Chapter 5.19
Organizing for Knowledge Management:
The Cancer Information Service as an Exemplar

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ABSTRACT

The Cancer Information Service is a knowledge management organization, charged with delivering information to the public concerning cancer. This chapter describes how societal trends in consumer/client information behavior impact clinical knowledge management. It then details how the CIS is organized to serve clients and how it can interface with clinical practice by providing referral, by enhancing health literacy, by providing a second opinion, and by giving crucial background, assurance to clients from neutral third party. The CIS serves as a critical knowledge broker, synthesizing and translating information for clients before, during, and after their interactions with clinical practices; thus enabling health professionals to focus on their unique functions.

INTRODUCTION

The Cancer Information Service (CIS) is essentially a knowledge management (KM) organization, manifestly charged with delivering up-to-date information to the public related to scientific advances concerning cancer. Its latent purpose, increasingly important in a consumer driven medical environment, is to insure the rapid diffusion of state-of-the-art medical care. It is an award-winning national information and education network, which has been the voice of the National Cancer Institute (NCI) for more than 30 years in the US. While the CIS has extensive outreach programs dedicated to reaching the medically underserved, it is probably best known for its telephone service that has a widely available 800 number (1-800-4-CANCER). We will use the CIS as an exemplar in this chapter of issues
related to a national information infrastructure that supports clinical knowledge management.

Because of the critical role of broader societal trends we will turn to a discussion of them before describing in more detail the basic services and organizational structure of the CIS and its potential interfaces with clinical KM. Many health organizations have realized that there are strategic advantages, especially in enhancing quality, maintaining market share, and developing innovations, in promoting information technologies. Improving information management, associated analytic skills, and knowledge utilization should be a top priority of clinical practice (Johnson, 1997). It has become commonplace for almost all hospitals and managed care providers to have very active information programs for their clients allowing those in clinical settings to concentrate on their central, unique missions. Government information providers can also act as information services providing knowledge before, during, and after client interactions with clinical organizations. Health professionals can partner with KM services that recognize the public’s demand for information and the various difficulties involved in reaching the people who need information. Indeed, the CIS focuses on the classic KM functions of retrieving and applying knowledge, combining it, and finally distributing/selling it.

This chapter’s objectives are to answer the following questions:

1. How do societal trends in consumer/client information behavior impact clinical KM?
2. How the CIS is organized to serve clients?
3. How it can interface with clinical practice?
   a. By providing referral
   b. By enhancing health literacy
   c. By providing a second opinion
   d. By giving crucial background, assurance to clients from neutral third party
4. How can the CIS serve as an answer to information explosion?
   a. For client it acts as synthesizer, translator who can relieve clinical settings of this task
   b. Through client it directly acts to disseminate information to improve practice

BACKGROUND

Knowledge Management

KM has been loosely defined as a collection of organizational practices related to generating, capturing, storing, disseminating, and applying knowledge (MacMorrow, 2001; Nonaka & Takeuchi, 1995). It is strongly related to information technology, organizational learning, intellectual capital, adaptive change, identification of information needs, development of information products, and decision support (Choo, 1998; Fouche, 1999). They are so intimately related, in fact, that it is often difficult to say where one approach stops and another begins. We will primarily view KM as a system for processing information. This is certainly the organizing thrust of the CIS. The CIS obtains the knowledge it translates to the public from the NCI (Figure 1). It is organized to provide consistent, quality information translated in a manner that can result in meaningful responses on the part of callers (e.g., course of treatment) that transforms basic information into knowledge (and perhaps in some cases even into wisdom and ultimately action). Thus, the KM service the CIS provides makes information purposeful and relevant to individuals that need it, who are often in dire circumstances.

Knowledge itself runs the gamut from data, to information, to wisdom, with a variety of distinctions made in the literature between these terms (e.g., Boahene & Ditsa, 2003). Special weight
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