



Medisch Spectrum  $\Delta$  Twente



University of Twente  
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# 'Recruiting and retaining IC nursing- and surgery assistant staff at Medisch Spectrum Twente'



Master Thesis

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# **'Recruiting and retaining IC nursing- and surgery assistant staff at Medisch Spectrum Twente'**

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## Management summary

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Medisch Spectrum Twente (MST) is a large hospital in Twente that integrates basic and top-clinical care functions. Just as many other hospitals around the world, MST experiences the negative consequences of a tight labour market, as the organization encounters problems with staffing the crucial positions of Intensive Care Nurse, Surgery assistant and Anaesthesia employee. MST has itself insufficient insight to deal with these problems and therefore initiated this research.

The central question that the research addresses is how MST can make sure that there will be sufficient qualified staff at the IC and OR divisions in the medium-and long term. In order to create certainty for MST about the availability of these employees, the goal of this research is to develop insight in the developments and characteristics of the regional labour market for IC nurses and OR assistants and to define the conditions of the retention and recruitment strategies that should be created. These aspects are included in the theoretical framework.

The research is organized along three lines, based on this framework. The emphasis lies on the retention of employees, on which MST can exercise most influence. In the first part of the research, a description of the developments and characteristics in the regional- and internal labour market for IC and OR employees is provided. In the following parts, the most urgent changes MST should make regarding the HR instruments of retention and recruitment are explored. The analysis of retention is based on the preconditions for long term employment relationships and a consideration of the satisfaction and commitment of the current staff and turnover. After that, the current recruitment policies and practices are examined. Thereby particularly attention is given to the fit of potential applicants with MST and the preconditions of recruitment practices.

These parts of the research are analysed by means of multiple research methods. For the exploration of the labour market, desk research is applied. The analyses of retention and recruitment at MST are based on existing questionnaires and on interviews with respondents of MST and with external experts.

A general conclusion is that HR policies are insufficiently developed and applied, which has caused many of the problems that are found in this research. That is because this led to the absence of structure and it prevented insights from being developed about appropriate HR practices.

The outcomes of the labour market exploration illustrate that the tightness on the labour market for IC and OR workers is increasing, mainly due to ageing. It will become even more difficult for MST to retain and recruit these workers, when their policies do not change. It can also be concluded that the main source of supply for the IC and OR positions, the educational courses, are not used optimally by MST. The educational capacity is not adjusted to the future personnel needs and the dropout in the courses is high. Besides that, many young employees leave MST within several years after they have received their diploma. The increasing tightness underlines the importance of dealing with retention and recruitment carefully.

From the analysis of retention it can be concluded that many things should, and can be improved. This is partly concerned with some preconditions of retention not being present, which are trust in management, involvement, development opportunities and fairness of rewards. Besides that, IC and OR employees are dissatisfied with their job and most employees do not feel committed to MST. This also makes recruitment more difficult. The aspects that most urgently need to be improved to increase satisfaction are communication, workload, appreciation, and respect from medical specialists. The dissatisfaction is particularly concerned with the perceived lack of attention of management for the interests of employees. Also a lack of time and money contributed to the problems. Finally, it appears that people within MST do not have explicit insights in voluntary turnover.

From the analysis on the problems with recruitment, (potential) applicants not matching MST appears to be the biggest problem. The values they consider most important are not characteristic for MST's culture. MST is too much focused on its own organization. Other urgent problems, regarding preconditions of recruitment practices, are that MST does not have insight in the job search behaviour and labour motives of (potential) applicants, the recruitment message is not appealing, MST is not actively recruiting people, it does not make sufficiently use of informal sources and let applicants wait too long. Furthermore, MST only focuses recruitment on active job seekers and people within Twente and Achterhoek. It appeared that, although there are risks involved, it might be a good opportunity to recruit qualified IC and OR workers from Germany.

Based on the outcomes of the research, recommendations are formulated. They are prioritized based on their urgency and they should be embedded in an integral policy framework. In the policies, the following conditions need to be addressed.

The aspects MST most urgently needs to deal with, relate to retention:

1. **Reduce the workload of anaesthesia- and surgery assistants.** For working on involvement, communication and training, and preventing job stress, this is essential.
2. **Improve involvement and communication.** This recommendation will have the strongest impact on the satisfaction and retention, by management of MST giving personal attention towards IC and OR employees through listening actively to their ideas and using those ideas more often. Also fixed structures for communication and involvement should be created and supervisors and management need to communicate more openly.
3. **Show more appreciation towards employees** by using opportunities to provide positive messages.
4. **Create more training opportunities**, which is particularly important for younger employees.

Regarding the educational courses, MST should concentrate on the following:

5. **Change the selection procedure and criteria for IC and OR students.** This recommendation should reduce the dropout of students substantially by making it more likely that students who are selected can meet the expectations of the course.
6. **Educate more students.** MST should have the inflow focus mainly on the educational courses by educating more students. The capacity of support for students should be expanded accordingly and a capacity planning needs to be created about the future demand for personnel by MST, to determine the educational capacity.

For dealing with the recruitment problems, MST should:

7. **Increase value congruence.** The culture of MST should be adjusted to the values potential applicants search for in an organization.
8. **Study job search behaviour and labour motives of potential applicants.** The outcomes of these studies provide insights, which are needed for determining the recruitment messages and sources to use.
9. **Make the recruitment message more appealing.** This makes potential employees more enthusiastic for an IC or OR job at MST.
10. **Make use of employee referrals** by developing a program for stimulating employees to approach their network. When employees are satisfied this is the most effective recruitment method.

## Preface

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After an intensive year of work, I am glad to present this final report of the research that I have conducted in order of MST, on the shortages of qualified IC and OR employees. This research is done in conclusion of the MSc in Business Administration at the University of Twente.

I perceived the assignment to be a major challenge and an opportunity to gain experience at an employer that appealed to me. The whole process has been a great learning experience, from conducting the research and writing this report to the insights I have gained on organizational life and the practical application of HRM. In the period I worked on the assignment there were periods in which the research went prosperous, but I also faced difficult periods gathering information for my research. It eventually took more time to complete this report but I am glad to have put in the effort that provided valuable information for this report.

I could not have made this report without the help of others. I first would like to thank the management of MST for giving me the opportunity and facilities to conduct the research. Second, my thanks go out to my supervisors of the University of Twente, Dr. Martijn van Velzen and Prof. Dr. Jan Kees Looise, for their support and for providing me with good comments. That helped me a lot to make this report the way it is. Third, I would like to thank my supervisor of Medisch Spectrum Twente, Dr. Martin Nieuwenhuizen, for the valuable advises he gave me and the time he made in his schedule to help me with problems or questions. Fourth, my thanks go out to my direct colleagues of MST with whom I had a great time and who were always willing to help me. Finally, I would like to thank all the people who took the time to answer my questions, and my family, girlfriend and friends for their support and for reviewing my report.

Hengelo, 15 October 2009,

Tim Nijenhuis

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# 1. Introduction

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In this introduction chapter, several aspects are described that provide insight into the context and starting points of this research. To get a good view on the research context, general information about MST is portrayed first in section 1.1. After that the practical problem of MST, that forms the basis for this research, is outlined in section 1.2. In section 1.3 the final goal that the research should meet is elaborated on and in section 1.4 the relevance of this research for society and science is discussed. Finally, the research questions are formulated (section 1.5) and the units that are studied are described (section 1.6).

## 1.1 Company profile

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Medisch Spectrum Twente (MST) is an integrated medical-specialized organization in the healthcare sector. MST resulted through a merger between the hospitals in Enschede and Oldenzaal in 1989 and is now one of the largest non-academic hospitals in the Netherlands. MST is divided over 5 locations: two hospitals in Enschede, one in Oldenzaal and outside polyclinics in Haaksbergen and Losser. It employs about 4000 employees, of which 200 specialists. The main task of the hospital is to improve the health of the people in their region. MST strives to make sure that they can help patients in the region with all the medical-specialized care they need. Next to the basic hospital facilities it offers for Enschede, Oldenzaal and surroundings, MST offers top clinical functions for its patients. Almost all medical specialism are represented, for instance radiotherapy, neurological surgery, anaesthesiology and cardiology. For the top clinical care, MST treats patients from a large region, also outside the primary service area. To provide this care, MST employs many professionals with exceptional knowledge and/or skills and has a number of exceptional provisions for diagnosis and treatment, which is called the 'top clinical profile'. The organization also offers many educational possibilities for nurses, medical students, physicians, paramedics and other professionals. MST has its own recognized educational institution for 12 medical-specialist courses named Medical School Twente. Furthermore, MST is an acknowledged educational institution for all parts of the trainings to surgeons and internal medical science.

### 1.1.1 Structure

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In 2008, MST has moved over to a new organizational structure. The organizational principles of a flat structure and decentralized responsibilities are anchored in that structure (Medisch Spectrum Twente [MST], 2008b). The board of directors is charged to govern MST daily, is under supervision of the supervisory board and is advised by the medical staff management, works council, client council and nursing advisory body. MST is further divided in 'result oriented units' (RVE's), which have their own budget and are held responsible for their own results. The board of directors has a guiding role in this structure. The clinical and non clinical supporting RVE's have a dual structure consisting of a manager from the medical staff and a business manager. The other (non-clinical) RVE's only have a business manager or a staff manager. Five non-clinical RVE's are the staff services that form the service organization of MST. Each staff service supports the primary RVE's and board of directors in their specialism, such as Human Resource Management that provides support on personnel issues. The organization chart of MST is included in appendix XIV.

### 1.1.2 Human Resource Management at MST

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The research that is described in this paper concerns a Human Resource Management (HRM) issue. Therefore, an important characteristic of the research setting is the organization and principles of HRM at MST.



