



iBMG Working Paper W2010.03

Mapping the context:

Different scenarios for managing human resources in a changing hospital context

Monique Veld Jaap Paauwe Paul Boselie



Mapping the context:

Different scenarios for managing human resources in a changing hospital context

Date of publication

December 2010

Authors

Monique Veld Jaap Paauwe Paul Boselie

Contact

Erasmus University Rotterdam Institute of Health Policy & Management Tel. +31 10 408 8555 research@bmg.eur.nl www.bmg.eur.nl



Mapping the context:

Different scenarios for managing human resources in a changing hospital context

Monique Veld^{1, 2§}, Jaap Paauwe ^{2,3}, Paul Boselie ^{2,4}

¹ Institute of Health Policy & Management, Erasmus University Rotterdam, the Netherlands

² Department of HR studies, Tilburg University, the Netherlands

³ Departments of Applied Economics, Erasmus University Rotterdam, the Netherlands

⁴ Utrecht School of Governance (USG), Utrecht University, the Netherlands

§Corresponding author

E-mail addresses:

MV: veld@bmg.eur.nl

JP: Paauwe@uvt.nl

PB: j.p.p.e.f.boselie@uvt.nl

Abstract

Consequences of health care reforms for the management of employees in health care have generally been overlooked. This is surprising, as employees bear the burden of these reorganization and restructuring initiatives. Hence, more systematic research is needed on the consequences of health care reforms on human resource management (HRM) in health care.

The aim of this paper is twofold. First, to address the gap in knowledge about the influence of health sector reforms on the management of employees. In order to do this a framework is provided, in which different dimensions of influences upon the management of human resources are discussed. The framework is used to conduct a force field analysis in the Dutch hospital sector, resulting in four focal HRM themes: attraction and selection, task redesign, substitution, and improving working conditions. These HRM themes are in need of further elaboration in order to contribute to an optimal functioning of hospitals in the near future. The second aim of this paper is to provide different scenarios. These scenarios describe alternative strategic choices individual hospitals can opt for, and what this means in terms of selecting and shaping HRM policies and practices in hospitals.

The framework will enable policy makers and managers to conduct a force field analysis for their organization, resulting in a systematic overview of forces and actors having an impact on HRM. This can be used as a stepping stone for creating a better fit between the (changing) context and the management of employees. In addition the scenarios can be used as a basis for strategic conversation.

Introduction

Across many countries health care systems are in a state of flux, as governments struggle with increasing demands arising from an ageing population and medical innovations, in conjunction with a more demanding public and cost containment issues (Dubois et al., 2006). Health sector reforms have a major impact on health organizations and the employees working in these organizations (Buchan & O'May, 2002; Franco et al., 2002). General health reform on national level pushes health organizations towards change, for example with regard to increased attention for cost-effectiveness, service quality, safety, flexibility and innovation. Organizational change is most likely to affect employee outcomes with regard to employee commitment, satisfaction, motivation, job stress, trust, absence due to illness and turnover (Martin et al., 2005). Low employee morale, general employee dissatisfaction, lack of trust in management, high employee turnover levels and job stress can be the direct result of organizational change when the (inevitable) change itself is not managed properly (Boxall & Purcell, 2008). Although many aspects of health care reform have been researched worldwide, there has been a surprising lack of attention to the human (worker) elements of reforms (Franco et al., 2002). The implications of reforms in terms of changes in the requirements of human resources have only been superficially addressed (Durán-Arenas & López-Cervantes, 1996). Moreover, health care reforms have rarely been translated into consequences for the management of employees in health care. This is remarkable, given the fact that employees are at the cutting edge in reconciling a whole range of pressures as a resultant from the reorganization and restructuring initiatives (Bach, 2000). Hence, more systematic research is needed on the consequences of health care reforms on the management of employees in health care, as the right staffing mix (both in quality as well as in numbers) can make the difference between successful and less successful organizations. In this paper we will provide a framework (based on Paauwe, 2004), which can be used to systematically link contextual characteristics (including reforms) to the implications for the management of human resources in health care.

The aim of this paper is twofold. First of all, we will use the framework in order to conduct a contextual analysis in the Dutch hospital sector. The use of the framework contributes to our understanding of the impact of contextual factors on the management of employees in a changing context.

The second aim of this paper is to provide different scenarios focused on alternative strategic choices managers and policy makers can opt for. These scenarios are used to further refine our model from a sector level perspective towards an organizational level perspective.

The paper starts with a theoretical framework, focusing on the Contextually Based Human Resource Theory (CBHRT). This section is followed by a description of the methodology, and the application of the contextual based HR model in the Dutch hospital sector. The paper ends with different scenarios, focusing on alternative strategies for managing employees within hospitals.

The Contextually Based Human Resource Theory (CBHRT)

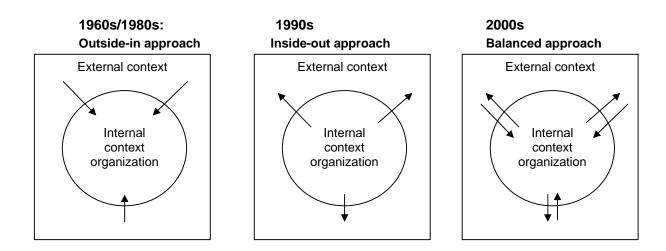
Context matters, but what have we got? The early strategic contingency approaches in management (e.g. Pugh & Hickson, 1976) highlight the relevance of both internal and external contextual factors for the shaping of an organization, for example with regard to the strategy, the organizational structure, the systems in place and the organizational culture. The popularity of the strategic contingency approaches decreased with the rise of a new theoretical school in strategic management: the resource based view (RBV) (Barney, 1991). The RBV is a reaction on the typical

outside-in approaches that characterize strategic contingency models. The RBV is often labeled an inside-out approach emphasizing the potential value of internal resources (for example human resources) for organizational success. The RBV gained popularity in the 1990s and was further strengthened by the inclusion of human and social capital notions early 2000 (e.g. Wright et al., 2005). The RBV is built on the notions that internal resources can be a source of competitive advantage when the resources are scarce, valuable, difficult to imitate and difficult to replace. From an HR perspective it is thought that these internal resources (in particular human resources) can be managed and developed through so called high performance work practices (Boxall & Purcell, 2008). In other words, organizations can outperform competitors through HRM. The RBV does acknowledge the relevance of the internal organizational context (configuration), however the external context is largely ignored (Paauwe & Boselie, 2007).

