Quality processes that maximise the Health Navigator web portal as an enabler for consumers and health professionals

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Abstract
The quality of information on the internet is highly variable. One of the key priorities of the Health Navigator NZ website and portal is to improve access to health information by the identification of high quality health information for consumers and health professionals, particularly information that assists individuals and their families to manage everyday life (self-management) more effectively. Fundamental to this is the processes that ensure quality, reliable health information. The development of a quality framework to guide the selection of reliable and trustworthy websites and online resources is described.

1. Introduction
The quality of information on the internet is highly variable so it can be a challenge for health professionals and consumers to find information they can trust in a timely manner [1, 2]. The Health Navigator NZ website is designed as a portal or gateway linking through to useful websites and online resources that can be used both at points of care by health professionals and consumers. Such information aims to assist families and health teams working with people living with long term health conditions to prevent or delay complications and improve their health and quality of life. The premise underpinning this is that the information accessed through Health Navigator is accurate, reliable and appropriate for the New Zealand context. Key to the success of Health Navigator is the accessibility and availability of independent, quality tested and appropriate health information relevant to New Zealanders. This paper describes the quality processes fundamental to the development of Health Navigator. The development of a quality framework to ensure only the best resources are used for Health Navigator also guides the selection of reliable and trustworthy websites and online resources.

2. Literature
Over recent years, there has been a major epidemiological shift in burden of disease and mortality trends away from acute infectious diseases and injuries towards long term health conditions such as heart disease, diabetes, mental health, and cancer. Long term health conditions pose increasing problems for quality of life with the burden of symptoms from long term health conditions internationally accounting for approximately 70% of all health expenditure [3, 4]. In New Zealand the National Health Committee [5] identified that long term health conditions accounted for nearly 80% of all deaths, and 70-78% of healthcare expenditure. The World Health Organisation [6] identified long term health condition self-management as a significant factor for the future of healthcare delivery worldwide. Consumers with long term health conditions mostly live their lives in their own communities and gain support from professionals and peers,
therefore an increased focus on effective self-management support is needed as this will aid consumers’ independence and confidence [5].

There is now good evidence that increased self-management support reduces health disparities, improves adherence to treatment regimes, decision-making, communication, coordination, reduces hospitalisations, improves health outcomes and quality of life [7-9]. Self-management is based on the consumer having knowledge of their condition, being informed enough to share in decision-making with health professionals, being able to monitor and manage symptoms and their impact; and adopting lifestyles that promote their health [10]. Increasingly, seeking information about one’s health is being recognised and documented as a key coping strategy in self-care and psychosocial adjustment to illness [11].

There is an international trend of health care consumers becoming more knowledgeable, and this occurs in conjunction with an increased range of treatment options and a plethora of health related information [12-15]. Patients, as well as health professionals, use the Internet to locate information, with a British study estimating that a third of consumers search the Internet for information and knowledge about symptoms and conditions [1]. An illustration of the widespread use of Internet-based health information is the website, www.Discern.org, which states, “Despite a rapid growth in the provision of consumer health information, the quality of the information remains variable”. In New Zealand there has been considerable growth in the number of households with computers; from 32 percent in 1997, 47 percent in 2000, to 60.5 percent in 2006 [16]. Reports from New Zealand indicate consumers also want better explanations about their conditions, and want family/whanau and carers included [17, 18].

While the Internet provides a ready source for health information the quantity of health websites can be overwhelming and consumers express concern about the quality and reliability of health information [19]. Health professionals are often having to spend time dealing with inaccurate or misleading information that patients have found online [20, 21]. Furthermore, with the amount of information exponentially increasing, it is becoming more difficult for health professionals to navigate through reliable and evidence-based information [2]. This has highlighted the need to have a reliable and trusted single point of reference that can be accessed equally by health professionals and consumers, and it has been noted that a web portal is a cost effective means to achieve this [2].