The way in which personnel issues are addressed at MST is in transition. In 2008, MST implemented a central HRM division to replace the Personnel & Organization (P&O) function, which was not working optimally and lacked a clear vision and integrated policy on personnel issues (MST, 2007). The P&O discipline only had an advising role on policy making by personnel advisors, decentralized in the organization, and it was focused on things that happened at that moment. Policy development for the long term is missing. MST only recently started to catch-up. There is now one staff department for HRM through which HRM has become more central in the organization. The objective of the new organization of HRM does not differ, namely support the integral management and employees in a professional way. Though, by centralizing, MST wants to exercise more influence on the execution of HR policies, create unity in the execution of policies and work more efficient. The view of MST on employees is expressed in the policy plan (MST, 2004): *'To be successful in the core tasks, recruitment and retention of employees is of great importance. The employees of MST should possess the following characteristic: patient focused, competent and innovative. MST wants to offer its employees a performance oriented, inspiring and learning work environment with attention for personal development'*. This view is still applicable, but HRM at MST is based on the assumption that employees are the human capital of the organization. That means that the professional approach is focused simultaneously on the current desires and needs of the employees and the general objectives of the hospital. Therefore, the intention is to execute policies as close as possible to the work floor and connect policy development to the long term policy and goals of MST and the needs of the employees. The roles of HRM staff at MST are divided as follows: The HR advisors perform advisory work within the RVE's and provide input for HR policies that need to be developed. HR policy development itself is mainly the task of HR policy advisors and leaders at the HRM department. Employees of the central HRM division are furthermore responsible for the control on the execution of HR policies which is the task of the team leaders of the various divisions.

## 1.2 Problem description

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MST is a large hospital in the region Twente that offers medical-specialized care for its patients. Last years, MST has been experiencing large problems with staffing crucial positions with qualified people (MST, 2008a). Particularly vacancies for Intensive Care nurses and assistants on the operating-room have been open for a long period. The shortages at MST for those positions are on the one hand related to the difficulties MST has with finding qualified employees for those positions in the tight labour market, but are also caused by the large amount of employees who left MST. Some of them return to MST, hired as an independent contractor, but most of them leave the organization definitely. When MST does not manage to deal with the shortages this may cause serious problems for the organization. The availability of IC and operating room employees at MST is a precondition for providing good care and is crucial for the competitive strength of the organization, particularly since it concerns core capabilities of the hospital. Shortages of qualified IC nurses and medical assistants might create major problems for hospitals and their patients: committal stop, longer waiting lists and worse quality of care (Zorg lijdt onder personeelstekort, n.d.). It has a negative impact on the accessibility for patients, for instance through longer waiting lists. It also increases the workload of the available employees and will have negative consequences for the attractiveness of individual hospitals as employer (Personeelstekort in zorg, 2008). These consequences have a negative influence on the continuity of an organization. It might create a vicious cycle, since the higher pressure on the remaining employees likely results in higher turnover and consequently higher shortage of employees. The implications of this vicious cycle point at the importance of retention as a means to reduce turnover and to address the problem of employee shortages.

At the moment, MST does not have much insight in the reasons that cause employees to leave, neither do they have policies on how to retain the employees in the future. The same applies to insight and policies with regard to the inflow of employees for specific positions and the issues on the labour market that play a role in the availability of labour. Only recently has MST started

addressing personnel issues in a more strategic and central way, characterized by the change from P&O to a HRM approach. Long term policies still have to be created for dealing with the issues of employee shortages in the face of present and future developments and events in the labour market. Many decisions are taken ad hoc and are not based on long term policies.

The main problem that this research addresses is that MST is not able to predict on the availability of sufficient qualified IC nurses and medical assistants for the future, due to a lack of information and policy development. Information is needed on the labour market for potential employees, and retention and recruitment issues.

The type of research that is concerned here is practice-driven research. The research addresses the empirical problem described above that exists at MST. By analyzing the problems in the current situation with regard to the labour market, retention and recruitment of IC and OR staff and formulating recommendations to solve these problems, the research should provide information on what MST can do to overcome the gap with the desired state: that there is certainty about the availability of sufficient qualified employees.

This problem is concerned with the business dimension HRM. HRM, introduced as a new perspective to personnel management, is characterized by the notion that the human capital is most important to the success of organizations. While HRM usually was a specific approach to personnel management, nowadays it has largely replaced it (Lievens, 2006). Different from personnel management HRM places a strong emphasis on the integration of personnel policy with the strategy, culture and management of the organization (Legge, 1995). Although there are many different definitions, schools and models of HRM, Boxall & Purcell (2003) provide a broad and inclusive view of HRM. They define HRM as 'all those activities associated with the management of employment relationships in the firm'. Subsequently, one of the dimensions of HRM, that derives particular attention for organizations that are to compete in tight labour markets, is the attraction, development and retention of individuals with relevant skills. With the model of the internal labour market (that will be explained later) in mind, the emphasis of this research lies particularly at retention, since organizations have less control over external labour market conditions strongly affecting recruitment. High competition on the labour market for IC nurses and OR assistants reduces the space for MST to recruit new employees for those positions. Moreover, the more a company is able to develop and keep its own employees, the less hiring it has to do. Retention of employees is also less expensive and labour intensive as recruiting and educating new personnel.

**The following central research question is addressed in this research:**

*'How should Medisch Spectrum Twente anticipate on developments in the labour market and which conditions should their retention and recruitment strategies meet to provide for sufficient qualified staff at the IC and OR divisions in the medium-and long term?'*

### 1.3 Research goal

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Adequate anticipation to the labour market from which MST recruits its employees requires insight for MST in the labour market developments for IC nurses and OR assistant staff. The organization needs to know for instance what the future supply of available employees for the different positions will be. At the moment, MST does not have much insight in the labour market for IC and OR employees. Although there have been many studies on the labour market in the healthcare sector, these are overall very generic or not focused on the region Twente and Achterhoek, in which MST operates. The first part of the research therefore is a labour market exploration specific for the IC and OR divisions at MST and the region Twente and Achterhoek. Since the positions at the IC are mostly filled from within, the labour market exploration also has attention for the internal labour market. The aim of the research is not only to create insights in the general labour market characteristics, but also provide information on the problems regarding retention and recruitment and advise MST how to adapt the current organization, in order to create more certainty on the presence of sufficient qualified employees at the IC and OR positions on the medium- and

long term. Since organizations are restricted in the changes they can make, the recommendations of this research are directed at improving those aspects MST suffers most of, just as patients are treated first on the medical problems that are most urgent to their health.

## 1.4 Relevance

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To understand why a research is conducted one should look at the relevance of the research. This research has a societal relevance as well as a scientific relevance. Both are described beneath.

### 1.4.1 Societal relevance

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As a result of the growing tightness on the labour market for nurses (particularly specialized) and medical employees, many hospitals and other healthcare organizations suffer from the shortages on crucial positions (e.g. Van der Windt, Arnold & Keulen, 2008). From an employer's survey in the healthcare sector it appears that recruitment is a yearly returning issue for the organizations in the sector (Prismant, 2007a). It is not only MST that finds it difficult to attract and retain these employees but it is a national problem. One just has to look at the newspapers to find articles about the precarious situations that arise from the employee shortages for healthcare organizations. Some hospitals had to reduce the amount of beds for patients, others were forced to shut down whole divisions. Even surgeries of very ill people had to be delayed due to the employee shortages. The Dutch association of hospitals (NVZ) has recently expressed their worries in the news about the urgency of the shortages, particularly with regard to Intensive Care nurses and medical assistants. Hospitals still struggle with the shortages and are in search of feasible solutions. The contribution of this report is urgently needed at those hospitals. The societal relevance lies at the insights it provides for organizations on labour market, retention and recruitment issues so that those organizations are able to make changes to predict the availability of sufficient employees for specific positions. The implications from this research are even applicable for organizations outside the healthcare sector where the same problems take place. The quality and size of the healthcare supply that are negatively influenced by the employee shortages are also relevant for the society and is especially important in the region Twente since MST is a major supplier of basic and top clinical healthcare in that region.

### 1.4.2 Scientific relevance

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The research also has scientific relevance. Structural labour shortages and the higher workload it creates for employees is an acute problem that most organizations in the healthcare sector face and which may be a problem for all industries and professions. This research can supply a need of these organizations for a coherent solution that deals with both the external and internal labour markets of organizations. While the influence of the situation on the external labour market for developing HR-policies is recognized in the influential Harvard model of HRM, many studies in HRM still focus mainly on one specific aspect of HRM when studying the problem of employee shortages. This research however is concerned with both recruitment and retention of employees as well as the characteristics of the internal and external labour market. Furthermore, innovative of this research is the total of the connections that are made from the theoretical concepts, for instance linking retention to both preconditions resulting from ILMs and models relating job satisfaction to turnover. The theoretical connections of this research provide a new integrative framework of retention and attraction that organizations can apply to critically analyze problems in the organization with regard to staffing various positions.