Oliver (1997), Deephouse (1999) and Paauwe and Boselie (2007) make a plea for restoring the balance between outside-in approaches (e.g. strategic contingency approaches) and inside-out approaches (e.g. RBV). They emphasize the relevance of the internal and external organizational context by introducing new institutionalism (e.g. DiMaggio & Powell, 1983) in order to specify the external context of organizations. In their approaches the external organizational context incorporates market mechanisms (for example new products, technology and market developments) and institutional mechanisms (for example legislation, the role of the government and societal norms and values). Oliver (1997) stresses the necessary blending of the outside-in and inside-out model for a better understanding of an organization in its specific context. In other words, both the internal and external organizational context affect the decision making and the shaping of people management in an organization. Distinguishing both market mechanisms as well as

institutional mechanisms in these approaches appears to be highly relevant in contemporary health care settings.

Figure 1: paradigm shifts: the role of context in management research



Paauwe (2004) introduces a theoretical framework that combines the outside-in and inside-out perspectives and takes into account both market mechanisms and institutional mechanisms. The framework incorporates elements of the contingency and configurational mode (Delery & Doty, 1996), new institutionalism (DiMaggio & Powell, 1983), and the Resource Based View (Barney, 1991).

The CBHRT model (see figure 2) distinguishes two different dimensions in the environment which more or less dominate the crafting of HRM. The first dimension is the *Product / Market / Technology dimension* (PMT). This competitive dimension shows how HRM is affected to a certain degree by demands arising from relevant product market combinations and the appropriate technology. These demands are usually expressed in terms of criteria such as efficiency, effectiveness, quality, innovativeness. This dimension represents the tough economic rationality (added value) of competition. However, it is important to be aware of the fact that this

dimension is embedded in or corrected by a second dimension, which focuses on institutional mechanisms. This second dimension is the *Social / Cultural / Legal dimension* (SCL dimension) and embodies normative (Oliver, 1997) or relational rationality by focusing on moral values such as fairness and legitimacy. The outcomes of market forces are guided and corrected by prevailing values and norms (Paauwe, 2004). So, more or less widely accepted societal values such as a fair balance in the exchange relationship between individual and organization (fairness) and the acceptance of the behavior of organizations in the wider society in which they operate (social legitimacy) will also have an impact on the shaping of HRM policies and practices (Paauwe, 2004).

In addition to these two dimensions, the unique historical grown *configuration* of a firm also has a bearing on shaping and structuring HRM. This organizational/administrative heritage is the outcome of past choices and constraints which the organization has endured and the kind of culture this has engendered (Paauwe, 2004).

Next to a systems perspective the framework also takes into account an actors' perspective by including the so-called *dominant coalition*. The dominant coalition includes the people who hold the decision making power regarding HRM in the organization. Examples of these are Board of Directors, Management Team, Chief HR officer, works council etc. The dominant coalition is involved in shaping and selecting HRM policies and practices. These decisions are made within a certain *degree of leeway,* implying that the aforementioned three contextual dimensions are not fully determinative in shaping HR policies. To a certain degree there is room for manoeuvre, enabling the dominant coalition to make choices amidst of market and institutional forces/influences.

The right part of the CBHRT model shows that the unique shaping of HRM strategies is aimed at generating HRM outcomes (e.g. commitment, motivation, retention, and employee presence) which in their turn contribute to the performance of the organization (e.g. Boselie, 2010).

Efficiency Product/Market/T Effectiveness echnology Flexibility Dimension Quality (PMT) Innovativeness Speed Competitive Mechanisms Ρ Ε Н **HR Strategies** R aimed at R Room to Manoeuvre: F resources that M Organizational/ 0 are: Administrative/ 0 R - valuable **Dominant** Cultural Heritage U Μ - inimitable Coalition Τ Α - rare С Ν - and non-0 Configuration С substitutable Μ Ε Ε Strategic Choice S Social/Cultural/Le gal Dimension Fairness and Legitimacy with (SCL) regard to work, time, money, know-how and Institutional participation Mechanisms

Figure 2: The contextually based human resource theory. Source: (Paauwe, 2004)

Methodology

In this paper the CBHRT approach was used to map the Dutch hospital context. In order to do this we run through three different stages of data collection. During the

first stage we conducted a document analysis and a literature review. The primary focus in this first stage was to gain insight in the role and relevance of different contextual influences on the shaping of HRM. In addition we performed an extensive review of publicly available information sources including websites of CBS¹, RIVM², and the Dutch Ministry of Health. This publicly available information provided relevant information about the sector (e.g. characteristics of the hospital workforce).

During the second stage we collected data by means of interviewing experts in the field of HRM in hospitals

(n=20). Respondents were selected through purposive sampling (Miles & Huberman, 1994). The interviews were semi-structured based on a schedule designed by the authors, and covering questions about HR strategies in hospitals, relevant changes regarding the HR policies and practices, and changes within the hospital context that might influence HRM. The interviews were all recorded and transcribed. The researchers content-analyzed the interview transcripts (Miles & Huberman, 1994) to track relevant changes and issues with respect to HRM. Issues were considered relevant if reference was made to them during two or more of the interviews.

The information collected with the document analysis, the reviews and the interviews made it possible to map the Dutch hospital context, resulting in a completed CBHRT framework. In the last stage we presented this framework during a seminar, in which different health care and HRM experts (both scientists and practitioners) participated. During the seminar a very few and only minor changes were being suggested by the experts, which were then incorporated into the final framework. This final checkup made it possible to check for accuracy of our context analysis.

The following sections describe the insights generated by applying the CBHRT framework to the Dutch hospital context.

-

¹ CBS: Statistics Netherlands (Centraal Bureau voor de Statistiek).

² RIVM: National Institute for Public Health and the Environment (Rijksinstituut voor Volksgezondheid en Milieu)

The contextual based HR model in the Dutch hospital sector

Configuration/administrative heritage

Hospital care in the Netherlands is delivered almost exclusively in private not-forprofit institutions. Before the 1980s Dutch hospitals could be characterized by their inward-looking narrow focus. This inward focus was mainly reinforced and strengthened by the system of open-ended funding, i.e. there were no budget limits either on a global level or for certain health care expenses as health insurers paid all costs incurred by every health care organization (Paauwe, 2004). However, a crucial change in hospital finance happened in 1983, with the introduction of prospective, fixed hospital budgets. This means that, from that moment on, hospital reimbursement was based on different parameters (e.g. the number of authorized beds and medical specialist units, inpatient days, outpatient visits and hospital admissions) (Custers et al., 2007). As a result 'efficiency' became the magic word in those days, leading up to many mergers between hospitals to achieve economies of scale. The Ministry of Health, Welfare and Sport actively encouraged and initiated these mergers, with the aim of improving quality of care and reducing the overcapacity in hospital beds (Maarse et al., 1997). These mergers and reorganizations have led to a major reduction of the number of hospitals. Since 1982 the number of hospitals reduced from 172 organizations (Meegdes, 1992), to 91 organizations in 2009. These 91 organizations comprise 141 locations and 60 external outpatients' clinics (Deuning, 2009).

