



EMERALD POINTS

**THE SOFT SIDE
OF KNOWLEDGE
MANAGEMENT
IN HEALTH
INSTITUTIONS**

JON-ARILD JOHANNESSEN



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PREFACE

The aim of this book is to contribute to the understanding and clarification of leadership and organizational problems in hospitals. Economists focus on cost-effectiveness when looking at hospital leadership and organization. Obviously, we agree that cost-effectiveness is important, but knowledge-effectiveness is equally important because knowledge, skills and attitudes are the most important competence factors in hospitals. The innovative contribution of this book lies in how a knowledge perspective and, in particular, knowledge-effectiveness can contribute to hospital leadership and organization from a continuous-change perspective.

The method we employ is conceptual generalization (Adriaenssen & Johannessen, 2015).

Knowledge management in this context is about managing, controlling and communicating knowledge within social systems. Managing knowledge relates to the management perspective. Controlling knowledge relates to information processes, vision, goals, discrepancies and correcting the course along which the system is heading. Communicating knowledge is defined here by the statement: Who talks with whom over which channels and with what effect.

This book follows up on our earlier book *Knowledge Management Philosophy* (Emerald, 2020) and continues our development of a new paradigm for knowledge management. The particularly innovative feature of this book is its focus on knowledge management, information, communication, organizational learning, tacit knowledge and negotiations within hospitals.

Our new paradigm raises knowledge management from an organizational to a social level, while at the same time uncoupling knowledge management from the technical- and solution-oriented models to which it has previously been linked.

We use our new paradigm to focus on knowledge management in relation to epistemology, development, change and innovation in social systems.

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KEY POINTS IN THIS BOOK

The question we are investigating in this book is as follows: Why are hospitals so difficult to manage? We believe that if we can help answer this question, we will be helping to ease the task of hospital management.

The answers we give in this book can be summarized along six axes.

- (1) Management philosophy: There are two contrasting philosophies of hospital management. These are the organizational philosophy and the healthcare-oriented philosophy. In order to establish clarity in the leadership of a hospital, it is essential to ensure the integration or coordination of these two management philosophies.
- (2) Value creation processes: To a large extent, hospital leaders are trained to think about value creation along a value chain. In hospitals, there are five value creation processes, all of which are equally important. These five value creation processes are: the value chain; the value network; value workshop; value community; and the value dialogue. Each of these value creation processes has its own particular emphasis. Management of a hospital will be difficult unless a hospital's leadership attaches importance to all of these processes.
- (3) Knowledge processes: Hospital management and leadership teams do not attach sufficient importance to the strategic significance of tacit knowledge.
- (4) Organizational learning: Organizational learning is insufficiently implemented within hospitals.
- (5) Negotiating processes: Hospitals are institutions where a negotiated reality is part of everyday working life. There is little enthusiasm for training all staff members in negotiating skills, however. Accordingly, knowledge of negotiating skills is not equally distributed in hospitals. This is not in anyone's interests and is not to the benefit of other actors. Until knowledge about negotiating becomes part of the knowledge base of all

employees, everyday life at a hospital will be dominated by other conflict-resolution strategies than negotiation. In our opinion, this does not benefit a hospital's management.

- (6) Performance of health professionals: Improving the performance of health professionals is considered crucial for management competence in hospitals.

METHODOLOGICAL AND THEORETICAL BASIS FOR THIS BOOK

Both theoretical and practical knowledge comprise knowledge that is both explicit and tacit (Jakubowska, 2019). It is a misunderstanding to believe that tacit knowledge belongs to the practical domain, while explicit knowledge belongs to the theoretical domain (Lim, 2016). The necessity of making a connection between tacit and explicit knowledge is clearly expressed by Nonaka (1994, p. 22):

...in order to raise the total quality of an individual's knowledge the enhancement of tacit knowledge has to be subjected to a continuous interplay with the evolution of relevant aspects of explicit knowledge.

Tacit knowledge is understood here on the basis of the tradition that views participation and interaction with other people and with technology as the essential component of knowledge processes, or as Polanyi puts it (1958, p. 189): 'I have said that the premises of science are tacitly observed in the practice of scientific pursuits and in the acceptance of their results as true'. This is practical knowledge or knowledge in action (D'Cruz et al., 2009). Knowledge in action may also give rise to theoretical knowledge, which may not necessarily be directly applicable in practice, i.e. practice is the starting point but not necessarily the end point for the knowledge process (Turner, 2014).