## 1.5 Research questions

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Three research questions are addressed in this research, the analyses of which together provide an answer to the main research question. These research questions structure this report. Although all three questions contribute to a solution for the main problem of MST, most important is the second question, since the emphasis of this research lies on the retention of employees. MST should focus mainly on that aspect to provide for sufficient qualified IC and OR staff in the future. The first research question is a descriptive question on issues that concern the availability of qualified employees for the divisions at MST with regard to developments in the labour market. In answering the latter two exploratory questions, the current HR practices with regard to retention (question 2) and recruitment (question 3) are evaluated against the theory and there is explored what MST needs to improve most in those areas to increase their certainty about the availability of sufficient qualified IC and OR staff. The following research questions are defined:

- Research question 1: *What are the characteristics and expected developments in the labour market for IC and OR nurses in the region Twente and Achterhoek?*
- Research question 2: *What are the most urgent changes that MST should make in HR policies and practices to retain IC and OR staff?*
- Research question 3: *What are the most urgent changes that MST should make in HR policies and practices on recruitment to provide for more qualified IC and OR staff for the long term?*

## 1.6 Research units

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Before starting with the research it must be clear which units will be studied. The divisions at MST that are studied are the IC and OR divisions, since MST experiences most problems with employee shortages on these divisions. The general IC and OR division are clustered together and form the 'Acute axis'. The general OR division is further divided in six units, the Operating Rooms, Anaesthesia, Central Sterilization, Pre Surgical Screening (POS), Recovery and supporting functions. The positions of surgery assistant and anaesthesia assistant are studied in this research, which are respectively part of the operating rooms and anaesthesia. When the OR division is mentioned in this report it refers to these two divisions. When a distinction is needed between both, they are mentioned separately. Surgery- and anaesthesia assistants support the physicians with their work at the hospital. They make their equipment operational, assist the physician during the surgery and assist the patient (ROC van Twente, 2009). Moreover, the anaesthesia assistant guards the patient during anaesthesia. Physicians are not included in the study. MST does not have many problems with regard to staffing positions for physicians and they form a small and relative independent group, mostly organized in their own organization. The OR division is linked closely to the IC since patients on the IC are brought there after they had surgery. The IC division of the hospital is a place where patients are treated whose condition is too critical to lay on a normal division. These are often patients of whom one or more vital organs, such as the heart, lungs or kidneys do not work sufficiently and therefore should be observed closely by a large team of experts (MST, n.d.). The IC nurse guards, observes, guides and coordinates the total care around the patient that is on the IC, in cooperation with specialized physicians. The IC divisions are divided in a general IC and Thorax IC. The general IC consists of nineteen beds for patients of all specialism, with exemption of Thorax surgery. The Thorax IC of MST has twelve beds and is specialized in patients with problems of the heart, lungs and big veins.

## 2. Theory and methodology

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The analyses of the research questions that are described in the following chapters are based on existing literature on HRM and specifically on the concepts of the labour market, retention and recruitment. The theories and methodology that are used to answer the questions are outlined in this chapter. In section 2.1, the HRM model and assumptions that form the basis for the theoretical framework are outlined. Theory on the labour market is described subsequently (section 2.2), followed by a description of the links in HRM that illustrate how the separate HRM instruments (e.g. retention and recruitment) should lead to the achievement of organizational goals (section (2.3). After that is elaborated on theory about the internal labour market (section 2.4) from which preconditions of employee retention are deducted. Further, the model of voluntary turnover is discussed (section 2.5) as well as the attractiveness of organizations for potential recruits (section 2.6), on which recruitment has a large influence. The research model is subsequently outlined in section 2.7. An exploration of the existing literature that is used to answer the research questions is portrayed in section 2.8 and finally the methodology for the research is described in section 2.9.

### 2.1 Theoretical models

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There are various models on HRM, which have different assumptions, for instance about how organizations should deal with HRM problems. The most influential models are the 'hard' Michigan model and the 'soft' Harvard model (Lievens, 2006). The principles of the Harvard model form the basis for this research.

The Michigan model assumes that employees are just one of the resources of an organization and they should be controlled, as the other 'resources' (Fombrun, Tichey & Devanna, 1984). Management of employees should be dealt with in the same way and should meet the same requirements (e.g. quality and efficiency) as all the other management processes. The Michigan model is also known as the 'Matching model' of HRM since the main focus of this model lies in creating the best fit of HRM with the organizations strategy.

Contrary to the Michigan model, in the Harvard model, there is much more attention for the influence of employees and their role in the organization (Beer, Spector, Lawrence, Mills, & Walton, 1984). To assure the availability of needed people in organizations, the Harvard model suggests that management should adopt a social capital perspective in which employees are treated as valuable investments that should be properly supported, developed and involved. Investment in employees leads to higher commitment and will positively influence an organization's capacity to attract, keep, and develop people (Beer et al., 1984). The focus on consensus between management and employees is central in the Harvard model. Boxall and Purcell (2003) agree that this is the most fundamental principle in labour management. Although it is crucial in every organization to give thought to the needs of employees, this is particularly important in a context of labour scarcity, where workers have considerable choice among competing employers and it is very hard to attract and retain the individuals that an organization needs. Moreover, the control of the behaviour of human assets is always limited and for that reason it is important that both parties exercise trust (Boxall & Purcell, 2003). Organizations also should attend to the problem of fairness, especially in the area of HR-flow where employees' careers might strongly be affected by practices, such as hiring and promotion. Without perception of fairness of the HR-flow policies, employees are not likely to develop commitment to the organization (Beer et al. 1984). From the Harvard model and notions of Boxall and Purcell (2003) come forward that involvement of employees, investment in their development, trust and fairness are of strategic importance for organizations. These aspects are

necessary to form long term employment relations with employees. They therefore form preconditions of employee retention and are included in the analysis of retention at MST. Employee retention is further discussed in section 2.4 and 2.5.

Consistent with the focus on the consensus between management and employees in the Harvard model, the authors noticed that HR policies are affected by (and influence) situational factors, including factors as the organization strategy and goals, management philosophy, characteristics of the workforce and the labour market. Other authors provide support for the importance of these factors in shaping HR Policies, as components of the context in which HRM takes place (e.g. Schuler & Jackson, 1987). That approach is used in this research and can be characterized as a best-fit or contingency approach, which advocates fitting HR strategy to its surrounding context (Boxall & Purcell, 2003). Which elements of the context are seen as important and are preferred is variable. The main variables in this research are the labour market, the employee needs, and the organizational goals with regard to the retention and recruitment of employees. The relevance of the labour market is discussed first. The sections after that pay attention to the strategic links in the relation between HRM and organizational goals. Employee needs, as it is a central theme in the different concepts of this theoretical framework, is discussed when elaborating on those concepts.

## 2.2 Labour market

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The labour market is an important situational factor affecting HR policies, as is pointed out in the Harvard model, particularly with regard to recruitment and retention. The first part of the research is directed at the regional labour market for IC nursing staff and surgery- and anaesthesia assistants. Labour markets often act as a constraint on the staffing activities of organizations, by ensuring that it is not always possible to attract and retain the people who are needed (Taylor, 2008). This is particularly true in tight labour markets where it is hard to find sufficient staff with the requisite skills and attitudes. Labour market conditions are not fixed. They may vary considerably over time, across different types of employment and between regions.

Recruitment and retention can only support the achievement of organizational objectives through successful competition in the labour market (Taylor, 2008). The ability of managers to compete successfully with other firms for human resources is determined by the attractiveness of the company to prospective recruits and current employees, as well as the condition of the labour markets from which the firm draws its supply of people (Beer et al., 1984). The combination of aspects that makes an organization attractive for employees develop over time to form a firm's reputation in the several labour markets in which it competes. That reputation becomes an asset or a liability in attracting and retaining employees (Beer et al., 1984). For effective labour market competition, organizations should understand the dynamics of the labour market that are most important to the organization and acting to improve the organization's labour market reputation (Taylor, 2008). In other words, what can organizations do to improve the way they are perceived as employer by potential- and current employees. The recruitment and retention of workers also depend on the ability of organizations to anticipate on trends in the labour markets and to prepare to take advantage of these trends through HR policies and practices.

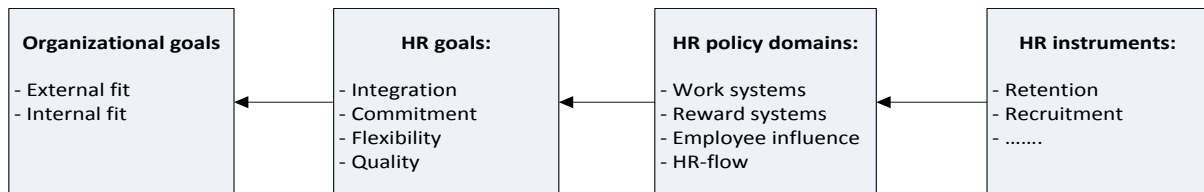
## 2.3 Strategic links in HRM

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HR policies, instruments (e.g. retention and recruitment), and practices are not ends in themselves but get meaning when they are linked to organizational goals that are pursued by the strategy of the organization. That notion is stressed in both the Michigan and Harvard models of HRM. How the organizational goals, HR policies and HR instruments relate to each other therefore derives attention before discussing the specific aspects of HRM at which this research is directed. The next sections are constructed along the different levels at which the various components of HRM are linked to the achievement of organizational goals, as illustrated in figure 2.1. Consistent policies and practices are needed at all levels to support the achievement of organizational goals (Beer et al.,

1984). Recruitment and retention of specific groups will help the organization to reach its goals by their contribution to the achievement of HR flow- and subsequently broader HR goals. The description of the links between these different levels starts with the organizational goals and it elaborates on the notions of the best-fit approach, which is adopted in this research.

**Figure 2.1** Strategic links in HRM



### 2.3.1 Organizational goals

There are mainly two perspectives on how HRM supports the organization strategy to reach the organizational goals: the best-practice approach and the best-fit approach. The best-practice school advocates that all firms will see performance improvements if only they identify and implement certain best practices (Boxall & Purcell, 2003). The best-fit approach on the other hand advocates the opposite, that organizations should fit their HR strategy to the context they are operating in. The best-fit approach is used here since this research is focused on how MST can create certainty about the availability of sufficient qualified employees in the light of such factors as the labour market and the specific needs of their current and potential employees. According to the best-fit approach, there are two types of fit that are essential in HR policy making and that should help in the achievement of organizational goals: external fit and internal fit. External fit involves the alignment of HR policies and practices and the strategic management process of the firm (Schuler & Jackson, 1987) and internal fit implies congruence among the various HRM practices (Baird & Meshoulam, 1988). By applying both types of fit, organizations are to arrange a variety of HR practices in a systematic way (Wei, 2006).