The historical grown configuration of hospitals is based on a functional structure. This means that similar capacities are grouped in departments (units), for example, surgeons in the surgery department, and medical lab technicians in the diagnostics department. The main reason for this functional design is the task differentiation and specialization of physicians and to a lesser degree also nurses (Vos et al., 2009).

Given the fact that in a functional design each department strives to optimize its level of functioning, coordination between departments is often a difficult task. As a result, departments are not able to tune their processes to those in other departments. Currently, Dutch hospitals are in the middle of a transition towards a more processoriented and customer focused organization (see next section for more information about the reasons for this transition). In a process-oriented and customer focused organization, divisions are centered around the processing of well-designed categories of patients including both inpatient and outpatient services (Maarse et al., 1997). This means in practice that functional (and sometimes even organizational) boundaries are crossed, and members of different departments (or organizations) are encouraged to collaborate and achieve common goals (Vanhaverbeke & Torremans, 1999). Notwithstanding the fact that most of the hospitals actively pursue to redesign their organizational structure into a process oriented organization, most of the hospitals are still characterized by their functional design.

Governance of hospitals in the Netherlands is based on a "two-tier" board model. To be precise they have a board of directors, which is responsible for the day to day running of the hospital, and an independent board of supervisors (Eecklo et al., 2007). This independent board of supervisors, made up by co-opted volunteers, is responsible for checking and approving of the major decisions made by the board of directors (Hoek, 1999). Medical specialists do not have a full role in the hospital management and governance structure (Scholten & Van Der Grinten, 2002). Instead, most of the medical specialists are 'self-employed entrepreneurs' and work in so called partnerships (maatschappen). In spite of the fact that medical specialists are strongly dependent on hospital management for being able to treat their patients, they occupy a rather autonomous position in the hospital, directly affecting the management and policy making of the hospital as a whole (Boselie, 2010). That is to say, the hospital board is dependent on the medical staff in order to achieve its

objectives. Given the fact that hospitals need the commitment of medical specialists towards these objectives, hospitals try to pursue the integration of medical specialists in their governance structure (Scholten & Van Der Grinten, 2002). A number of options are available for doing this: increasing the power of doctors at the top of hospital organizations or adopting the idea of "comakership", i.e. the dual management by doctors and professional managers (Ong & Schepers, 1998). Whatever direction is taken, it does have implications for decision making in hospitals, and so the management of human resources in hospitals.

Lastly, the core of hospital staff is comprised of professionals. In fact, one can distinguish between four groups of professionals, i.e. physicians, nurses, allied health (such as respiratory therapists, occupational therapists, dietitians and pharmacists) and the health administrators (Garman et al., 2006). Management of professional employees has traditionally involved high levels of employee discretion. Employees in professional service firms typically have advanced educational qualifications (Boxall & Purcell, 2008). Professional networks and communities often provide training and education, both before and after organizational entry (Kalleberg et al 2006). In addition, these networks also create a shared sense of identity and common norms and values among their members (Golden et al., 2000). Based on these specific characteristics, professional employees do have different needs than non-professionals. Hence, managing HR in a professional organization, like hospitals, requires a customized approach which takes into account the needs of the professional employees.

In summary, the historical configuration is mainly characterized by: a large amount of mergers and reorganizations, the "two-tier" board, a bureaucratic way of organizing, autonomous position medical specialists, a functional based organizational structure, and a hospital staff which is mainly comprised of professionals.

PMT dimension

The product-market-technology dimension is focused on the demands arising from relevant product market combinations and the appropriate technology. The main product (actually service) of hospitals is delivering care to patients. Traditionally the delivery of care was based on supply driven principles. However, the Dutch health care sector is changing from a supply oriented system towards a more demand and patient oriented system with a focus on more market competition. Nevertheless, this does not mean that policymakers seek to abandon planning and regulation. Rather, the aim is to combine some market incentives with a framework of rules to guide competition and the capability to intervene in case of market failures (Ham & Brommels, 1994). More market incentives should in the end lead to cost containment, higher productivity, better quality of care, and care that is tailored to customer preferences (Helderman et al., 2005).

An important step to introduce more market competition was the introduction, in 2005, of a new reimbursement system based on output pricing, which should lead to more transparency and market orientation. In this new system a set of diagnosistreatment combinations (DTC) form the basis for the introduction of product prices. A DTC includes all the activities and actions performed by the hospital and medical specialist in response to a patient's specific need for care, from the first consultation or examination to the final check-up (Custers et al., 2007). Hospitals receive money for each DTC they deliver. Most prices of these DTCs are set by the government, but freely negotiable prices are allowed for a number of routine operations, such as hip and knee operations. These freely negotiable prices account for about 34% of all DTCs (Van de Ven & Schut, 2009). This system enables insurers to purchase care based on price and, potentially, on quality — forcing hospitals to make prices transparent and increasing competition among them (Grol, 2006).

Another element of competition that is introduced was the new Health Insurance Act (HIA) in 2006, under which every person who legally lives or works in the Netherlands is obliged to buy, from a private insurance company, a basic benefit package (Enthoven & van de Ven, 2007). Health insurers are intended to be buyers of care and for that reason they were given possibilities to selectively contract with care providers. The government expects the reform of the health insurance system to result in a more equitable and cost efficient health care market and preserve individual freedom of choice in care providers (P. R. De Jong & Mosca, 2006).

Due to the introduction of more market competition hospitals are stimulated to strengthen their market profile toward their customers to maintain and expand their service area (Maarse et al., 1997). Various instruments are used to accomplish this, for example benchmarking, publishing annual public reports on hospital facilities and performance, publishing performance indicators on websites (e.g. Maarse et al., 1997), and measuring patient satisfaction continuously.

A more far-reaching intervention introduced, is the introduction of (integrated) care pathways. These care pathways are clinical management tools used to develop systematic and multidisciplinary care of patients (Verdú et al., 2009). Multidisciplinary cooperation and collaboration are required to facilitate these clinical pathways.

More market orientation does not only have an impact on the internal design of hospitals, it also stimulates cooperation with other health care providers outside the organization resulting in the creation of provider networks (chain care, *ketenzorg*). So both within as well as across organizational boundaries we see more teamwork of a multidisciplinary nature, which requires more insight into the nature of changing patterns of cooperation, teamwork and the necessary HR architecture to support and enable these new ways of working together across both functional and organizational boundaries.

In summary, the PMT dimension is mainly characterized by the following key issues: the introduction of more market competition; the pressure to reduce costs, improve productivity, and to create high service quality which is tailored to customers' preferences; the creation of network organizations; and the need for innovation.

SCL dimension

The SCL dimension is focused on characteristics of the present and future hospital workforce and the related institutional mechanisms that have a direct impact on the shaping of HRM.