In Western thinking, the tacit dimension has not been given much attention because the emphasis has been on so-called scientific knowledge that can be measured, quantified and tested, i.e. objective knowledge (Zappavigna, 2014).

By 'objective knowledge', we mean the following:

Let p be a piece of explicit knowledge. Then p is objective if and only if (a) p is public (intersubjective) in some society, and (b) p is testable (checkable) either conceptually or empirically.

(Bunge, 1983, p. 80)

Thus, according to this definition, objective knowledge must be intersubjective and verifiable. However, truth is not necessarily an integral part of objectivity; a statement may be objectively correct but false, and non-objective but true. For example, ‘there is a high tide because the dough is swelling’ – this is an objective statement because it is intersubjective and testable, but it is false. The statement ‘my dog is always kind’ is not objective, but it may be true. Tacit knowledge is difficult to codify. It is, therefore, not exact in the sense that it can be quantified, measured or tested. On the other hand, tacit knowledge may be verified in action, e.g. by the physician or nurse’s clinical gaze. In its consequences, tacit knowledge is thus objective, since it can be tested by verifying it in practice (Zembylas & Niederauer, 2020).

Technical rationality, with the natural sciences serving as a theoretical model for knowledge, has been the ideal in Western science. The tacit dimension is opposed to this view of knowledge; in a scientific context, and in practice, it stems from intellectual empathy, emotional commitment and action. Polanyi (1958, p. 134) clearly expresses his view of knowledge in the following statement: ‘Science is regarded as objectively established in spite of its passionate origins: It should be clear by this time that I dissent from that belief’. What then is Polanyi’s contribution to Western philosophy and epistemology? Allen (1990, p. 15) expresses this fittingly: ‘Polanyi’s theory of tacit integration is his distinctive contribution to philosophy’. This may be interpreted as meaning that all our knowledge development, not just tacit knowledge, has as its starting point the details upon which we have a subsidiary focus in relation to the object or phenomenon under investigation. It is this *from-to* structure, from the subsidiary to that which is in focus, which constitutes the structure in the tacit integration. All knowledge, according to Polanyi, has this tacit basis as its foundation.

Schön (1983, 1987) compares tacit knowledge to the artist’s method of working, where knowledge is unique from situation to situation. The tacit dimension belongs to professional practice (Schon, 1983, p. 39) without a theoretical foundation. The problem that arises in practice, no matter how similar it may seem to be to other problems, is unique, and the solution must be found within the specific context. It must, therefore, be defined each time. In such contexts, problem-definition knowledge (e.g. development of concepts) is as important as problem-solving knowledge (e.g. use of tools). In many cases, problems can only be defined in relation to practical situations that often have unclear boundaries, where explicit knowledge is not sufficient to define the problem or solve it. To define a problem in a practical context, a hospital should create a framework around the work situation. This is the strategic, organizational and managerial implication of the focus on tacit knowledge

(Souleiman, 2016). If this framework is not generated, then explicit knowledge and technical rationality will gain acceptance because of their historical importance and position as the dominant logic. When the system does not create structures, relationships and processes that allow the possibility of a tacit dimension, then the explicit dimension will dominate decision-making (Gill, 2016). Our point is that such 'rational' solutions will ultimately lead to less rationality at the system level, and in the worst-case scenario, could damage a system's performance.

An organizational and managerial deficit will occur if tacit knowledge (e.g. the front line in a hospital and in other places in a hospital where tacit knowledge is located) is given less emphasis in favour of explicit and verifiable knowledge (Jaziri-Bouagina & Leal Jamil, 2017).

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ABSTRACT

The aim of this book is to contribute to the understanding and clarification of leadership and organizational problems in hospitals from a knowledge management perspective. We develop the concept of knowledge-effectiveness contrasted to the concept of cost-effectiveness. The innovative contribution of this book lies in how a knowledge perspective and, in particular, knowledge-effectiveness can contribute to hospital leadership and organization. The question we are investigating in this book is as follows: Why are hospitals so difficult to manage? We believe that if we can help answer this question, we will be helping to ease the task of hospital management.

Keywords: Hospitals, leadership, knowledge-effectiveness, knowledge management, innovation, continuous change, conceptual generalization

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INTRODUCTION TO THE HISTORY OF HOSPITAL LEADERSHIP

In recent years, there has been considerable debate at times about forms of hospital leadership. Among other things, this debate conveys the engagement of political stakeholders and health professionals in both hospital and academic settings.