Internal fit, also called horizontal fit, refers to the need to ensure that individual HR practices are designed to complement each other and help towards the achievement of strategic objectives (Guest, 1987). Just as other HR instruments, recruitment and retention are not goals in itself but means to reach the broader HR goals, with internal coherence of policies and practices. When HR policies work in opposite directions, they may not lead to the desired organizational outcomes (Boxall & Purcell, 2003). Internal fit is thus essential for making good use of the human resources, no matter which practices are implemented. Baron and Kreps (1999) stressed that it is very important that the practices are consistent. They argued that internal fit comprises different types of fit: consistency among single employees, among employees doing the same kind of work and consistency of employee treatment across a reasonable period of time. Treating people equitably (e.g. with regard to employment conditions) is important, they state, because it creates a sense of fairness under employees (Baron & Kreps, 1999). Furthermore, by having consistent HR policies and practices employees get a clearer image of the goals of the organization and how they can contribute to the achievement of those goals. Otherwise employees give their own interpretation, which can lead to inefficiencies and mutual frustrations. It is thus important according to Baron and Kreps (1999) that the HR-policy is sufficiently communicated to employees, so that they get a clear message what they can expect from the organization and what it expects from them. Consistency across time is needed since employees like to be able to predict an employer's behaviour and they can be seriously demotivated when their employer changes some policies (Baron & Kreps, 1999).

External fit (or vertical fit) emphasizes the congruence of a series of HR practices with the strategy an organization is pursuing (Guest, 1987). External fit is viewed as a critical step towards attaining the organizational goals through initiating human resource activities that are aligned with

the goals of the organization (Wei, 2006). The organization also needs employees with the essential skills and motivations to reach their goals and to successfully compete with others in the sector (Beer et al., 1984). HR strategy should focus on the recruitment, development and retention of those people, these authors suggest.

Internal fit and external fit are both pursued in the Harvard model: the authors of the model stated that general managers should develop coordinated HR policies and that those policies should be developed to create commitment of employees to the strategy that an organization has developed to achieve its goals (Beer et al., 1984). Moreover, these authors of the Harvard model place a great deal of emphasis on realizing employee interests, while overlooking those interests is an important criticism on many models that focus on the fit of HRM with the competitive strategy of the organization (Boxall & Purcell, 2003). In accordance with the Harvard model, Schein (1977) indicates that the 'matching processes' of HRM are not only to create a fit between HR practices and the competitive strategy but to integrate both business needs and the needs of employees. Thus, although strategy is seen as an important situational factor in the context in which HRM takes place, management should also think about the fit with the (potential) employees.

### 2.3.2 HR goals

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In order to be successful and attain their goals, organizations need an effective configuration of choices involving all the key dimensions of the business, such as finance, marketing or HRM (Boxall & Purcell, 2003). Those key dimensions should reach certain goals or outcomes that together must lead to the attainment of organizational goals. This research is focused on the HRM dimension and concerns HR-goals. The goals of HRM are diverse and involve supporting the competitive objectives of the organization as well as meeting employee needs (Beer et al., 1984). Guest (1987) defined four main HR goals, building on the HR outcomes that are suggested in the Harvard model, and combined it with models that place more emphasis on the strategic implications of HRM. The following HR goals are identified:

First, there is the goal of integration, which has different components. Underlying these forms of integration is the general proposition that integration makes it more likely that the strategic plans of an organization are successfully implemented (Guest, 1987). Both the notions of external and internal fit are among these integration components. External fit in the sense that human resources must become an integral component of the strategic planning process. Internal fit when emphasizing the need for human resource policies to cohere with other areas of policy and cohere within themselves. The last element of integration is that all employees should be as fully integrated as possible into the organization in order to create congruence of interests between employees and management.

Second, Guest defines the HR goal of employee commitment, which is strongly emphasized in the Harvard model. This goal is to develop a feeling of commitment to the organization in individual employees. The rationale behind the goal of commitment can be found in the assumption that committed employees have positive organizational outcomes. They for instance will be more satisfied, adaptable and more committed to the goals of the organization (Guest, 1987).

A third goal of HRM is the goal of flexibility or adaptability. An important feature of successful human resource management is the capacity to implement strategic plans (Guest, 1987). This in turn requires a capacity of the organization to manage planned organizational change and to be adaptive and responsive for unforeseen events at all levels of the organization. Employee flexibility is only feasible when employees at all levels display high organizational commitment, high trust and high levels of intrinsic motivation (Guest, 1987).

The final goal of HRM that is identified by Guest (1987), quality, has related dimensions. The first dimension concerns the quality of staff. It assumes that policies to attract, keep and develop employees with high levels of ability, skill and adaptability which the organization needs in the future, are desirable (Guest, 1987). That overlaps the HR employment systems goal of predictability, noted by Osterman (1987), which is the central issue of this research. Predictability means that



organizations are able to plan confidently upon the availability of a qualified labour supply in the future at foreseeable prices (Osterman, 1987). A second element of quality concerns the public image of the organization and in particular its human resource policies. Organizations with a reputation for the high quality of the way in which they treat employees are likely to be more successful in attracting the kind of individuals they wish to recruit into the organization (Guest, 1987).

Although the HR policies at MST should address all these goals to some extent, the HR goals that are central in this research are particularly the quality dimensions. That is because the main aim of the research is to create predictability for MST about the availability of sufficient qualified IC and OR staff in the future by changes in the current situation regarding retention and recruitment at MST. Furthermore, the commitment of employees is analyzed in chapter 4 of this research as a mediator between job satisfaction and turnover.

### 2.3.3 HR policy domains

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HRM consists of different policy domains that contribute to the attainment of the HR-goals. Beer et al. (1984) subdivide HRM in four policy domains. Each of the policy domains defines a major HRM task that general managers must attend to. The management of an organization has to develop a mutual consistent vision within and across these domains. The four domains are: work systems, reward systems, employee influence and HR-flow. Although the other three policy areas also play a role in recruitment and retention, the policy area that is most linked to these aspects and is of most interest to this research is HR-flow. Employee influence also play a role in the flow domain as employees should be involved in decisions on flow issues in the organization. The research will also be too extensive when all the policy domains are addressed. In the HR-flow domain, HRM is responsible for shaping and giving direction to the inflow, throughflow and outflow of personnel. It includes activities as recruitment, internal staffing, performance appraisal and promotion. Questions that play a role in the whole policy domain of HR-flow are how much employment security should be given and how much should be invested in the development of employees (Beer et al., 1984).

The authors of the Harvard model propose three perspectives in managing HR-flow. They suggest that it can be approached from an individual, organizational and societal point of view. A consistent policy is needed, that meet the labour force requirements for the organizational strategy and simultaneously the career needs of employees (Beer et al. 1984). That must be done within the constraints imposed by social institutions. Social institutions can impose themselves on the organizations through the shifting values of the workforce, the impact of outside institutions and through regulation and labour union policy. It is outside the scope of this research to elaborate on the impact of social institutions. Though, there is a third perspective which is looked at in this research and which concerns the labour market for IC nurses and OR assistants. The HR flow model includes both internal labour market issues as well as external labour market issues.

The HR flow policy domain is of strategic importance to organizations. It is about having the right numbers of employees with the skills required to implement the organization's strategy. Organizations therefore must design appropriate policies and practices for managing HR-flow. The problem of ensuring that the right people are available is not only a problem of forecasting personnel requirements but also a function of the organization's capacity to attract, keep and develop the people it needs (Beer et al., 1984). When organizations do not have the right skilled workers available, this can seriously undermine the success of strategic business choices. Furthermore, the authors of the Harvard model suggest that flow policies and practices should be designed and administered central in the organization, otherwise they will not be internally consistent and support the strategy of the organization.

### 2.3.4 HR instruments

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Two HR instruments that are part of the HR-flow policy domain are the recruitment and retention of specific groups of employees. Retention is closely linked to the internal flow policies of an organization, but is concerned with more aspects that are not included in the model of HR-flow by Beer et al. (1984). Those aspects are discussed in the next sections. Where recruitment is about attracting new employees, retention means that organizations should care that employees remain within the organization. This research is directed at those two HR instruments, to reach the HR-goal of quality (e.g. predictability). The emphasis lies at the instrument of retention as MST has more control over the internal labour market and it reduces the need for recruitment. Various concepts that influence the retention of employees are being discussed: the concept of internal labour market arrangements, their effect on psychological contracts, core-periphery models and job satisfaction as antecedent of voluntary turnover. Since these concepts also have consequences for recruitment, some recruitment issues are addressed in that part of the theoretical framework that is mainly focused on retention. In the same way, the concepts of organizational attractiveness, Person-Organization fit and various aspects of recruitment are elaborated to illustrate the preconditions of recruitment strategies but these concepts are also related to the retention of employees. A basic concept to examine the preconditions of retention is the 'Internal Labour Market' (ILM).

### 2.4 Internal Labour Markets

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The concept of the ILM can provide a structural solution for problems with employee retention and is therefore used in this research with regard to the retention of IC and OR employees at MST. The definition of the ILM can be classified in different ways. In general, the distinction can be made between a wide and narrow definition (Rubery, 1994). The narrow definition relates ILMs with its characteristics, for instance the development of internal job ladders and the prospect of job security offered to employees. That is associated with the model of the ILM as described by Doeringer & Piore (1971). They refer to an ILM as an administrative unit of employees within an organization of whom the employment relationships are governed by a set of institutional rules and procedures (Doeringer & Piore, 1971: in Grimshaw, Ward, Rubery & Beynon, 2001). Offering job security is one of the rules, which are expected to address an employer's need for supplies of scarce and skilled workers. Section 2.4.1 elaborates on the rules of the ILM. A broader definition includes employment systems which protect employees from the external labour market conditions and provide better terms and conditions of employment than they could have in the external labour market (Rubery, 1994). In this research, the narrow definition is adopted as it is focused on the retention of employees. The ILM is used to analyze which factors might cause problems with the retention of IC nurses and OR assistant staff at MST. ILMs developed mainly to establish some form of control over the labour market and the labour process for employers (Boxall & Purcell, 2003). This helps organizations to protect employment from the pressures of competitive labour market and creates more certainty on their labour provision (Osterman, 1987). That is because ILMs decrease the mobility of employees across organizations and generally lead to longer organizational tenure and lower turnover (Osterman, 1987; Fairris, 2004). Although it is argued that there can be different ILMs, this research concentrates on the traditional ILM, within the borders of the organization (Royal, 2000). The traditional ILM is preferred when the goal of organizations with respect to labour is predictability, which is the aim of this research. In this research, the ILM consists of all employees at MST that are employed by the organization as opposed to those employees who do not have a labour contract with MST. The latter form the external labour market.

