# Chapter VI Governance in European Hospitals: Analysing Governance Practices Using Data Mining and Information Visualisation

**Kristof Eeckloo** Centre for Health Services and Nursing Research, Belgium

Luc Delesie Centre for Health Services and Nursing Research, Belgium

Arthur Vleugels Centre for Health Services and Nursing Research, Belgium

## ABSTRACT

Hospital governance refers to the complex of checks and balances that determine how decisions are made within the top structures of hospitals. In this chapter, authors introduce hospital governance as a policy domain in which data mining methods have a large potential to provide insight and practical knowledge. The chapter starts by exploring the essentials of the concept, by analysing the root notion of governance and comparing it with applications in other sectors. Recent developments and examples from the UK, France and The Netherlands are outlined. Based on an evaluation of the current state of affairs, a research agenda is developed. The chapter concludes with an introduction to the European Hospital Governance Project, which follows the outlines of the described research agenda. Methods of data mining and information visualisation that are used in this project are explained by means of a real data example.

# INTRODUCTION: A STRAIGHTFORWARD THEORY OF GOVERNANCE

The term governance has a strong intuitive appeal: it is easily associated with attributes such as accountability, transparency and participation. Yet, when it comes to a definition, governance seems to turn into a rather complex and versatile notion (European Commission, 2001). Illustrative for its versatility are the many concepts and neologisms in which the term is used. Corporate governance is probably the best known. It stands for the system by which a private corporation is directed and controlled by its share- and stakeholders (Cadbury, 1992). Other examples are clinical governance, cultural governance, social governance, E-governance, global governance, government governance, etc. At the Birbeck University of London there is even a research centre on 'football governance'. All of these concepts put forward their own definitions, all shaping - and blurring - for their part, the root notion of governance.

However, despite this breadth and ambiguity of definitions and wide scope of applications, governance essentially refers to the means for achieving direction, control and coordination of wholly or partially autonomous individuals or organizational units, on behalf of interests to which they jointly contribute (Lynn et al., 2001). It takes shape in the complex of rules, values, procedures and structures, usually referred to as "*checks and balances*", that determine how decisions are taken by these individuals or units (Rozman, 2000).

As such, it has a social, a political and an economic dimension. And it can be encountered at all levels of human activity: for example, at state level, at the level of the local community or at the level of a corporation.

Already within the world of health, Preker and Harding (2003) identify four levels of governance. First, there is the global or cross-national level. An example of a specific topic at this level are the procedures to address international pandemics. Second, there is multi-sectoral (or 'macro') governance. This level addresses policy sets that control the behaviour and use of resources in the broader economy of a nation. Third, there is sectoral (or 'meso') governance, where the ministry of health seeks to promulgate policies and allocate resources among providers, payers, and technology-pharma producers to not just restore health, but to protect and promote health. And finally, there is institutional (or 'micro') governance, which deals with the control of a specific organization's (for example a hospital, pharmaceutical company or health insurance plan) resources for mission accomplishment.

This chapter will focus on the application of the governance-concept within the organisational context of a hospital: commonly referred to as "hospital governance".

In many European countries, the governing bodies of hospitals are increasingly recognised as key actors in the health care systems. As decentralised health care agents, they are thought to embody both entrepreneurial dynamism and societal legitimacy. The challenge many health care systems currently face is to achieve a "fit" between the changing context of health care and the key configurations of these governing bodies of hospitals: structure and composition (who), role (what) and functioning (how).

Meeting this challenge is no easy task and depends on three intertwined prerequisites. The first is a solid and valid conceptual model for the delineation and testing of the many diverse characteristics and variables at play. The second is close observation in a wide range of hospitals in different socio-cultural and economic-political settings which will result in reliable experimental data. The third is a method of analysis and synthesis for the myriad of relationships that are undoubtedly at the basis of the actual situation. Data mining and information visualisation can support this challenge, as these can help targeting 16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/governance-european-hospitals/29066

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