Over the past 30 years, hospital management models have developed in four stages. In the 1970s, when there was a relatively low level of internal and external complexity, the bureaucratic model was predominant. As far as leadership was concerned, members of the medical profession were dominant to a large extent. From a political point of view, the prevailing watchwords were equality and democracy. In general, the value-creation logic was oriented around the value chain (see Porter, 1985).

In the 1980s, when hospitals became more complex internally, the ‘professions’ model became more and more prominent. There was also a growing debate about shared versus unified leadership. The professions model was the predominant management model, even though during this period the bureaucratic model continued to be strongly represented in the conceptual models being applied by individual actors. From a political point of view, productivity and effectiveness were the prevailing watchwords. To a large extent, the logic for value creation was oriented around competence and the linking of competences, a value-creation logic that is known as value workshop (Stewart, 1997).

In the 1990s, external complexity increased, among other things, as a result of increasing expectations, because technological opportunities made it possible to satisfy more needs and wishes than before. The demand for new and better services increased and the pressure on hospitals and professionals grew significantly. This led to a debate where one sought to find a balance

between expectations and possibilities. The management model that evolved during this period can be called the 'divisional' model, where the focus was on leadership and management within relatively free units. The political catchphrase employed at the time can be summed up as 'greater freedom of choice for the individual'. The value creation logic that came to the fore was the value network (Stewart, 1997), with network connections in a larger network of hospitals.

Throughout the 2000s, internal and external complexity increased. The management model that crystallized from the 2000s up until today (2022) can be termed the 'communication' model, because the prevailing coordination mechanism, in situations where both internal and external complexity is great, is communication. The value-creation logic that emerged can be termed the 'value dialogue' and 'value community'. This can be explained by the fact that knowledge development, knowledge transfer, communication and social responsibility are necessary prerequisites for increasing value creation at a time when turbulence is great, the rate of change is great and there is an increasing demand for knowledge production; for example, innovations that can meet the needs and wishes of the growing expectations that hospitals are facing.

The division into different management models (and different value creation focuses) should only be understood as ideal models for clarifying developments for analytical reasons, and not as a situation where one model replaced the other. This is not what occurred. All the management models and value focuses still exist today, side by side. It is the gradual change we wish to explain in this brief review (shown in the figure below). In other words, there was no dramatic shift between management models. The changes came about gradually and people's conceptual models change even more slowly, so that the different management models exist side by side over a long period of time. This increases the complexity of the management context, but also the diversity (Fig. 1.1).

The arguments that have been used for 'shared' as opposed to 'unified' leadership may be summarized as follows:

Arguments in relation to shared leadership in hospitals:

- Equal dialogue
- Negotiated agreement results in greater commitment and goal orientation
- Promotes diversity and pluralism
- Consensus can hamper decision-making efficiency

Internal complexity	High	The ‘professions’ model 1980s Focus: productivity effectiveness Value-creation logic: Values workshop	The ‘communication’ model 2000s Focus: coordination communication Value-creation logic: Value dialogue and value community
	Low	The bureaucratic model 1970s Focus: equality democracy Value-creation logic: Value chain	‘Divisional’ model 1990s Focus: leadership and management within relatively free units Value-creation logic: Value network
		Low	High
External complexity			

Fig. 1.1. The Management Models of Hospitals: A Typology.

- Bureaucratization, because unsolved issues can be sent further up the hierarchy
- Develops a culture of negotiation.

Arguments related to ‘unified’ leadership in hospitals:

- Promotes financial management
- Greater problem focus
- Increased ability to act
- Does not support segmentation of the professions
- Can lead to friction between the professions
- Develops a performance culture.

The power and the convention perspectives regarding shared, in contrast to unified, management of hospitals can be framed in relation to three elements: technology, profession and ideology.

- Power and influence can be understood as a process in which people hold positions and form relationships with others, thus gaining influence in the health sector or more specifically in the hospital sector.
- New technology leads to new professions, which will also be able to exert influence.

