# Chapter 5.17 Assisting Users Seeking Medical Information through Government Portals

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### INTRODUCTION

There has been an explosion in the number of different types of portals in the last decade, and at the same time there has been a lot of confusion with them, especially in relation to the enormous number of portals and their differences from Web sites or Web-pages. This coincides with increased use by consumers seeking medical information on the Internet, and with the important role played by medical portals for evidence based medicine.

This article explores current portal technology available from an evaluation of market leaders in the industry and identifies important functional components that are necessary in building an intelligent portal to assist users seeking information on the Internet.

The emphasis will be on government to consumer portals (G2C) and uses two reputable government portals Betterhealth and Healthinsite as examples to discuss issues involved with those.

# BACKGROUND: INCREASED USE OF PORTALS FOR SEEKING MEDI-CAL INFORMATION

Reliance on portals for medical information is high, and recent statistics show that this trend is growing. At the same time medical information is widely dispersed and information retrieval is inadequate (Shepard, Zitner, & Watters, 2000). There is an urgent need to develop portals that help users to retrieve quality information.

The National Health Medicine Advisory Council reported that better health outcomes are predicted when users are better informed, suggesting the need for digitization of health services (Bodenheimer, Lorig, Holman, & Grumbach, 2002; Kennedy, 2002; National Health Information Management Advisory Council, 2001). However this is yet to be confirmed, as Internet content has not yet proven to be satisfactory. There is a lot of concern about the materials found on the Internet (Ciolek, 1997, Moon, 2005). Modern portals are built with the aim of better catering for the different needs of users. Portal technology is improving and features such as knowledge management, content management, and search engines, along with effective Web site design, help users to find information more effectively, and yet portals remain ineffective in information retrieval (Clarke & Flaherty, 2003; Elias & Ghaziri, 2004; Quirk, 2001; Rao, 2001). An effective evaluation tool to assess the validity and effectiveness of the portal is quintessential in assisting both users and portal builders.

## PORTALS

Portal terminology has been loosely used in the industry and the term "portal" means different things to different people. Some argue that the word "portal" should be used as an adjective—"portal framework," "portal structure," and "portal architecture"—rather than as a noun as it is commonly used (Roth, 2003). Others are confused by the difference between a Web-page or Web site and a portal. The same confusion is applied to health portals vs. medical portals. The following sections seek to clarify these terms.

## **Definition of Portals**

For the purpose of this research, the working definition of a portal is an Internet-based information system providing uniform access to different sources of information in an enterprise and maintaining dynamic links to information resources (Moon & Burstein, 2004). A portal supports communication within the enterprise, and connects people with information and applications they need for performing tasks. Unlike a conventional Web site, portals should support both push (subscription) and pull (search) functions in assisting users to gain access to essential contextual information (Probst, Raub, & Romhardt, 2002; Shepard et al., 2000).

## Portals vs. Web sites

The word "portal" is often confused with Web sites. The difference between Web sites and portals is that the former are static and the latter are

Figure 1. Government portal market segment diagram (Adapted from Collins, 2003; Clarke and Flaherty, 2003; Shepard et al. 2000)



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