJ. Feasibility of internet-delivered mental health treatments for rural populations. *Social Psychiatry And Psychiatric Epidemiology*. 2014;49(2):275-82.
14. Kay-Lambkin, FJ, Baker AL, Kelly BJ, Lewin TJ. It's Worth a Try: The Treatment Experiences of Rural and Urban Participants in a Randomized Controlled Trial of Computerized Psychological Treatment for Comorbid Depression and Alcohol/Other Drug Use. *Journal of Dual Diagnosis*. 2012;8(4):262-76.
15. Nielsen, J. Website Response Times [Internet]. Nielsen Norman Group, Evidence-Based User Experience Research, Training and Consulting (US); 2010 [Cited 11 Mar 2015]. Available from URL: <http://www.nngroup.com/articles/website-response-times/>
16. Krug, S. Don't Make Me Think: A Common Sense Approach to Web Usability. 2nd ed. Thousand Oaks, CA, USA New Riders Publishing 2005.
17. Nielsen, J. 113 Design Guidelines for Homepage Usability [Internet]. Nielsen Norman Group, Evidence-Based User Experience Research, Training and Consulting (US); 2001 [Cited 24 Mar 2015]. Available from URL: <http://www.nngroup.com/articles/113-design-guidelines-homepage-usability/>
18. Nielsen, J. F-Shaped Pattern For Reading Web Content [Internet]. Nielsen Norman Group, Evidence-Based User Experience Research, Training and Consulting (US); 2006 [Cited 11 Mar 2015]. Available from URL: <http://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/>
19. National Centre for Farmer Health. Stress tool [Internet]. 2010 [Cited 09 Mar 2015]. Available from URL: <http://www.farmerhealth.org.au/health-centre/stress-tool-2>.
20. National Centre for Farmer Health. Farm safety windmill [Internet]. 2010 [Cited 09 Mar 2015]. Available from URL: <http://www.farmerhealth.org.au/safety-centre/farm-safety-windmill>.
21. Health on the Net Foundation. Health on the Net Foundation [Internet]. (Geneva, Switzerland): ; 1995 [updated Jun 10 2013; Cited 09 Mar 2015]. Available from URL: <https://www.healthonnet.org/>.
22. National Centre for Farmer Health. Scabby mouth (Orf) [Internet]. 2015 [Cited 23 Mar 2015]. Available from URL: <http://www.farmerhealth.org.au/page/safety-centre/scabby-mouth-orf>.
23. National Centre for Farmer Health. Eye injury – flash burns [Internet]. 2015 [Cited 23 Mar 2015]. Available from URL: <http://www.farmerhealth.org.au/page/health-centre/eye-injury-flash-burns>.
24. National Centre for Farmer Health. Farm succession planning [Internet]. 2015 [Cited 20 Mar 2015]. Available from URL: <http://www.farmerhealth.org.au/page/health-centre/farm-succession-planning>.