### 2.4.1 ILM rules

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An important reason why ILMs developed is that employers wanted to keep (scarce) valued workers by offering a form of career and job security (Boxall & Purcell, 2003). Therefore rules emerged to govern the employment relationship and especially to build and manage expectations. Osterman (1987) distinguishes four groups of rules, each of which is a form of a relationship in which efforts and rewards are exchanged: job definition rules, career development rules, job security rules and wage rules. Since the latter three groups are very important for employee retention, those are regarded as preconditions of retention in this research.

Career development rules refer to the extent to which more senior or more rewarding jobs are reserved for employees in the organization to provide some basis of career development or career expectations (Boxall & Purcell, 2003; Osterman, 1987). In ILMs, higher positions are mostly filled by promotion from within, which creates disincentives for workers to leave the organization (Osterman, 1987). The nature and extend of the development of employees is heavily influenced by the career paths an organizations makes available to its employees (Beer et al., 1984). In ILMs there are a single, or very few 'ports of entry' and subsequent progression up the career ladder based on understood criteria such, as seniority (i.e. experience), qualifications or promotion channels (Boxall & Purcell, 2003). Career advancement based on acquisition of skills and experience is supported by the structure of ILMs (Grimshaw et al., 2001). Part of the promotion system is the criteria that are used to decide who will be selected for promotion. These criteria may be more or less explicit (Schuler & Jackson, 1987). Very explicit criteria, as is characteristic for ILMs, have the benefit that it creates clarity for employees, since they come to recognize the qualities of behaviour that will be rewarded with promotion. The disadvantage when the criteria are explicit is that the promotion system becomes less adaptable to exceptions and changing circumstances. Furthermore, career progression is contingent not only on the presence of a transparent job ladder providing for incremental advancement, but also on opportunities to learn through on-the-job training or in-house training schemes (e.g. Doeringer & Piore 1971: in Grimshaw et al., 2001).

Investment in employee development is a central theme in ILMs and is also a major part of the Harvard model. Beer et al. (1984) emphasize that the investments may increase the competence of employees as well as their commitment to the organization because employees believe they are receiving an opportunity for development. Beer et al. (1984) suggest that policies with regard to internal flow through the organization should have attention for the career development of employees and stimulate their development process so that it also meets the needs of the organization. Effective career development requires that organizations create a context that encourages employee development in directions that meet the needs of the organization but also give individuals a chance to influence their development process (Beer et al., 1984). To meet organizational needs, management should communicate those needs to employees so that they know what kind of behaviour or skills the organization values, and they should provide employees with career opportunity information. On the other hand, people desire to have control over their careers and choose the career path that fits with their competences and values (Beer et al., 1984). Organizations can give individuals control over their careers for instance by providing possibilities for employees to show their career needs, such as job postings that allow employees to apply for other positions in the organization they would like to employ. Furthermore, satisfaction of individuals with their career development will increase when horizontal movements (lateral transfers) or vertical movements (promotions) in the organization become more rapid and employees will be rewarded for their development. Employees are then likely to be more committed to the organization as they expect personal rewards in the future. When there are few possibilities for promotion to provide career development, lateral transfers such as job enrichment (i.e. the redesign of work to include more responsibilities) can be used as opportunities for development and growth (Beer et al., 1984).

Finally, a major concern that must be addressed by organizations when managing internal flow of employees is how performance effectiveness is defined and evaluated as effectiveness may

be a criteria used by organizations for promotion decisions. The main problem with the evaluation and selection of effective employees for promotion is that the process is subjective by nature, as managers make the decisions and evaluation of the effectiveness of employees. Although there are methods for selection and evaluation that makes the process more objective, they are at best imperfect (Beer et al., 1984). Most important is that the process of employee appraisal is fair. This suggests that emphasis is placed on the process of appraising and particularly the amount of influence employees have on that process. The more influence employees have, the more they are likely to perceive it as fair. Organizations therefore should openly communicate the process of evaluating and selecting effective employees (Beer et al., 1984).

Job security rules refer to the extent to which explicit commitments are made to individuals about the expected time they can hope to stay within the organization (Osterman, 1987). In ILMs, workers are typically offered jobs for life, and those expectations are institutionalized through informal and formal arrangements within the organization (Grimshaw et al., 2001). For example, establishment of career ladders implies that the company offers long term opportunities for promotion and employment security. Employment security is contrary to the trend of employability, where the responsibility for the accumulation of training and experience shifts to the individual to remain attractive in the labour market (Baruch, 2001). When organizations offer employability, they provide employees with general skills that are valuable outside the organization. Although there is some discussion among researchers on how employability affects retention, the dominant understanding is that employability has a negative impact on employee retention (e.g. Benson, 2006). That is because employability makes employees more marketable and therefore more likely to be attractive for other organizations and thus enhance their opportunities for employment outside the current organization.

Wage rules finally refer to how a person's salary or wage is to be determined (Osterman, 1987). In ILMs wages are generally attached to jobs instead of individual attributes, with limited scope of managerial discretion (Grimshaw et al., 2001). That increases perceptions of fairness of rewards. Furthermore, reward systems send out a message to employees about the kind of organization that management want to create or retain and the behaviour that is expected of employees (Beer et al., 1984). ILM wage rules are expected to provide integrated job and pay ladders with clear pay promotion paths to match the upward skill or career progression. The reward system is thus on a fixed basis to reward dependability (Cappelli, 1995). Furthermore, in the Harvard model it is stressed that employees should have some participation in the design of pay or reward system to increase the satisfaction with and acceptance of the system (Beer et al., 1984).

#### 2.4.2 ILMs and recruitment

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Retention and recruitment are not isolated constructs. Forming ILMs may have implications for the recruitment strategy of organizations. Some implications are already presented (e.g. recruitment takes place at specific points in the organization and internal recruitment is preferred above sourcing externally). Internal recruitment is a mean for ensuring commitment of employees (Royal, 2001). As illustrated with respect to the HR-goal of quality, organizations that are perceived to have good policies and practices on ILM aspects such as employment security, opportunities for development and growth and fair pay systems, are likely to be more successful in attracting the kind of individuals they wish to recruit into the organization (Guest, 1987). The recruitment policy of organizations in ILMs is to offer long-term employment opportunities for applicants (Royal, 2001). Organizations that support this long term employment and which mainly promote employees from within are in need of a steady recruitment (Beer et al., 1984). Doeringer & Piore (1971) noticed that workers accept employment with certain expectations for the future (e.g. with regard to employment security) and these expectations assume a certain stability (Grimshaw et al., 2001). A violation of expectations through a change in recruitment policies may negatively affect the

workforce and may question the credibility of offers that management might wish to make in the future.

### 2.4.3 ILMs and psychological contracts

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The arrangements of ILMs create incentives for employee commitment to the organization by means of a psychological contract in which employee loyalty and adequate performance are exchanged for security and predictable improvements (Cappelli, 1995). Psychological contracts play a major role in the employment relationship and can be used to analyze the quality of that relationship. Psychological contracts are also useful in the analysis of core-periphery employment models in organizations, which is addressed later. A Psychological contract can be described as 'an individual's (subjective) beliefs regarding reciprocal obligations in the relationship with their employer' (Rousseau, 1990). This suggests that employees and employers have unwritten reciprocal expectations in the employment relationship about what contributions they owe in return for certain inducements (Rousseau, 1990). When employees perceive that their employers failed to meet their obligations it often leads to lower commitment and higher turnover (Sturges, Conway, Guest & Liefoghe, 2005).

Two types of psychological contracts can be identified, both representing the end of a continuum (Rousseau, 1995: in Graeme, Staines & Pate, 1998). On the one hand is the relational contract, describing long-term relationships that include emotional attachment and a focus on development and growth of persons (Boxall & Purcell, 2003). Transactional contracts describe short-term relationships, characterized by mutual self interest and a focus on economic exchange. It is hypothesized that employees with transactional contracts are more likely to leave the company in case of alternative employment opportunities and are less psychologically committed to the organization (e.g. Tsui & Wu, 2005). ILMs are used when there is a need for trust, open ended contracts, and the building of a relationship between the organization and the employees with high levels of organizational commitment (i.e. relational contracts) (Boxall & Purcell, 2003), as is the case in this research.

Moreover, Beer et al. (1984) stated that different patterns of labour flow create different psychological contracts as those flow patterns can have a profound impact on the job security and career development of employees. The pattern of ILMs can be characterized as a 'lifelong employment system', where people usually enter the organization at the bottom and stay with the organization throughout their careers. The bottom may be defined differently for different employee groups. This flow pattern creates relational contracts since employees who have long term prospects in the organization are also likely to take a longer-term view of the relationship. Employees who are insecure about their future and opportunities at an organization are more calculating about the relationship, and are more likely to decide to leave when their career needs are not met quickly (Beer et al., 1984). Moreover, by structurally investing in employees as in ILMs, their competence may be increased and they may feel a greater sense of commitment to the organization when they believe they are receiving an opportunity for development. The other flow patterns make it more difficult for employees to develop commitment to the organization (Beer et al., 1984).

Tsui & Wu (2005) also stressed the importance for organizations of a long-term and open ended relationship involving loyalty and commitment with the employees, what they call the mutual investment relation. When employees experience long-term investment from employers, they reciprocate with loyalty and contribute much more than simple job performance. The consequences of this relationship for HR practices are in congruence with the arrangements in ILMs. For instance, it focuses on long term career development and promotion from within.

