

# Chapter XLVII

## Electronic Collaboration Toward Social Health Outcomes

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### ABSTRACT

*This is an illustrative process description of a collaborative project utilizing a multidisciplinary approach. The requirement for collaboration originated in an attempt to optimally answer the needs of individual patients and health professionals for information to allow them to achieve better health outcomes. This chapter introduces the problem statement through the auto-ethnographic reflections of three project developers. These reflections illustrate individual experiential agendas that initiated electronic collaboration among diverse stakeholders in the health care network. Each reflection also illustrates the*

*sequence of events in a collaborative process beginning at the individual level and growing through the interaction of multiple individuals including patients, their relatives, health professionals, and other actors in the care giving network. This chapter describes how collaboration was sustained and further developed into an operational model.*

## **INTRODUCTION**

To arrive at a correct diagnosis, a health professional requires an accurate account of the illness history from the patient or her/his relatives. Active collaboration with a patient to determine what the patient values most are necessary for a health professional to select an appropriate therapeutic option. Medicine is thus a collaborative effort in problem solving between individual patients and health professionals. The collaborations also involve others who are directly or indirectly related to the patient and health professional (for example, the patient's relatives and the physicians' institutions) who provide the necessary support to the two primary collaborators.

In the medieval past medicine was a similar problem solving effort between patients and health professionals. With time and globalization there have been major changes. From an approach where clinical decision-making was driven by the expert opinion of a local physician (as a first step to medical problem solving) the collaborative process has evolved to a global evidence-based approach that uses generalized information for the benefit of the individual patient (Biswas, 2007).

As clinical information is, to a large extent, available on the Internet, patients and health professionals have rapidly learned to use Internet services to solve their clinical problems. All these users and their information needs drive health care to a considerable extent. The traditional patient and health professional clinical encounter has tended to become an informational collaborative process persistent in virtual space and time. A

persistent clinical encounter has immense potential advantages for the patient as well as the health professional (Haggerty, 2003).

However, in day-to-day practice, both individual patients and health professionals are often in situations where the information available is limited and difficult to apply to a given patient. A gap between the paucity of what is proved to be effective for selected groups of patients versus the infinitely complex clinical decisions required for individual patients has been recently recognized and termed the inferential gap. The breadth of the inferential gap varies according to available knowledge, its relevance to clinical decisions, access to the knowledge (that is, what the physician actually knows at the time of a clinical decision), the variable ways in which knowledge is interpreted and translated into a decision, the patient's needs and preferences, and a host of other factors. Clinicians are required to fill in where their knowledge (or knowledge itself) falls short. (Stewart, Shah, & Selna, 2007).

## **PROBLEM STATEMENT**

Average patient data, which drives most of our present day (knowledge and evidence) information bases, is often unable to satisfy individual patient and health professional needs. In spite of an unprecedented expansion of medical information, at present we still do not have the quality of information to satisfy a given individual patient to an optimal extent (Biswas, 2008a).

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