25. National Centre for Farmer Health. Crush injuries [Internet]. 2015 [Cited 23 Mar 2015]. Available from URL: <http://www.farmerhealth.org.au/page/health-centre/crush-injuries>.
26. National Centre for Farmer Health. Depression – the facts [Internet]. 2015 [Cited 23 Mar 2015]. Available from URL: <http://www.farmerhealth.org.au/page/depression/depression-the-facts>.
27. National Centre for Farmer Health. Celebrating Rural Life (Open) [Internet]. [Cited 17 Mar 2015]. Available from URL: <http://www.farmerhealth.org.au/page/2010-photography-competition/celebrating-rural-life-open-2010-2>.
28. National Centre for Farmer Health. Theme 1 – Of droughts and flooding rains (Open) 2015 [Cited 09 Mar 2015]. Available from URL: <http://www.farmerhealth.org.au/page/theme-1-of-droughts-and-flooding-rains/theme-1-of-droughts-and-flooding-rains>.
29. Brumby, S, Chandrasekara A, McCoombe S, Torres S, Kremer P, Lewandowski P. Reducing psychological distress and obesity in Australian farmers by promoting physical activity. *BMC public health*. 2011;11(1):362.
30. Vanzetta, M, Vellone E, Dal Molin A, Rocco G, De Marinis MG, Rosaria A. Communication with the public in the health-care system: a descriptive study of the use of social media in local health authorities and public hospitals in Italy. *Annali Dell'istituto Superiore Di Sanità*. 2014;50(2):163-70.
31. Sensis. Yellow Social Media Report 2014: Sensis; 2014 [Cited 23 Mar 2015]. Available from URL: <https://www.sensis.com.au/content/dam/sas/PDFdirectory/Yellow-Social-Media-Report-2014.pdf>.
32. Anikeeva, O, Bywood P. Social media in primary health care: Opportunities to enhance education, communication and collaboration among professionals in rural and remote locations *Social media in primary health care: Opportunities to enhance education, communication and*. *Australian Journal of Rural Health*. 2013;21(2):132-4.
33. Berry, H, Rodgers B. Rural and Remote Populations Trust and distress in three generations of rural Australians. *Australasian Psychiatry*. 2003;11:S131.
34. Dobson, P, Jackson P, Gengatharen D. Explaining broadband adoption in rural Australia: modes of reflexivity and the morphogenetic approach. *MIS Quarterly*. 2013;37(3):965-91.
35. Australian Bureau of Statistics. Suicides, Australia, 2010 [Internet]. 2010 [Cited 25 Mar 2015]. ABS cat. no. 3309.0:[Available from URL: <http://www.abs.gov.au/ausstats/abs@.nsf/Products/3309.0~2010~Chapter~Summary?OpenDocument>]
36. Kamel Boulos, MN, Wheeler S. The emerging Web 2.0 social software: an enabling suite of sociable technologies in health and health care education. *Health Information & Libraries Journal*. 2007;24(1):2-23.
37. Nordfeldt, Ssnls, Hanberger L, Berterö C. Patient and Parent Views on a Web 2.0 Diabetes Portal-the Management Tool, the Generator, and the Gatekeeper: Qualitative Study. *Journal of Medical Internet Research*. 2010;12(2):9-

Presenter

Bianca Todd has worked at National Centre for Farmer Health for five years as Website Content Coordinator and in 2013, became Web Administrator of Western District Health Service in southwest Victoria. Bianca has spent most of her life in rural communities of South Australia and Victoria, understanding the issues surrounding health care access. Her particular expertise is in helping rural people (health professionals, consumers, farm men and women) to engage across a variety of web based platforms, providing improved access to farmer health related resources. She is also aware of the importance of quality information and works closely developing relationships with Deakin University, Better Health Channel and HON code accreditation. In 2014, Bianca was part of the National Centre for Farmer Health team to be awarded the Deakin University Award for Teaching Excellence for Australia's only Agricultural Health and Medicine course in Australia. Bianca has also been actively involved in developing a video with farm men and women to encourage exercise on farm and make use of the resources available to them in their own farming environments.

Appendix 1: Farmer Health Website Survey Questions

1. Please nominate the category/categories you belong to:
 - a. Farmer
 - b. Rural health professional
 - c. Rural agricultural professional
 - d. Student
 - e. Academic
 - f. Other
2. In question 1, if you answered 'other', please describe
3. What would YOU like to find on a website about farmer health? Choose as many categories as you would like.
 - a. Fact sheets about farm health issues
 - b. Reliable links to health information
 - c. Latest research findings – health
 - d. Health tips
 - e. Farm safety tips
 - f. Best practice guidelines – health
 - g. Healthy eating tips
 - h. Best practice guidelines – agriculture
 - i. Latest research findings – agriculture
 - j. 'Ask the doctor'
 - k. Other
4. Is there anything else you would like to see on the farmer health website?
5. What is your favourite website(s)? Please tell us the website address(s).
6. Please comment on what you like about these sites.
7. What is your preferred method of receiving information?
 - a. None
 - b. Mail
 - c. E-mail
 - d. SMS
 - e. Twitter
 - f. Facebook
 - g. Other
8. In question 7, if you answered 'other', please describe.
9. How did you find out about this survey?
 - a. Email
 - b. Newsletter
 - c. Website