- The ideological perspective is related to developments in society from the 1980s up until the present day. This concerns a transition from a focus on collective solutions to an emphasis on individual solutions. This change in mind-set may also be related to the management of hospitals. The ideological perspective is also related to the fact that external institutional forces, political influence, pressure groups, trade unions and so on, can all largely be said to contribute to the development of the framework conditions for the management of hospitals.
- The professional perspective is related to the fact that old and new professions compete with each other for power and influence. Historically, there have been three dominant professional groups in the hospital sector: doctors, nurses and hospital administration (mainly economists and lawyers). However, recent developments have led to an increase in the number of professions and professional categories in modern hospitals.

The demand and supply of health services is governed by several factors. Some of these are mentioned below.

- (1) *Demographic trends:* Demographic trends indicate that there will be a growing need for health services in the years to come. We are facing a situation where, in a relatively short period of time, we must either increase the volume of health services or make the health sector more efficient. Another alternative is of course to do both, both increase resource use and at the same time improve the economic efficiency in healthcare. Automation and new technology, such as artificial intelligence, may provide opportunities to achieve this.
- (2) *Technological opportunities:* Recent years have witnessed rapid technological developments, and it is anticipated that new technological innovations in health-related technology will emerge in the future, where artificial intelligence, intelligent robots and intelligent algorithms will play a crucial role in hospital automation processes. This will enable procedures to be performed that were previously characterized as very difficult. Another consequence is that with the new technology, new specialist groups will emerge that utilize the technology. Relationships of power will change and new positions and relationships will develop. The new technology will thus lead to both opportunities and challenges for both the management of hospitals and the various professions.
- (3) *Increased expectational pressure:* Technological and economic factors have both contributed to a rise in expectational pressures for hospitals.

This can quickly develop into a conflict between perceived opportunities and the perception of what is actually being delivered by hospitals. Much of the expectational pressure crystallizes at the interface between expectations and the perception of what is actually delivered.

- (4) *Increased informational pressure:* The level of knowledge among the general public has increased, while at the same time there is greater and easier access to information, for example via the Internet. This has equipped patients to challenge doctors and nurses, who are thus put under increased everyday stress, because they feel that they have to be able to provide reasonably expert responses to their patients' questions. A form of information competition further increases the level of pressure in these professionals' stressful everyday working lives.
- (5) *The threshold problem:* In a society where our expectations are increasing due to many factors, such as new technology, political promises and economic progress, a trend can easily develop where the threshold for what constitutes a 'health problem' is falling. When and if this happens, the pressure on hospitals will increase further. This will also increase the political pressure on hospitals, because politicians will aim to fulfil the wishes of those voters who demand an improved and more diverse healthcare.
- (6) *Competitive tendering:* For some countries, this is a relatively new phenomenon, at least if we think on a large scale. This competition, regardless of whether or not it is beneficial, causes leaderships in both private and public sector hospitals to experience additional pressure to master their roles and deliver the expected results.
- (7) *Socialization:* The education of health professionals has a strong socialization effect. Doctors, nurses and other health professionals develop a common strong identity, which may provide one of the explanations for why changes in hospitals are difficult to implement. Without changing the socialization process in medical education, it can be difficult to change the basic management philosophies in the health sector.
- (8) *Professionalization:* While there were few professions in hospitals in the past – for example, doctors, nurses, various nursing assistants and some support functions, in today's modern hospitals there is a large number of various professions and professional groups. All of these groups have clear expectations of having their voices heard in both professional and managerial matters. For example, many medical engineers believe that

they are just as qualified as doctors and nurses to take on leadership positions at various levels within hospitals. This results in further complexity in the health sector.

- (9) *Different value-creation logics*: In hospitals, as in other enterprises and institutions, one can typologize value creation along five axes. These are the value chain; the value network; the value workshop; the value dialogue; and the value community.¹ These value creation processes, which the management of hospitals need to deal with in one way or another, increase complexity and can be experienced as making management difficult.
- (10) *Different management philosophies*: We have discussed above the debate concerning ‘shared’ in contrast to ‘unified’ management in hospitals. Other management philosophies are based on a stakeholder perspective, a resource perspective, an activity perspective, a bureaucracy model, a professional model, a divisional model and a communication model.² A variety of management philosophies can be viewed by hospital leadership as increasing complexity.
- (11) *Complexity and risk*: The constant shifting between medical and economic matters increases the complexity of managing hospitals. Technology enables many new possibilities, but it also results in increasing risk to a higher level. For instance, prior to the introduction of new technology, there were many surgical interventions that could not be performed. It is now possible to perform certain surgical procedures to treat conditions that may have arisen due to lifestyle; in other words, a person’s lifestyle can pose certain health risks. This ‘risk’, which was the individual’s responsibility before, has now to a certain extent been ‘transferred’ to the hospital. Consequently, this ‘risk’ increases complexity and makes it more problematic to manage hospitals. Of course, this benefits many patients, but the ‘risk’ is transferred to the front-line and the hospital leadership. The complexity also has another aspect. This concerns the fact that the management system will never be able to achieve sufficient variation in relation to the activity system in hospitals, because the complexity of the activity system will always be greater than the complexity of the

