

# Chapter 6.1

## Governing Health Care with IT

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### INTRODUCTION

The pressures for the health care industry are well known and very similar in all developed countries: altering populations, shortage of resources as it comes to staff and financial resources from the taxpayers, higher sensitivity of the population for health issues, new and emerging diseases, just to name a few. Underdeveloped countries have different problems, but they also have the advantage of being able to learn from the lessons and actions the developed countries made already, maybe decades ago. On the other hand, many solutions also exist, but they all make the environment even more difficult to manage: possibilities of networking, booming medical and health-related research and knowledge produced by it, alternative care-taking solutions, new and expensive treats and medicines, and promises of the biotechnology.

From the public authorities point of view, the solution might be easy: outsource as much as you can out of this mess. Usually, the first ones to go are marginal operational activities, such as laundry, cleaning, and catering services. It is

easy to add information systems to this list, but we believe this is often done without a careful enough consideration. Outsourcing is often seen as a trendy, obvious, and easy solution, which has been supported by financial facts on the short run. Many examples show that even in the case of operational information systems outsourcing can become a costly option, not to speak of lost possibilities for organizational learning and competitive positioning through mastering of information technology.

In this article, we discuss how information technology and health care industry work together. Information technology is a valuable resource that must be managed within the health care industry. At the same time, information technology has the potential to renew the whole industry. Good practices in both must be supported by good IT governance.

Health care is a big resource user in every country. In Table 1 we have percentages of health care expenditures in relation to gross domestic product in selected countries, where the percentage is very high (WHO, 2004). As one can see, the cost explosion phenomenon hits both rich

and poor countries, even though the wealthiest countries are well presented in the list.

Health care costs can be born by different parties within a national economy. Shares of different potential cost carriers vary from national economy to economy:

- The national government, directly or through different indirect arrangements such as separate funds or public insurance institutions
- Municipalities or other local public actors
- Private insurance institutions
- Employers
- The patients themselves

For example, in the United States, the raising costs of health care born by the employers have been a topic of much academic and industry discussion (Berry, Mirabito, & Berwick, 2004). Sadly enough, there is controversial evidence whether information technology can lower the total costs of running health services (Ammenwerth, Gräber, Herrmann, Bürkle, & König, 2003; Ko & Osei-Bryson, 2004).

There are few other forces than modern information technology that could cut down costs in the health care industry. In addition to cost cutting, information technology can provide extended productivity and is an ingredient in the processes that cumulate towards better care practices. But advantages from information technology are not to be harvested without constant focus on IT governance issues in the industry.

## BACKGROUND

We have found the following reasons for the late adoption of modern information technology in the health care sector (Suomi, 2000):

- Fragmented industry structure
- Weak customers

*Table 1. Top 20 percentages of health care expenditure in relation to gross domestic product in 2001 in selected countries (WHO, 2004)*

USA	13.9
Lebanon	12.2
Cambodia	11.8
Switzerland	11.0
Uruguay	10.9
Germany	10.8
Timor-Leste	9.8
Marshall Islands	9.8
France	9.6
Jordan	9.5
Argentina	9.5
Canada	9.5
Greece	9.4
Suriname	9.4
Australia	9.2
Palau	9.2
Portugal	9.2
Iceland	9.2
Croatia	9.0
Belgium	8.9

- Strong professional culture of medical care personnel
- Hierarchical organization structures
- Handcrafting traditions
- One-sided education
- Big national differences in processes

We will next discuss each of these issues in greater detail.

## Fragmented Industry Structure

Good competitors and customers are a key to success for any company and industry (Porter, 1990). Unfortunately, the health care sector has not been able to enjoy from neither of them. For a long time health care has been considered as a

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