The health care sector is very labor intensive. It is even one of the most labor intensive sectors of the Dutch economy. More than 1.3 million people are employed in the health care sector (15% out of a total workforce of 8.3 million employees). Almost 20% of the employees in health care work in the hospital sector. Consequently, labor costs are substantial; more than half of the total costs in hospitals consist of labor costs (e.g. in 2005 total costs in Dutch general hospitals were 14.1 billion Euros; labor costs were 8.7 billion Euros) (CBS, 2009). These labor costs are expected to increase even further as a result of an ageing workforce. Other implications of an ageing workforce are the need for changing work patterns, and the replacement of staff. The ageing of society also affects health care, since elderly people need more care. The combination of an increasing demand for care and a diminishing capacity of manpower, bear the risk of higher work pressures. Hence, the ageing of the Dutch population is a major issue for HR in health care. First of all, it will become more difficult to attract and retain highly qualified personnel. Plus a further increase in work load is expected (which is high already) and this is most likely to lead to higher accident and sickness rates.

Looking at other characteristics of the hospital workforce, one can say that it is a typical feminine sector (80.8% women), characterized by many part-time workers (70% of the employees work less than 34 hours per week) (RVZ, 2006). This pattern

can be especially found among the non-physician employees, such as nursing and supporting staff. The profession of medical specialists is traditionally male dominated (in 2007 66% of the physicians was male) (Velden et al., 2008), mainly characterized by a lot of full-time workers. Nowadays this pattern slightly changes with the growing number of women physicians (in 2025 55% of the population of physicians will consist of women) (Velden et al., 2008), who prefer to work part-time (J. D. De Jong et al., 2006). Another characteristic of the hospital workforce is that the majority of staff is well trained and specialized. In the Dutch hospital sector only 13% of the hospital staff is lower educated, or is not educated at all (van der Velde & Verijdt, 2010). Hence, the majority of the hospital staff is comprised of professionals. Professionals often identify primarily with their profession, which may conflict with identification with the wider organizational context. Besides, employees often feel more committed towards their profession than towards the organization they work for (Johnson et al., 2006). A further characteristic of a professional workforce is their educational level, which is typically determined by professional standards of education and training. This training and education usually involves more than teaching specialist expertise. It also encompasses intensive socialization into the (often strong) norms and values of a professional network and its standards of integrity, judgment and loyalty (George, 2009). Given the fact that hospitals employ different groups of professionals and non-professionals, there is a lot of skill variation between different employee groups.

Finally, the hospital workforce is characterized by status differences. A well-entrenched status hierarchy exists in medicine, making it difficult to speak across professional boundaries (e.g. physicians vs. nurses). This status difference can diminish professionals' tendencies to communicate, share authority and collaborate in problem solving and quality improvement (Nembhard & Edmondson, 2006), which might adversely affect patient care. Schmitt (1990) for example has shown that malpractice in care was the result of hierarchical status differences. Physicians (high

status) tended to ignore important information communicated by nurses (low status), and nurses held back relevant information from physicians.

Other status differentials between groups exist between management on the one hand and health care professionals on the other hand. Traditionally, decision making in hospitals has been dominated by physicians which have often pursued goals critical to their status as professional but not congruent with organizational goals (Lega & DePietro, 2005). Management functions were often handled by the health care providers themselves in collaboration with some non-professional help. Still, health care professionals often report up to other health care professionals within their discipline, rather than to the managers in their unit or hospital (Garman et al., 2006). Related to the changes in the PMT dimension (i.e. more market competition), managers have become more important for hospitals nowadays. Because of the high status of health professionals, hospital management faces the difficult task of engaging health professionals in managerial issues aligning their interests as much as possible with the organizational goals.

The hierarchy and related status differences not only exist between professional groups, but also exist within professional groups. Looking at the group of physicians, surgeons gain more prestige than other specialty physicians like internists. In turn these specialty physicians rank above primary care physicians (Oaker & Brown, 1986). The status differentials within groups are less salient than the status differentials between professional groups. However, the introduction of clinical pathways, in which different medical specialties collaborate with each other on behalf of the patient, might lead to more salience of this type of status difference.

Looking at the institutional features of the SCL dimension, one can say that hospitals operate in a highly institutionalized context. This is mainly the result of a complex set of rules and procedures (e.g. for safety) in combination with the professionalization of specific employee groups (Boselie, 2010). In spite of the introduction of more market competition, the Dutch government still regulates the health care system by means of

control over doctors' fees, the price determination of a large number of the DTCs, hospital budgets and quality and safety issues. Next to the government, other stakeholders, like the Dutch health care inspectorate and patient organizations, do have a major influence on hospitals. Hospitals need to report annual quality records to these different stakeholder groups. In addition these stakeholders have become more intensively involved in improvement initiatives, like the program "faster better" (Grol, 2006).

Another aspect of the institutionalization is the existence of a National Collective Bargaining Agreement (CBA) for hospitals. The employer federation and the trade unions negotiate on this CBA. On behalf of all Dutch general hospitals (100% membership rate), the Dutch Hospitals Association (*Nederlandse Vereniging voor Ziekenhuizen*), acts as employer's federation. On behalf of the employees, five trade unions are active in the hospital sector. With an average unionization rate of 30%, Dutch hospitals are relatively highly unionized, at least compared to other sectors of the Dutch economy.

In the CBA for general hospitals (academic hospitals do have their own CBA), many HR practices are pre-determined. For example, compensation (wages) and employee benefits are determined by the CBA. Typical for the CBA for general hospitals are the obligations to do overtime, and the inclusion of a provision (a so called 'spare' provision, *ontzie maatregel*) under which older workers (above the age of 55) are exempted from working night shifts and weekend shifts.

In 2009, a renewed CBA was agreed on. This new CBA is especially focused on attracting and retaining more employees. Special attention is paid to equal treatment of employees, irrespective of their age, by means of implementing personal "life stage" budgets. This individualized approach offers employees the opportunity to save time off, which can be used during different life stages. The age for the exemption of night shifts and weekend shifts is increased to 57 years. Furthermore, employees with a pensionable age (65 years) are now allowed to continue to work

after they reach the age of 65. All these regulations should lead to a better division of work among younger and older employees, and a better work life balance as well as trying to extend the amount of available manpower for the near future.

In summary, the SCL dimension is characterized by: a highly institutionalized context, a tight labor market, a feminine and ageing workforce, a lot of skill variation between different employee groups, status differentials, and strong professional norms and values. These features bring about the following issues: high professional but low organizational commitment, the need for differentiation between employee groups in terms of HR policies and practices, high sick and accident rates and work-life balance issues.