1 We will not elaborate further here on value-creation processes in hospitals, as this will be discussed in Chapter 4.

2 We elaborate on the various management philosophies, as this is one of the questions we explore in this book.

management system. In other words, the operating system has greater complexity than the management system can deal with. Amongst other things, this is because the operating system has a surplus of tacit knowledge.

- (12) *The performance of health professionals:* When an increasingly large proportion of the wealth creation in many countries is invested in the health sector, the demand for higher productivity and improved performance of health professionals will only increase. The responsibility for this will lie with the leadership of hospitals. Therefore, the pressure will increase further on the leaders at all levels in hospitals. At the beginning of the Fourth Industrial Revolution, this pressure will be linked to increasing the productivity of health professionals, as well as increasing the level of innovation in the sector.
- (13) *Leadership complexity:* While the leadership of hospitals in the past was performed by skilled medical professionals, the requirements for the skilled leader today have changed. Leadership today is not only linked to professional competence, but also to social and emotional competence. What constitutes social and emotional competence today is more explicit than was the case in the past. Before, it was common to hear expressions such as ‘the chemistry is wrong’, if a leader experienced problems working together with others. Today, there is a tendency to be more analytical, pointing out which social and emotional competences are crucial if one is to perform effective leadership. In this context, it is conceivable that the following hypothesis is of relevance: It is the leader’s social, emotional and professional competence that is crucial to perceived success, not the leadership structure (e.g. ‘shared’ in contrast to ‘unified’ leadership). Studies carried out in Denmark (Vinge, 2000), among others, may indicate that this hypothesis is of relevance.
- (14) *Surplus of tacit knowledge:* The operational level in hospitals has a surplus of tacit knowledge, which makes it difficult to transfer the necessary management information to the hospital leadership that does not possess this type of tacit knowledge. Expertise in the operating system requires a high-level of experience-based knowledge. In this way, the front-line will always have more information than the management system, and tacit knowledge cannot be transmitted as information. The solution to this problem complex is linked to the organization of the activity system.

- (15) *Institutions are 'slow fields'*: Hospitals can be defined as institutions with a high degree of complexity in relation to objectives and technology, as well as having many links to other institutions. According to 'institutional thinking', this means that they have a high degree of resistance to change, which makes management and organization of hospitals difficult.

We have listed some of the factors above that influence the leadership and organization of hospitals.

The leadership role is under pressure in hospitals, and partly undergoing changes. There are greater demands from the market for service and quality (the value workshop); there are greater demands from the social and institutional contexts regarding the delivery of results (the value chain); there are greater demands from the external world regarding utilization across hospitals (the value network); there is also a greater demand from the external world for ongoing information and communication, as well as an increasing demand for greater social and emotional competence (the value dialogue and the value community). This links our perspective to strategy literature and systemic thinking. In addition, we will consider the 'institutional perspective' in order to investigate change processes in hospitals. The institutional perspective is interesting, among other things, with regards to what is taken for granted, and how this can be changed (Scott, 1995).

Why do we regard hospitals as institutions, and not just as organizations? Scott (1995) lists two requirements for a system to be institutionalized.

- (1) A high degree of complexity in objectives and technology (Scott, 1995, p. 19)
- (2) A high degree of affiliation with other institutions (Scott, 1995, p. 191).

Hospitals fulfil both of these criteria. Consequently, hospitals as institutions may be considered a special type of system. When there is a great deal of complexity in objectives, this requires considerable resources to develop a strategy for a hospital. The objectives of hospitals, especially large hospitals, are related to a range of aspects, such as research, education, patient care, staff focus, pay conditions, health and safety, user service, quality of services, networks with other hospitals and institutions, dialogue with the external world, and the use of technology.

The strong connection with other institutions has several aspects. In relation to the above, we can formulate the following hypothesis: The higher the degree of connection a system has to other institutions, the greater the