A unique project to address this need is Health Navigator NZ - a health information web-based portal. The Health Navigator NZ project is about making it easier for both families and healthcare teams to have access to reliable health information and self-care resources to share in the process and maximise health and wellbeing. It is also about sharing information and resources across organisations to improve consistency of messages and reduce duplication of effort and wastage of resources, while promoting quality care.

3. Health Navigator Web Portal

In 2005 a Self Management Network (SMN), a group of General Practitioners (GPs), nurses, allied health providers, public health specialists, psychologists, secondary care providers, consumers and managers interested to encourage collaboration and uptake of self-management principles across the health sector was established. Interest grew as members talked about the possibilities of coordinating and collectively identifying the best resources and tools with different groups and forums. Three years later, Health Navigator NZ was launched.

Health Navigator is a regional and national project, led by the Health Navigator Charitable Trust in collaboration with a range of primary care providers, non-profit health organisations (including National Heart Foundation, SPARC, Diabetes NZ, Webhealth, Mental Health Foundation, Asthma and Respiratory Foundation of NZ, Arthritis NZ), Primary Health Organisations (PHOs) and District Health Boards (DHBs). The governance structure of Health Navigator Charitable Trust includes a Trust Board, Steering Group and Expert Advisory Reference Groups.

Key aims of Health Navigator are the development of a long-term conditions web portal to: collate, coordinate and identify the most useful resources for the prevention and management of long-term conditions in New Zealand; simplify the process of navigating the health information maze by improving accessibility and availability of quality-tested and reliable health information and self-care tools; and improve awareness, understanding and use of self-care support approaches for supporting and enabling individuals and their whanau to manage their health and long-term health conditions more effectively and in partnership with their healthcare providers. Development has proceeded so far with seed funding from Counties Manukau DHB, Waitemata DHB and Auckland DHB.

The key to meeting the above aims is the infrastructure to consistently ensure the quality of health information provided. Health Navigator intends to provide a comprehensive and evidence-based range of self help tools, e-health information and key resources through a health website and portal that have been quality tested. To achieve this quality assurance processes are used to ensure the provision of reliable, evidence based, practical tools and resources that can
be used quickly and easily within consultations for health professionals in primary and secondary settings, as well as individuals in the community and their family/whānau.


The Health Navigator quality assurance framework was developed by the Steering and Reference Groups, and approved by the Trust Board. The basis of the Health Navigator quality framework was a literature review conducted to identify the key quality standards and guidelines developed both nationally and internationally. Multiple website guidelines and patient information standards have now been developed. The following were among those identified as relevant for this project.

- HON – Health on the Net Foundation www.healthonnet.org
- Commission of the European Communities – Quality Criteria www.hon.ch/HON_CCE_en.htm
- DISCERN – www.discern.org.uk
- Canadian Health Network quality framework – www.canadian-health-network.ca
- Net-Wellness – www.netwellness.org

In addition to the above, two New Zealand resources influenced the development of the quality framework. These were the work of Alastair Smith from Victoria University in Wellington who has developed criteria for evaluation of Internet information sources [22], and the Masters of Public Health dissertation by Dr Janine Bycroft [23].

The following minimum standards and issues were identified as essential for any resource or website to be included in the Health Navigator web portal.

- **Responsible partnering** – reasonable effort has been made to ensure that partnering or linking to other websites or resources is only undertaken with trustworthy individuals or organisations
- **Content is accurate and trustworthy**
- **Information is balanced & unbiased** – e.g. for resources covering information on procedures or medical treatments (includes all medications, no treatment or delayed treatment), the risks & benefits are clearly presented; knowledge bases include biomedical, behavioural, occupational and other sciences
- **Evidence bases** – where possible information is based on evidence-based clinical and self management guidelines, or where these do not exist, on best or promising practice
- **Content** - appropriate & relevant for the intended audience
- **Responsible advertising** – no drug advertising and minimal commercial or product advertising
- **Independent of drug companies**
- **Reviewed or updated within the last two years** (unless this is the most recent clinical guideline which will often be more than two years old).