Dominant coalition & the degree of leeway

The dominant coalition of most Dutch hospitals consists of a Board of Directors, a Supervisory Board, members of the works council (in which the unions have a strong representation), the HR manager / director and the unit managers. All of these actors have their own values, norms and attitudes, shared with others to a greater or lesser degree. In this respect, it is important to note that a good interaction and a shared ideology are crucial elements in creating understanding and credibility (Paauwe, 2004). This is highly relevant, given the fact that the actors together are responsible for the shaping, structuring and implementation of HRM.

The dominant coalition does have little leeway for shaping HRM policies and practices, mainly due to the relatively high degree of unionization and the sector wide CBA. These factors hinder the degree to which hospitals can differentiate themselves from competitors.

Additionally, hospitals have little financial leeway as they are dependent on government subsidies and face budgetary constraints. On the other hand, hospitals

can nowadays create a bit more room for manoeuvre, since they can negotiate with health care insurers about the prices of some DTCs.

Focal HR themes for hospitals

The force field analysis in the previous sections has provided us with a useful overview of the major challenges and key issues in the environment of Dutch hospitals. In this section we will discuss and describe how the key issues arising out of the PMT and SCL dimension give rise to a number of focal HR themes, which are badly in need of attention in order to contribute to an optimal functioning of hospitals in the near future.

As a result of the ageing of the population the attraction and retention of qualified personnel is a highly relevant HR theme for hospitals nowadays. The ageing is expected to cause an increase in the demand for care, while on the other hand it leads to a shrinking workforce. In addition, hospitals face a weak competitive position in the labor market due to a negative image, which is characterized by high work load, relatively low salaries, limited growth opportunities in terms of personal development and salaries, and the hierarchical structure mainly due to the position of medical specialists (Boselie, 2010). Consequently, hospitals have problems attracting and retaining qualified personnel, especially nurses.

Hospitals currently take various initiatives to attract and retain people. One of these initiatives to attract and retain people is the cooperation with regional training centers and other hospitals. A good example is the agreement reached by 13 hospitals in the southern part of the Netherlands. In this agreement they explicitly state that they will not actively recruit personnel from the hospitals who signed the covenant. The hospitals have also promised to help each other out in case of short term labor shortages. Most importantly, the hospitals will cooperate in order to create more

training opportunities for specialized jobs (e.g. anesthesiologists and surgical nurses) both within as well as outside the hospitals.

A different initiative is the creation of more attractive growth opportunities by extending the role of nursing staff, through clinical nurse specialists, nurse anesthetists, physician assistants and nurse practitioners. Nurses with an extended role are involved in direct care and combine care from both nursing and medicine. The introduction of these extended roles should offer more attractive career opportunities to nurses and should contribute to continuity of care and substitution of scarce physicians (Van Offenbeek & Knip, 2004). An additional advantage of substitution for hospitals is the cost savings, as nurses are less expensive than physicians. Hence, substitution is not only a way to create more attractive growth opportunities but can also be seen as a relevant cost containment strategy (Schut, 1995). Given the fact that hospitals are facing an increasing need for cost containment, it seems to be common practice to use substitution as a cost containment strategy. This is especially the case at lower levels in the organization, where more expensive nurses are substituted for less expensive care assistants and aides (e.g. nutritionist's assistants). This type of substitution is not aimed at the creation of growth opportunities, but is mainly focused on reducing costs. Another way to reduce costs is by means of outsourcing ancillary and support services. These cost containment strategies seems to be at odds with the need for the attraction and retention of qualified personnel, and contributes to a negative image in the hospital sector. This negative image, mainly based on the high work load, the relatively low compensation and limited growth opportunities, are serious issues to which HRM has to pay attention to. Furthermore, in terms of retaining employees, hospitals should focus on creating more organizational commitment. Like in other health care sectors, employees in hospitals are most likely committed to and motivated by their work (professional commitment) and their colleagues (ward or team commitment) (e.g. Cohen, 1998), but they are not primarily committed to the

organization (Johnson et al., 2006). In particular employees are not committed to an organization that, as a result of mergers and reorganizations, has grown from a local and relatively small sized organization to a regional, complex organization. Factors that have been shown to increase organizational commitment in hospitals are adequate nurse staffing, organizational / managerial support for nursing, reduction of workload, leadership and adequate time for professional development (e.g. Aiken et al., 2002).

Another focal HR theme is related to the design of the hospital organization and the work design within hospitals. As described in the PMT section, due to the need for more market competition, the design of hospitals is shifting from a functional based design towards a process-oriented and patient-focused organization. Such restructuring and reorientation is characterized by efforts to replicate private-sector management principles in hospital settings. This has been reflected in the introduction of commercially derived marketing concepts and management principles, like Total Quality Management (TQM), SixSigma, Investors in People, and the use of balanced score cards. This refocusing does have direct implications for professionals in health care, as the introduction of consumerism and managerial principles can be seen as fundamentally challenging the (long) established positions of health care professionals (Laing & Hogg, 2002). Traditionally, patients were seen as "grateful and passive recipients" of the services offered, as they deferred to the expert role and judgment of health care professionals (Currie, 2009). These health care professionals were guided by normative logics of medical professionalism. Recently, the role of patients has been recast as the "customer" (Geiger & Prothero, 2007), resulting in different expectations from health care professionals. Given the fact that patients nowadays are better informed and expect more services, health care professionals are expected to act as service providers. This implies that they should look from a different angle to their relationship with the patients, and that they need to rethink their long established positions.

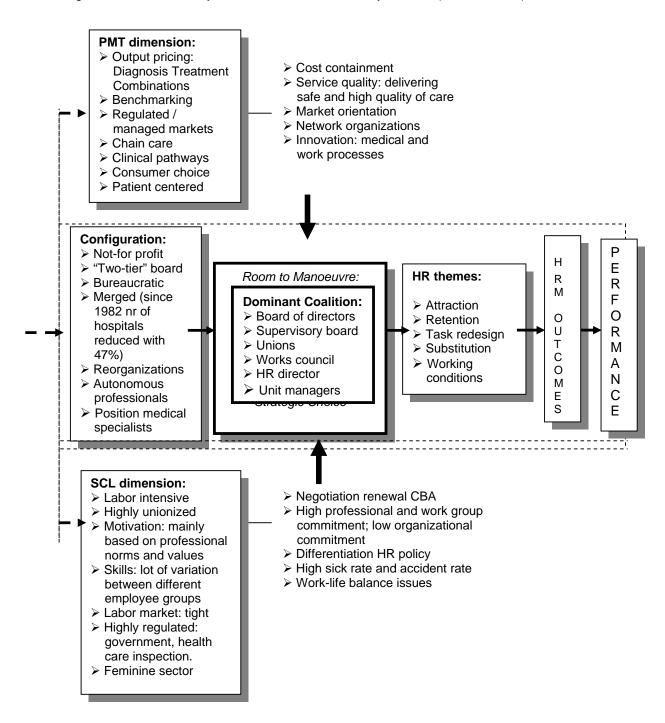
The restructuring not only has implications for the positions of health care professionals, it also does have an impact on the design of work processes. The introduction of (integrated) care pathways does imply that professionals more often need to cooperate and collaborate with other disciplines, both inside and outside the organization, resulting in more multidisciplinary team work. In terms of HRM this means that employees are expected to be able and motivated to work together across both functional and organizational boundaries.