#### 2.4.4 ILMs and core-periphery models

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Some authors recognized a decrease of ILM practices in organizations in response to factors internal and external to the organization, leading to expectations about the employment relationship that are contrasting to the case of ILMs (Cappelli, 1995). An example of the transformation of employment systems is the tendency of external recruitment of temporary workers, who have more arms-length and transactional contracts with organizations.

In response to these changes, models of the employment relation have been developed, called core-periphery models. In these models, the internal 'core' workforce is differentiated from, and to a degree buffered by different types of peripheral workforces, which enhances the flexibility in staffing issues for organizations (Cappelli, 1995). Employers recruit 'periphery' workers in order to adapt to changes in the demand, and restrict the benefits of ILM arrangements to a 'core' workforce (Atkinson, 1984: in Osterman, 1987). Core and periphery workers face different psychological contracts, where the psychological contracts of the former are characterized as relational and the latter are employed on more transactional contracts, with no expectations of longevity (Boxall & Purcell, 2003). The core-periphery arrangement is valuable in this research as part of the analysis of retention issues at MST, by looking at the construction of the workforce and consequently the different relations with employees.

An influential core-periphery model is developed by Atkinson (1984), and is called the model of the flexible firm (Taylor, 2008). That model consists of three rings. The external ring shows people who are external to the organization; they provide work for the organization but are not employed by it (Boxall & Purcell, 2003). Professionally qualified people working as self-employed fall under this ring, just as employees working for an agency or some other service provider (Taylor, 2008). In the middle ring are the peripheral workers (employees of the firm), divided into primary and secondary categories, the first forming part of the firm's internal labour market (Taylor, 2008). These people are mainly employed full-time and have a certain degree of permanence, but tend to have lower skills and are less central to the organization's success than core employees. That is because their skills are more widely available in the labour market. These employees therefore enjoy lower job security than the core workers. The secondary peripheral group has even less certainty because they are brought in mainly to cover peaks in business or short-term needs from the absence of other staff. They are employed either on a part-time or temporary basis. At the centre are core employees. These are the workers in organizations that perform the organizations' main activities and they are usually classified as permanent full-time staff and rely on firm-specific skills (Taylor, 2008). They enjoy the opportunities and benefits of ILMs (Boxall & Purcell, 2003).

Central to the model are two distinct types of flexibility: functional and numerical (Taylor, 2008). Function or task flexibility refers to the capacity of employees to undertake a range of tasks or skills (Atkinson, 1984: in Taylor, 2008). Numerical flexibility is described by Atkinson (1984) as management's ability to vary the amount of labour available in response to changes in levels and patterns of demand (Boxall & Purcell, 2003). Functional flexibility is specifically applied to the core workers while the two categories in the peripheral ring are both associated with numerical flexibility (Taylor, 2008). With regard to these peripheral workers, flexibility is sought by organizations in the number of employees working and the number of hours worked.

#### 2.5 Job satisfaction and turnover

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There are many studies that have paid attention to the prediction and control of turnover, which facilitates employee retention. The main variable that is related to turnover in this literature is job satisfaction (e.g. Mobley, Horner & Hollingsworth, 1978; Porter & Steers, 1973; Blegen, 1993; Irvine & Evans, 1995). These researchers in general found a negative relation between job satisfaction and turnover and concluded that a decrease in turnover occurs when employees are satisfied. It is theorized that the more dissatisfied employees are, the higher the chance of

considering other employment opportunities, which finally leads to higher voluntary turnover. In studies in the nursing literature, job satisfaction is also often linked to turnover and evidence is found for this relation (e.g. Lum, Kervin, Clark, Reid & Sirola, 1998; Price & Mueller, 1981). Moreover, studies of job satisfaction and turnover tell important things about what workers want (Boxall & Purcell, 2003). For these reasons, theories and concepts on the relation between job satisfaction and turnover are applied in this research with respect to retention. The concepts of job satisfaction and turnover are addressed first after which models of turnover are discussed. Finally, there is elaborated on organizational commitment, which is an important variable in the relation between job satisfaction and turnover.

### 2.5.1 Turnover

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Turnover is extensively studied in research on work behaviour and generally viewed as the movement of staff out of an organization (Coomber & Barriball, 2007). For examining turnover at organizations, this definition is too broad. Although the definition makes a distinction between movement of employees between units within the same organization (which is not turnover in this definition) and movement across organizations it does not make a distinction between categories of reasons for turnover. People have different reasons to quit their job, which can be categorized as retirement, dismissal or voluntary leave (Winterton, 2004). Retirement and dismissal are heavily influenced by management, while the last represents a personal decision to quit work. However, that personal decision is often caused by factors that are attributable to the organization, mainly through their impact on job satisfaction. Bluedorn (1978) also distinguishes the act of leaving the organization as voluntary or involuntary. He sees retirement and dismissal as involuntary. Coomber & Barriball (2007) stressed in their meta-analytic study on turnover among nurses that such a specified view is useful to consider when attempting to distinguish the variables that may have a relationship with voluntary turnover, which is the focus of this paper. Abelson (1987) further suggested that some voluntary turnover is avoidable, while in other instances it is not. Unavoidable voluntary turnover represents employee quits that employers cannot control (Abelson, 1987). That can be, for instance employees leaving due to family moves or medical disability. In this research is analyzed what the management of MST can do to retain the employees of the IC and OR divisions they need. Identification of the antecedents and process of turnover helps with that.

### 2.5.2 Job satisfaction

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While there is extensive literature with regard to job satisfaction among employees in general and within nursing literature, there is not one exact definition researchers have agreed upon (Cavanagh, 1992). Price (2001) defines job satisfaction as the affective orientation that an employee has towards his or her work. This definition characterizes the traditional model of job satisfaction which is directed on all the feelings that employees have about their job. However, as Lu, While and Barriball (2004) suggest, job satisfaction does not only depend on the nature of the job, but also on the expectations of individuals about what the job should provide for them. Spector (1996) provide a more inclusive definition of job satisfaction and defined it as the affective response of an employee to their job that results from the employee's comparison of actual outcomes with those that are expected, needed, wanted, or perceived to be fair.

There are also different theories with differing conceptualisations of job satisfaction, which can be categorised as 'content' or 'process' theories (Campbell et al., 1970: in Coomber & Barriball, 2007). The Motivator-Hygiene theory of Herzberg (1966) and Maslow's (1954) Hierarchy of Needs are the most influential examples of content theories. These theories try to identify the needs or values that should be realised in order for an individual to be satisfied at work (Coomber & Barriball, 2007). Herzberg (1966) for instance made the distinction between motivators and hygiene factors. The presence of the motivators creates job satisfaction, while the absence of hygiene factors creates job dissatisfaction (Herzberg, 1966). The theory of Maslow (1954) relates job satisfaction to need

fulfilment and stressed that the needs of people can be ranged in a five-level hierarchy, from physiological, safety, belongingness and love, esteem to self-actualization. Content theories have become less popular since the emphasis of researchers in cognitive processes (the attitudinal component) increased, rather than the emphasis on underlying needs (Spector, 1997). Process theories are directed on the process by which variables (e.g. expectations, needs) relate to the characteristics of the job to produce job satisfaction (Coomber & Barriball, 2007). These theories are mainly concerned with the feeling of satisfaction and the cognitive process through which employees come to such a feeling. An example of a process theory is the 'range of affect theory' by Locke (1976). He stressed that job satisfaction is determined by a discrepancy between what an employee wants in a job and what he or she has in a job. The satisfaction of employees with a facet of the job, when expectations are met or not, is moderated by the degree to which the facet is valued by the employee (Locke, 1976). When employees value a facet, their satisfaction is more greatly impacted by whether expectations are met compared to when the employee does not value that facet.

The theories and definitions of job satisfaction illustrate that it has an affective component (i.e. a feeling of satisfaction), and a perceptual component (i.e. an evaluation of whether the job of an employee meets his or her needs) (Tovey & Adams, 1999).

Another distinction in empirical studies about job satisfaction is whether it is classified as an overall feeling about the job or as a related set of attitudes about various aspects of the job (Spector, 1997). The first refers to the global approach of job satisfaction, while the latter concerns the facet approach. Griffeth, Hom and Gaertner (2000) conducted a meta-analysis to the antecedents of turnover and concluded that among the main predictors are general job satisfaction as well as satisfaction with facets of the job. Kalleberg (1977) incorporates both approaches and sees job satisfaction as a general attitude towards the job, but also stressed that employees can have positive attitudes towards one aspect of the job and negative attitudes towards other aspects. Together the attitudes on these aspects lead to a general degree of satisfaction (Kalleberg, 1977). Often, researchers use one of the approaches, depending on the interest of the researcher (Spector, 1997). The global approach is used when the overall attitude is of interest, while the facet approach is useful in exploring which parts of the job produce satisfaction or dissatisfaction, based on which can be determined which areas are in need of improvement. The facet approach is central in this research as the satisfaction with facets of the job for IC and OR employees at MST should provide information on which facets need to be improved to increase job satisfaction. The facets of job satisfaction could be any aspect of the job. However, in literature there are different categories of factors identified as facets of job satisfaction (e.g. Lambert, Hogan & Barton, 2001; Price & Mueller, 1981; Irvine & Evans, 1995; Mobley et al., 1978). Researchers distinguish demographic- and organizational characteristics (mainly including work environment and work content). Demographic characteristics are associated with individual variables such as age and gender (Lambert et al., 2001). The work environment is comprised of numerous dimensions, for instance participation and relationship with co workers, where work content concerns the nature of the work itself (Lambert et al., 2001). Studies that examined the strength of the relationship between these dimensions and job satisfaction mainly found work environment and work content to have a stronger relationship to job satisfaction than demographic characteristics (Blegen, 1993; Irvine & Evans, 1995; Lambert et al., 2001). An overview by Spector (1997) gives an indication of the facets of job satisfaction, based on a review of the most influential job satisfaction instruments. The facets are related to the organization and include: appreciation, communication, co-workers, fringe benefits, job conditions, nature of the work, the nature of the organization, an organization's policies and procedures, pay, personal growth, promotion opportunities, recognition, security and supervision (Spector, 1997). In the job satisfaction survey for the IC and OR divisions that is already set up by the external organization Effactory, most of these facets are included. In this research are only organizational characteristics addressed that relate to the job satisfaction of IC and OR staff.