In addition to the above, there were two issues that were identified as needing to be considered before final inclusion in Health Navigator could be confirmed. The first issue is copyright, and whether there are any restrictions on publication, reprinting, or linking. The second and a related issue, is permission and whether permission is needed to publish or link, and if this can be obtained.

Unfortunately, at that point in time, no one standard or resource included all the areas identified by the Steering Group as essential. Some focused primarily on content, others on authentication, or treatment. The closest was considered totally impractical at 18 pages long given the tight budget and reliance on voluntary input. Consequently, an amalgamation was drafted and after review by the Steering Group was piloted by the Reference Group for four weeks. Feedback and changes were then incorporated. A key requirement was the development of an assessment tool that was relatively quick and easy to use, yet sufficiently robust and comprehensive to identify websites of adequate quality and standard. After 12 months use, the initial two page checklist was further refined and the current shortened version (Figure 1) is proving quick and easy to use.
Criteria that are considered essential or mandatory are detailed in the first section. The following symbols are used to identify criterion: Tick – criterion met; X - criterion not met; ? - not known whether criterion met; and N/A – criterion is not relevant to the site or resource.
5. Quality Processes

To ensure a collective opinion a process around the use of the Quality Framework, involving three steps, was developed. These are outlined below.

1. Initial processing - Recommended websites are briefly screened by the Clinical Director using the mandatory features of the quality checklist.

2. Resources that meet the minimum standard are then reviewed by the Reference Group and the best three or four for a specific topic area selected for inclusion.

3. Permission to use or link - is then requested from the website’s organization.

By December 2008 over 100 organisations had been contacted for permission to link to their resources, web pages or online learning tools. Where possible New Zealand resources are prioritised and supplemented by high quality resources from other countries such as the United Kingdom, Australia, and Canada. The pilot Health Navigator web portal went live in December 2008. Completion of Stage One saw the Health Navigator web portal launched in September 2009. Alongside the development of the Health Navigator web portal has been the growth of the Self-Management Network which is now reaching over 500 clinicians nationally.

6. What Next?

The Quality Assessment Checklist (Figure 1) has provided a starting point for the review of websites and resources for inclusion in the Health Navigator website and portal. The Group recognizes that a tool such as this should be open to review and modification. Clearly the quality framework checklist is easy to use, as shown by the development that has taken place to enable Health Navigator to go live. Since initially developed, additional tools have appeared that warrant closer examination, such as the International Patient Decision Aid Standards (IPDAS) [1]. The next stage is to review and analyze the effectiveness of the current tool. Health Navigator plans to provide regular performance and utilisation data therefore identifying that the resources selected are accessed. In addition, this will be complemented by satisfaction measures of key stakeholders and users. Longer term evaluation plans include gathering qualitative reflections from consumers on their experiences of using Health Navigator, and ways in which the health information provided via Health Navigator has influenced and/or resulted in changes in health, behaviour and/or lifestyles.

Health Navigator acknowledges the importance of input from stakeholders and values the input from the large group of clinicians and consumers linked through the Trust Board, Steering and Reference Groups or Self Management Network. The Trust Board is currently reviewing options to maximize the valued input from these groups while simplifying the process of continual quality improvement and webpage review. The aim is to ensure useful resources aligned with current best practice, clinical guidelines, and interdisciplinary evidence bases which are responsive to community and sector needs.

7. Conclusion

Fundamental to the development of Health Navigator is the quality processes and the use of a quality framework to guide the selection of reliable and trustworthy websites and online resources. It is planned that all websites and resources listed within the website will be screened and assessed using this quality framework process. Websites that do not meet the minimum standards will be excluded and where multiple resources or websites are identified for a particular topic, the assessment checklist will be used to assist selection of the best ones.

The result is a practical, easy to use self-help portal that will simplify the process of safely navigating the health information maze for both clinicians and consumers in New Zealand. Furthermore, the quality framework provides a strong platform for continual quality improvement of the website and quality checklist.

8. Acknowledgements

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9. References