Summarizing, the focal HR themes arising out of the PMT and SCL dimension are: attraction and retention, substitution, task redesign and working conditions. Based on the context analysis, we can conclude that these themes are badly in need of attention in order to create sustained competitive advantage in the nearby future. However, focusing on these themes is not enough. It should be noticed that the development and selection of HR policies and practices should address the sets of key issues related to both the PMT and SCL dimension. A lot of attention is (still) paid to the SCL dimension, as hospitals struggle with the expected labor shortages caused by the aging workforce. However, the PMT dimension cannot be ignored, as a result of the introduction of more market competition and cost containment programs. It is not clear how much attention HR managers in hospitals are paying to these market dynamics, but it might be clear that there is a need to make sure that professionals in health care are able and willing to focus on further improving the relationship with their "customers".

Scenarios: different strategies for a changing context

So far, we have described the different dimensions and the focal HR themes related to these dimensions (see figure 3 for a summary of these issues).

Figure 3: The contextually based human resource theory. Source: (Paauwe, 2004)



Based on this information we have a good overview of the present situation in the Dutch hospital sector, including the (upcoming) focal HR themes. The dominant

coalition in hospitals is challenged to deal with these contextual factors and the focal HR themes, in order to make a genuine contribution to continuity and preferably competitive advantage. Our analysis has been carried out at the sectoral level. So the next step is to consider what these themes might imply for each individual hospital. What kind of strategic choices are possible, given the available room for manoeuvre for making choices by the dominant coalition? Whereas the context analysis can be seen as an analysis and overview of the current situation ('lst' situation) at the sectoral level, the next step can best be described as focusing on different strategic choices the dominant coalition can opt for in the nearby future ('Soll' situation). Given the fact that the future is unpredictable, we will use a scenario method. This scenario method can best be described as a disciplined method for imagining possible futures (Schoemaker, 1995), and provides a tool that encourages policy professionals, planners and managers to establish strategies for alternative futures that allow for a clearer understanding of the uncertainties involved (Leney et al., 2004). In this paper the scenario method is used to further refine our framework from a sector level perspective towards the level of the individual organization. Three different scenarios will be described. Each of these scenarios is focused on a specific course of action the dominant coalition can opt for (i.e. 'the customer is king', 'a wonderful place to work', 'muddling through') and what this means in terms of selecting and shaping HRM policies and practices in hospitals. The scenarios are based on the general sector developments as described in the CBHRT framework.

Scenario 1: The customer is king

In the customer is king scenario, hospitals adapt to the need for more market orientation and the creation of added market value by means of delivering high quality and customized care for a reasonable price. The strategy of hospitals is focused on delivering and optimizing service quality, and hospitals act in such a way that the added value to their customers will be optimized. The organizational

structure of hospitals is characterized by a process-oriented and customer focused design, including clinical pathways and chain care processes. The dominant coalition within hospitals is challenged to align the HRM policies and practices with the strategic goal of the hospital, in this case delivering high quality customized care. To be more specific the dominant coalition is confronted with two focal HR challenges. The first challenge is task redesign. The drive for quality, patient centeredness and continuity of care is pulling towards a more organic way of organizing, in which work roles are integrated and combined and authority is decentralized to enable local decision making (van Offenbeek et al., 2009). Examples of this form of organizing are chain care and clinical pathways, in which work is grouped around patients instead of professions. The work design around these processes asks for multidisciplinary teamwork, in which different occupations and medical disciplines work together. Open communication and information sharing between these different groups can be seen as important preconditions for this type of work design.

The second HR challenge is substitution of scarce physicians for nurses with extended roles. The introduction of extended nursing roles, like nurse practitioners, nurse consultants and physician assistants, responds to the demands for quality of care since these new roles help to reduce discontinuities in the care process and to reduce waiting times for patients (van Offenbeek et al., 2009).

A possible drawback of opting for the *customer is king* scenario is that professionals working in the hospital might experience that they lose their professional autonomy. Due to the fact that they are expected to act as service providers, they need to deal with articulate consumers wishes and demands, leaving less space to be guided by normative logics of their medical profession.

Scenario 2: A wonderful place to work

In this second scenario hospitals adapt to the need for creating a better labor market reputation and position as well as creating a wonderful place to work. So the focus is on creating an excellent employee value proposition, which will be needed in the near future due to an ageing population in the Netherlands. An ageing population creates on the one hand a larger demand for care and cure and on the other hand implies the threat of a tighter labor market. The strategy of the hospital in this scenario is based on the fear of lack/shortage of staff in the near future, so they do their utmost to offer an attractive employee value proposition with a focus on the following HR challenges, namely attraction, retention, development and improvement of working conditions. Different tools will be used in this scenario to attract more employees. One can think of labor market communication, and offering employee development and training programs (e.g. dual learning programs) in cooperation with regional training centers and schools.

In terms of retaining employees hospitals will focus on creating more organizational commitment. HR tools that have been shown to increase organizational commitment are adequate nurse staffing, organizational support for nursing, reduction of work load, leadership and adequate time for professional development (e.g. Aiken et al., 2002). The challenges of attraction and retention are intertwined with the challenge of improving working conditions. These will help to retain employees and lead to a better reputation at the labor market, resulting in attracting potential employees. Working conditions can be improved by reducing physical and emotional workload, improving the work-life balance, offering improved career opportunities, professional development, and better payment (van Raaij et al., 2002).

A possible drawback of this strategy is that labor costs will increase in the short run. Reducing workload, offering good employment conditions and fringe benefits require more investments in employees. However these initial additional costs will be offset by lower staff turnover, better retention and lower cost for recruitment and selection once the hospital has established itself a reputation as the 'preferred' healthcare employer to work for in the region.

Scenario 3: muddling through

In *muddling through* hospitals do not make a deliberate choice in adapting to any of the external conditions. They do not choose to delight the customer, nor do they make a sincere effort to become the preferred employer in their region. Time, sense of urgency and (HR) professionalism are lacking to develop a clear strategy and link it to a well developed set of HR practices in order to make the chosen strategy a living reality, which becomes noticeable either among clients/patients as is the case in the first scenario or among present and future staff in the labor market, as is the case in the second scenario. Many hospitals nowadays find themselves pressed by the developments and pressures as outlined in our analysis. Top management fails to make a clear choice and is constantly lagging behind in finding the right answers to meet with the demands arising out of the PMT and SCL dimension. Very often this is due to the lack of agreement among the dominant coalition. Professional top and mid level managers fail to reach an agreement with the medical specialists. Optimal solutions are not within reach due to the need for compromising based on diverging interests.