### 2.5.3 Models of turnover

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A variety of models have been developed in the past to explain turnover behaviour of employees and that specified the relationships among determinants of turnover (e.g. March & Simon, 1958; Mobley, 1977; Mobley et al., 1978; Mueller & Price, 1990; Irvine & Evans, 1995). What emerges from these models is that turnover behaviour is a multistage process including attitudinal, decisional and behavioural components (Lum et al., 1998). What is also common in the models is that while they are originated from various disciplines, most of the conceptual models of voluntary turnover have emphasized turnover largely as a function of job satisfaction (e.g. Mobley et al., 1978; March & Simon, 1958; Porter & Steers, 1973). Much evidence is found in these studies that job satisfaction is negatively related to voluntary turnover. The implication for the retention of employees is that organizations need to create and maintain conditions that contribute to high job satisfaction.

Most of the current theory and research on voluntary turnover stems from the ideas of March and Simon (1958) who theorized that actual turnover is not only predicted by the desirability of leaving a job but also by the perceived ease of movement from the job or organization. Desirability refers to job satisfaction. Perceived ease of movement on the other hand is reflected by the availability of alternative job opportunities and by personal characteristics that enhance the possibilities of mobility (Trevor, 2001). Trevor refers to the personal characteristics as an employee's movement capital. He further argues that while ease of movement strongly affects actual turnover it is difficult to separate its effect from job satisfaction and organizational commitment. Regarding the availability of alternative job opportunities there is suggested that labour market conditions may have a profound influence on employee turnover since employees are less likely to quit if there are few alternative job opportunities. (Winterton, 2004; Lambert et al., 2001). It is perceived that employees make a rational decision and will not leave the organization if they do not reasonably find other employment outside the organization.

Another theory on the process of voluntary turnover that has been very influential in developing turnover theory is formulated by Mobley (1977). He stated that the intention of employees to leave might be the last step before actual turnover. Mobley (1977) developed a model on the turnover process that includes eight stages before the intention to leave, involving steps as experience of job dissatisfaction, intention to search for alternatives and evaluating alternatives. The main implications that can be extracted from his model are the importance of intermediate stages between job dissatisfaction and actual turnover and that cognitive processes and actual behaviours follow each other. The final stages of Mobley's model represent the components of perceived alternative opportunities, that are stressed by March and Simon (1958). Before deciding to leave the organization, Mobley (1977) argues that employees who experience job dissatisfaction look at the available job alternatives and make an evaluation of them in terms of their expected utility. Theoretical critique on the model of Mobley (1977) is that it is assumed to be too specific and that some steps in the process are effectively redundant (e.g. Bluedorn, 1982: in Winterton, 2004).

Based on these ideas of Mobley (1977), Mobley et al. (1978) developed a theoretical causal process to explain voluntary turnover. This simplified model is tested under hospital employees and includes four core antecedents of turnover. These core areas are still widely used in today's research on voluntary turnover (Lambert et al., 2001). The first area concerns demographic characteristics that have an impact on the decision of employees whether to leave a job (Mobley et al. 1978). Second, job satisfaction influences a cognitive withdrawal process stressing turnover intention. Third, work environment factors have a significant influence on job satisfaction, on its turn determining the turnover intention. Finally, the intention to leave influences voluntary turnover. Mobley et al. (1978) proposed, just as Mobley (1977) did, that the relationship between job satisfaction and turnover is mediated by turnover intentions which is the final cognitive step in the process of voluntary turnover. This supports the earlier notion of Fishbein and Ajzen (1975), who sought to explain factors

that predict actual turnover and summarized that behavioural intention is the primary antecedent to actual behaviour. This infers that the cognitive process leading to an intention to leave is an important predictor of actual turnover.

Other theoretical models have also synthesized turnover research and specified relationships among determinants of turnover (Mueller & Price, 1990; Irvine & Evans, 1995). A theoretical model on turnover is used in many studies is developed by Mueller and Price (1990). They see turnover as a product of job satisfaction and commitment and found empirical evidence that both have a direct effect on turnover intention and indirectly on the actual employee turnover. In the next section, the concept of commitment, which has an important place in the relation between job satisfaction and turnover, is elaborated on. The model of Mueller and Price (1990) is a summary of different disciplinary perspectives contributing to the understanding of turnover behaviour. The model include: economic research with emphasis on individual choice and labour market variables; sociological research emphasizing characteristics of the work environment and content; and psychological research emphasizing individual variables and cognitive processes. Irvine and Evans (1995) developed this concept into a model for their meta-analytical study on job satisfaction and turnover. Their meta-analysis pointed to a strong positive relationship between behavioural intentions and turnover and a strong negative relationship between job satisfaction and behavioural intentions.

#### 2.5.4 Turnover and commitment

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Commitment is a central concept in the Harvard model in which it is linked to several organizational outcomes (Beer et al., 1984). Although commitment has various consequences, it is studied most in relation to turnover (e.g. Mueller & Price, 1990; Tett & Meyer, 1993; Griffeth et al., 2000). Tett & Meyer (1993) and Griffeth et al. (2000) for instance found commitment to be a good predictor of the intention of employees to leave while Meyer & Herscovitch (2001) found that the most important consequence of commitment is that people want to continue the relation with the organization. Others argued that decreased turnover is the strongest and predictable behavioural consequence of commitment (Mowday, Porter & Steers, 1982; Mathieu & Zajac, 1990). It is thus theorized that committed employees are important for organizations because it reduces turnover. Many researchers also found evidence that commitment is an important variable in the relation between job satisfaction and turnover (e.g. Mathieu & Zajac, 1990; Bluedorn, 1982; Mobley et al., 1978). The concept of organizational commitment and its role in the relationship between job satisfaction and turnover therefore derives more attention.

Before elaborating on the role of commitment, the concept itself needs more clarification. While people can be committed to a variety of objects (Torka, 2003), this research is directed at commitment towards the organization as it has the strongest links with employee turnover. Since there are different interpretations of the concept of commitment it is not easy to give one precise definition. Commitment is also used in various ways in studies, for instance by focusing on the process of commitment or the commitment state itself (O'Reilly & Chatman, 1986).

Mowday et al. (1982) developed a broad theory of organizational commitment and identified that, in research on commitment, there is disagreement among researchers whether commitment is mainly attitudinal or behavioural. Where attitudinal commitment focuses on the process through which people come to think about their relationship with the organization, behavioural commitment is related to the process through which individuals become locked into an organization and how they deal with this problem (Mowday et al., 1982). Behavioural commitment research has mostly been concerned with identifying the conditions under which a behavioural pattern tends to be repeated, as well as with the effects of such behaviour on attitude change (Meyer & Allen, 1991). According to the attitudinal approach however this behaviour is influenced by attitudes, a psychological state that precedes the behaviour (Torka, 2003).

Meyer and Herscovitch (2001) have analyzed multiple definitions of commitment and came to the conclusion that all definitions have two common characteristics: commitment can be seen as a binding force, which gives direction to behaviour. It is not behaviour in itself but it can be used to predict behaviour.

There are various definitions and conceptions of commitment, the most influential and supported model is developed by Meyer and Allen (1991), which is applied here. Meyer and Allen view commitment as a psychological state or attitude that binds people to an object, characterises the relationship between an employee and the organization and has implications for the decision whether or not to continue the membership at the organization (Meyer & Allen, 1991). This attitude people have towards an object thus can be seen as the binding force that Meyer and Herscovitch (2001) talk about, influencing behavioural outcomes such as voluntary turnover. Meyer and Allen (1991) further argue that there are three facets of organizational commitment: affective, continuance and normative commitment. These facets are based on different underlying psychological states that characterize the commitment of an employee towards the organization. Employees can be committed to organizations for various reasons, which illustrate why they stay.

Affective commitment refers to the employee's emotional attachment to, identification with and involvement in the organization (Meyer & Allen, 1991). This description of affective commitment correspond to the conception of attitudinal commitment of Mowday et al. (1982), who pointed at three characteristics of employees who have an attitudinal commitment to the organization: they have a strong belief in and acceptance of the goals and values of the organization, a willingness to put in much effort for the organization and a strong desire to maintain membership in the organization. They stay at an organization because they want to, because they have an emotional bond and identify with the organization.

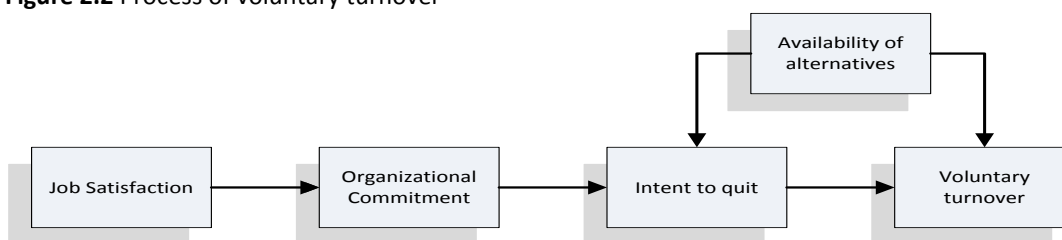
Continuance commitment on the other hand is not associated with an emotional attachment to the organization but is defined in terms of the awareness of the costs associated with leaving the organization (Meyer & Allen, 1991). These employees stay because they feel they need to because the costs of leaving are perceived as too high. This aspect of commitment is mainly based on the side-bet theory of Becker (1960). He theorized that employees make investments or side-bets in the organization, which can be for instance development of friendships or firm specific skills. These side-bets subsequently decrease the attractiveness of alternative employment opportunities outside the organization as they will be lost when an employee leaves. Further, the costs of leaving may also be higher when employees perceive that there are few available alternatives outside the organization making them more continuance committed (McGee & Ford, 1987). Since continuance commitment refers to a calculation of the costs and benefits of leaving an organization it is also referred to as calculative commitment (e.g. Mathieu & Zajac, 1990; Torka, 2003).