The resulting haphazard approach does not provide a clear sense of direction to employees, commitment reduces and clients perceive the hospital to be 'middle of the range'. Rankings drop and so does the attractiveness of the hospital in recruiting new staff. In the end this stuck in the middle scenario might even become a *doom* scenario.

Joint optimization

Reflecting on the three scenarios as outlined above, we notice that these are ideal-types in the sense that reality is not as clear-cut as depicted in our scenario analysis. So far we have also overlooked the most promising scenario, which fits the very nature of the contextually based human resource theory. The thesis put forward by Paauwe (2004) is that organizations can achieve a unique and sustainable

competitive advantage by simultaneously optimizing the demands arising both out of the PMT dimension as well as the ones arising out of the SCL dimensions. Actually this implies *joint optimization*, as it focuses on meeting with the demands stemming from both competitive market pressures as well as institutional pressures for acting in a socially responsible way (i.e. fairness and legitimacy claims as put forward by legislation, governance bodies, and stakeholders like insurance companies, patients' associations, trade unions etc).

More specifically related to HRM this means that policies and practices are focused on the one hand at creating more market value (i.e. delivering customized care) and on the other hand at improving the well-being of employees and the resulting employee value proposition. This is a difficult, yet challenging and feasible task for the dominant coalition and especially a professionally equipped HR function and department. The basic premise, underlying joint optimization here is that employees who are satisfied and loyal will provide better quality of care, leading to more patient satisfaction and loyalty. Accomplishing this balance will result in a so called 'satisfaction mirror effect' (Heskett et al., 1997). Customer's satisfaction with the delivered health care service reinforces the job satisfaction of the front-line service providers and vice versa.

To conclude, it is clear that many contextual factors have an impact on the management of employees in health care. The framework presented in this paper can be used to map these factors and their impact on HRM. In addition the scenarios can be used as a tool to encourage strategic conversation with respect to the management of employees in health care.

References

- Aiken, L., Clarke, S. P., & Sloane, D. M. (2002). Hospital staffing, organization, and quality of care: Cross-national findings. *International Journal for Quality in Health Care*, *14*, 5-13.
- Bach, S. (2000). Health sector reform and human resource management: Britain in comparative perspective. *The International Journal of Human Resource Management*, 11, 925-942.
- Barney, J. B. (1991). Firm resources and sustainable competitive advantage. *Journal of Management*, *17*, 99-120.
- Boselie, P. (2010). Strategic human resource management: A balanced approach.

 Berkshire: McGraw-Hill.
- Boxall, P., & Purcell, J. (2008). Strategy and human resource management (2nd ed.).

 Basingstoke: Palgrave Macmillan.
- Buchan, J., & O'May, F. (2002). The changing hospital workforce in Europe. In M.McKee, & J. Healy (Eds.), *Hospitals in a changing Europe* (pp. 226-239).Buckingham: Open University Press.
- CBS. (2009). Zorginstellingen; financiën, personeel, productie en capaciteit naar SBI.

 Retrieved July, 14, 2010 from

 http://statline.cbs.nl/StatWeb/publication/?DM=SLNL&PA=71584ned&D1=1-38,44-45,133-168&D2=a&D3=a&VW=T
- Cohen, A. (1998). An examination of the relationship between work commitment and work outcomes among hospital nurses. *Scandinavian Journal of Management*, 14, 1-17.

- Currie, W. L. (2009). From professional dominance to market mechanisms:

 Deinstitutionalization in the organizational field of health care. *Information systems outsourcing: Enduring themes, global challenges, and process opportunities* (3 ed.) (pp. 563-589). Berlin: Springer.
- Custers, T., Arah, O. A., & Klazinga, N. S. (2007). Is there a business case for quality in the Netherlands?: A critical analysis of the recent reforms of the health care system. *Health Policy*, 82, 226-239.
- De Jong, J. D., Heiligers, P., Groenewegen, P. P., & Hingstman, L. (2006). Why are some medical specialists working part-time, while others work full-time? *Health Policy*, 78, 235-248.
- De Jong, P. R., & Mosca, I. (2006). Changes and challenges of the new health care reform in the Netherlands: What should the Dutch be aware of? *TILEC Discussion Paper DP 2006-026*.
- Deephouse, D. L. (1999). To be different, or to be the same? it's a question (and theory) of strategic balance. *Strategic Management Journal*, *20*, 147-166.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, 39, 802-835.
- Deuning, C. M. (2009). Volksgezondheid toekomst verkenning, nationale atlas volksgezondheid. Retrieved July, 2009 from http://www.rivm.nl/vtv/object_map/o1857n26907.html
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American* Sociological Review, 48, 147-160.

- Dubois, C., Nolte, E., & McKee, M. (2006). Human resources for health in Europe.

 Human resources for health in Europe (pp. 1-14). Berkshire: Open University

 Press.
- Durán-Arenas, L., & López-Cervantes, M. (1996). Health care reform and the labor market. *Social Science & Medicine*, *43*, 791-797.
- Eecklo, K., Delesie, L., & Vleugels, A. (2007). Where is the pilot? the changing shapes of governance in the European hospital sector. *The Journal of the Royal Society for the Promotion of Health, 127*(2), 78-86.
- Enthoven, A. C., & van de Ven, W. P. M. M. (2007). Going Dutch managed-competition health insurance in the Netherlands. *The New England Journal of Medicine*, 357, 2421-2423.
- Franco, L. M., Bennett, S., & Kanfer, R. (2002). Health sector reform and public sector health worker motivation: A conceptual framework. *Social Science & Medicine*, *54*, 1255-1266.
- Garman, A. N., Leach, D. C., & Spector, N. (2006). Worldviews in collision: Conflict and collaboration across professional lines. *Journal of Organizational Behavior*, 27, 829-849.
- Geiger, S., & Prothero, A. (2007). Rhetoric versus reality: Exploring consumer empowerment in a maternity setting. *Consumption Markets & Culture*, 10, 375-400.
- George, C. (2009). The psychological contract: Managing and developing professional groups. Berkshire: McGraw-Hill Open University Press.
- Golden, B. R., Dukerich, J. M., & Fabian, F. H. (2000). *Journal of Management Studies*, 37, 1157-1188.

- Grol, R. (2006). *Quality development in health care in the Netherlands*. Radboud University Nijmegen Medical Centre: Centre for Quality of Care Research.
- Ham, C., & Brommels, M. (1994). Health care reform in the Netherlands, Sweden, and the United Kingdom. *Health Affairs*, *13*, 106-119.
- Helderman, J. K., Schut, F. T., Van Der Grinten, T. E. D., & Van De Ven, W. P. M. M. (2005). Market-oriented health care reforms and policy learning in the Netherlands. *Journal of Health Politics, Policy and Law, 30*, 189-210.
- Heskett, J., L., Sasser, W. E., & Schlesinger, L., A. (1997). The service profit chain:

 How leading companies link profit and growth to loyalty, satisfaction, and value.

 New York: Free Press, cop.
- Hoek, H. (1999). The art of governance of Dutch hospitals. World Hospitals and Health Services: The Official Journal of the International Hospital Federation, 35(3), 5-7.
- Johnson, R. E., Selenta, C., & Lord, R. G. (2006). When organizational justice and the self-concept meet: Consequences for the organization and its members. Organizational Behavior and Human Decision Processes, 99, 175-201.
- Laing, A., & Hogg, G. (2002). Political exhortation, patient expectation and professional execution: Perspectives on the consumerization of health care.

 British Journal of Management, 13, 173-188.
- Lega, F., & DePietro, C. (2005). Converging patterns in hospital organization:

 Beyond the professional bureaucracy. *Health Policy*, *74*(3), 261-281.
- Leney, T., Coles, M., Grollman, P., & Vilu, R. (2004). *Scenarios toolkit*. Luxembourg: Office for Official Publications of the European Communities.

- Maarse, H., Mur-Veeman, I., & Spreeuwenberg, C. (1997). The reform of hospital care in the Netherlands. *Medical Care*, *35*(10), OS26-OS39.
- Martin, A. J., Jones, E. S., & Callan, V. J. (2005). The role of psychological climate in facilitating employee adjustment during organizational change. *European Journal of Work and Organizational*, *14*, 263-289.
- Meegdes, J. (1992). Simons haalt stratificatie-model weer uit de kast. *Het Ziekenhuis*, 22, 1045-1047.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded source book* (2nd ed.). London: Sage publications.
- Nembhard, I. M., & Edmondson, A. C. (2006). *Journal of Organizational Behavior*, 27, 941-966.
- Oaker, G., & Brown, R. (1986). Intergroup relations in a hospital setting: A further test of social identity theory. *Human Relations*, 39, 767-778.
- Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal*, *18*, 697-713.
- Ong, B. N., & Schepers, R. (1998). Comparative perspectives on doctors in management in the UK and the Netherlands. *Journal of Management in Medicine*, 12, 378-390.
- Paauwe, J. (2004). *HRM and performance: Achieving long term viability*. New York: Oxford University Press.
- Paauwe, J., & Boselie, P. (2007). HRM and societal embeddedness. In P. Boxall, J. Purcell & P. M. Wright (Eds.), *The oxford handbook of human resource management* (pp. 166-186). New York: Oxford University Press.

- Pugh, D. S., & Hickson, D. J. (1976). Organizational structure in its context: The Aston program I. Aldershot: Gower.
- RVZ. (2006).

 Arbeidsmarkt en zorgvraag. Achtergrondstudies. [Labor market and care demand.
 - background studies.]. The Hague: RVZ.
- Schmitt, M. H. (1990). Medical malpractice and interdisciplinary team dynamics.

 Proceedings of the 12th annual interdisciplinary health care team conference,
 Indianapolis, IN: Indiana University, 53-66.
- Schoemaker, P. J. H. (1995). Scenario planning: A tool for strategic thinking. *Sloan Management Review*, *36*, 25-40.
- Scholten, G., & Van Der Grinten, T. E. D. (2002). Integrating medical specialists and hospitals. The growing relevance of collective organization of medical specialists for Dutch hospital governance. *Health Policy*, *62*, 131-139.
- Schut, F. T. (1995). Health care reform in the Netherlands: Balancing corporatism, etatism, and market mechanisms. *Journal of Health Politics, Policy and Law, 20*, 615-652.
- Van de Ven, W. P. M. M., & Schut, F. T. (2009). Managed competition in the Netherlands: Still work-in-progress. *Health Economics*, *18*, 253-255.
- van der Velde, F., & Verijdt, F. A., E. (2010). *De arbeidsmarkt voor de lagere functies in de zorg* No. OAZW 19). Utrecht: Prismant.
- Van Offenbeek, M., & Knip, M. (2004). The organizational and performance effects of nurse practitioner roles. *Journal of Advanced Nursing, 47*, 672-681.

- van Offenbeek, M., Sorge, A., & Knip, M. (2009). Enacting fit in work organization and occupational structure design: The case of intermediary occupations in a Dutch hospital. *Organization Studies*, *30*, 1083-1114.
- van Raaij, W. F., Vinken, H., & Dun, L. P. M. (2002). Het imago van de publieke sector als werkgever [the image of government as an employer]

 . Tilburg: OSA.
- Vanhaverbeke, W., & Torremans, H. (1999). Organizational structure in processbased organizations. *Knowledge and Process Management*, *6*(1), 41-52.
- Velden, L. F. J., Hingstman, L., Windt, W., & Arnold, E. J. E. (2008). Raming benodigde instroom per medische en tandheelkundige vervolgopleiding 2009-2019/2025. Utrecht: NIVEL / Prismant.
- Verdú, A., Maestre, A., Lopez, P., Gil, V., Martin-Hidalgo, A., & Castano, J. A. (2009).
 Clinical pathways as a healthcare tool: Design, implementation and assessment
 of a clinical pathway for lower-extremity deep venous thrombosis. *Quality and Safety in Health Care*, 18, 314-320.
- Vos, L., van Oostenbrugge, R. J., Limburg, M., van Merode, G. G., & Groothuis, S. (2009). How to implement process-oriented care: A case study on the implementation of process-oriented in-hospital stroke care. Accreditation and Quality Assurance: Journal for Quality, Comparability and Reliability in Chemical Measurement, 14(5), 5-13.
- Wright, P. M., Dunford, B. B., & Snell, S. A. (2005). Human resources and the resource base view of the firm. In G. Salaman, J. Storey & J. Billsberry (Eds.), Strategic human resource management: Theory and practice (2nd ed.) (pp. 17-39). London: Sage Publications Ltd.



Erasmus University Rotterdam

INSTITUTE OF HEALTH, POLICY & MANAGEMENT

Visiting address Burgemeester Oudlaan 50 3062 PA Rotterdam

Postal address P.O. Box 1738 3000 DR Rotterdam The Netherlands

Telephone +31 10 408 85 55
Fax +31 10 408 90 94
Internet www.bmg.eur.nl
E-mail research@bmg.eur.nl