Normative commitment reflects a feeling of obligation to continue working for the organization (Meyer & Allen, 1991). Normative committed employees stay at an organization because they feel they ought to. The feeling of obligation may be derived from many sources. It can be for instance that an organization has invested in the development of employees and they therefore feel morally obliged to stay at the organization till they 'pay' back the organization for its investments (Meyer & Allen, 1991).

It is found that of the three components, affective commitment is most strongly related to job satisfaction and turnover (Meyer, Stanley, Herscovitch & Topolnytsky, 2002; Mathieu & Zajac, 1990; Griffeth et al., 2000). However, the three components of commitment do not exclude each other: employees can be committed to their employer in an affective, normative, and continuing sense, at varying levels of intensity (Jaros, Jermier, Koehler & Sincich, 1993). Meyer and Herscovitch (2001) agree with this notion and stress that combinations of high or low levels of the different components form the commitment profile of employees, where different profiles lead to different employee behaviour such as the likelihood that an employee will leave the organization.

Important is the role organizational commitment plays in the relation between job satisfaction and turnover. Commitment can be seen as a mediating variable. It has been mostly reported in literature to be negatively related to turnover and intent to leave and positively correlated with job satisfaction (e.g. Bluedorn, 1982; Mowday et al., 1982; Mathieu & Zajac, 1990). Mathieu and Zajac (1990) have conducted a meta-analysis on the antecedents and consequences of organizational commitment and stressed that in most causal models of organizational commitment it is seen as a variable that mediates between personal characteristics and work experiences (i.e. job satisfaction) and employee turnover. Bluedorn (1982) and Mowday et al. (1982) also illustrated that job satisfaction is an important antecedent of organizational commitment, which is an important antecedent of turnover intentions. Furthermore, Guest (1987) states that commitment can be seen best as an intervening variable with antecedents and consequences, one of which is that committed employees tend to have longer job tenure than non-committed employees. The notion that organizational commitment mediates the effect of job satisfaction on turnover is supported by the meta-analytic study of Griffeth et al. (2000) who found evidence that organizational commitment is more strongly related to turnover than job satisfaction indicating that the effect of job satisfaction on turnover is less direct than the effect of organizational commitment. This supports the idea that the effect of job satisfaction is mediated by organizational commitment. Concluding, it is perceived that satisfaction influences commitment which in its turn influences turnover intentions. The model of voluntary turnover that is used for the analysis of employee retention at MST is illustrated in figure 2.2. In the analysis, most preconditions of retention are also regarded as facets of job satisfaction.

**Figure 2.2** Process of voluntary turnover



## 2.6 Organizational attractiveness for potential recruits

In the light of the shortages on the labour market for IC and OR staff, the attractiveness of MST for potential applicants has become increasingly important. Although policies and practices that make an organization attractive as an employer for potential recruits also make it more attractive for current employees to remain at the organization, the concept of organizational attractiveness is in this research mainly used in relation to the attraction of new employees. Some aspects that are discussed in the parts about recruitment and attractiveness also emphasize effects on the retention of employees, for instance through their impact on ILM arrangements. Furthermore, the aspects of organizational attractiveness for potential applicants form the reputation of the organization as an employer and therefore strongly influence the ability of organizations to compete on the labour market (Beer et al., 1984).

From an organizational perspective, the main goal of the management of organizational attractiveness is to fill vacancies (Rynes & Barber, 1990). At first instance, it is focused on enhancing the quantity of potential employees who apply for a certain vacancy. However, the quality (e.g. in terms of their characteristics, education, abilities) of applicants is also crucial, as well as the efficiency of recruitment methods (e.g. how much money will be spent on finding qualified candidates).

The focus here is on attraction, distinct from selection. Although they are interconnected, in the light of the tight labour market, attraction becomes more relevant. Successful selection is only possible if a sufficient amount of people apply for a vacancy (Lievens, 2006).

Rynes & Barber (1990), drawing on multiple studies, identify three strategies for organizations to enhance their attractiveness for applicants: altering recruitment practices, targeting

non-traditional applicants and changing employment inducements (for instance paying higher wages). They distinguish between attraction and recruitment, where recruitment is a means to attract applicants (Rynes & Barber, 1990). Organizations have to make a well thought strategic choice among (a mix of) these strategies, influenced by a number of contingencies (Rynes & Barber, 1990). The strategies contain tradeoffs. In general, it can be stated that improvements in recruitment contain low costs and/ or risks but the impact on attractiveness may be lower (Doeringer & Piore, 1971: in Rynes & Barber, 1990). In contrast, changes in applicant pools and inducements can be far more extreme in that they entail either higher costs or greater risks but have a greater impact on attractiveness. In this research situation, the focus is on recruitment. A reason not to emphasize the other strategies is that when strong ILMs are in place, the use of inducements and non-traditional applicants create a greater likelihood of negative effects to employees in the organization (Rynes & Barber, 1990). For instance, when positions are strongly embedded in career ladders, observed with great interest by internal employees, changes in both strategies would be expected to entail greater potential risks for employers such as salary spillover to other positions or demotivation of internal candidates (Doeringer & Piore 1971: in Rynes & Barber, 1990). These changes bring adjustments to the organizational reality. The ability of an organization to pay is also a factor that is, with respect to the financial situation of MST, in favour of the less costly recruitment strategy. Due to the large problems MST has with filling the positions of IC nurse, surgery assistant and anaesthesia assistant, the possibilities to recruit various groups of people for these positions (e.g. workers from Germany) are also explored in this research. The focus however lies on the recruitment policies and practices at MST. An organization's recruitment practices may have an impact on applicants' attitudes and choices and is important in heightening the stream of applicants, independent of the nature of the attributes characterizing a particular job opportunity (Kristof-Brown, Zimmerman & Johnson, 2005; Breaugh, 2008).

Most modern theories on organizational attractiveness for potential employees are based on the attraction, selection and attrition (ASA) model of Schneider (1987). The basic assumption of the ASA-model is that different sorts of organizations attract, select and retain different sorts of people (Schneider, 1987). Applicants also select themselves into organizations. With respect to the attraction component, people are attracted to an organization that fits with their own interests, personality or values (Schneider, 1987). Based on these factors they make a selection among different organizations. Organizations also give attention to the fit of the applicant with the organization in the selection process (Lievens, Decaesteker, Coetsier & Gerinaert, 2001; Schneider, 1987). The last A stands for attrition, meaning that employees who experience that they do not fit in their work environment will likely leave the organization.

### 2.6.1 Person-Organization fit

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An approach that rests on the ASA-model is the person-environment fit. In that approach, the same assumptions are applied and are supported by empirical research: that applicants are more attracted to organizations ('Person-organization fit') or jobs ('Person-job fit') that are compatible with their own personal characteristics (e.g. Kristof, 1996; Lievens et al., 2001; Turban & Keon, 1993). Kristof (1996) defines Person-organization (P-O) fit as the compatibility between people and organizations that occurs when: (a) at least one entity provides what the other needs, or (b) they share similar fundamental characteristics, or (c) both. Person-job (P-J) fit is defined by Edwards (1991) as the fit between the abilities of a person and the demands of a job or the desires of a person and the attributes of a job. Since the emphasis in this research is on the attractiveness of organizations, and there is evidence that job seekers place less emphasis on P-J fit when they make job choice decisions (Cable & Judge, 1996), P-J fit is not used here.

P-O fit literature describes the impact of congruence between characteristics of individual employees and the organization. In studies, different positive outcomes of that fit for organizations have been found. First, it is shown that this fit influences attraction to an organization and job choice decisions (e.g. Cable & Judge, 1996; Turban & Keon, 1993). The assumption that individuals make job

choice decisions based on P-O fit comprises the attraction component of Schneider's (1987) ASA-model. Furthermore, P-O fit may also influence work attitudes of employees. Results of a study by Cable & Judge (1996) show that employees who perceive that they share the values of their organization are more committed to the organization, have a higher job satisfaction and are less likely to quit. Kristof (1996) also found empirical evidence for these effects of P-O fit and adds that lower levels of work-related stress are associated with high levels of P-O fit. These outcomes correspond to the attrition process in the ASA model. A perceived negative outcome of high levels of P-O fit with employees is that it can lead to much homogeneity in organizations making them less flexible and creative (Lievens, 2006).

A distinction in P-O fit literature that is of interest for this research is between subjective (perceived) and objective (actual) fit (Kristof, 1996). On the one hand employees and applicants have a perception of the congruence between their characteristics, needs and values and those of the organization. They have a subjective feeling of fit. On the other hand, there is an objective congruence between the characteristics of individuals and the organization. The ASA model describes that it are the applicants subjective assessments of the match between their own personal characteristics, needs and values and the attributes of potential work organizations that influence their job choice decisions and work attitudes (Schneider, 1987; Kristof, 1996; Cable & Judge, 1996). It is therefore assumed in this research that job seekers develop perceptions concerning their degree of fit with organizations and that those perceptions have a large impact on their choice whether or not to apply for an organization.

There are a number of personal and organizational characteristics that are theorized to influence job seekers P-O fit perceptions (Kristof, 1996). Most frequently addressed in literature is the congruence between the work values of potential applicants and organizational values. Cable and Judge (1996) and Judge and Bretz (1992) found evidence, in their studies on the effects of value congruence on job choice decisions, that values are an important determinant of P-O fit and that perceptions of value congruence strongly influence job choice decisions. Judge and Bretz (1992) argue that organizational work values influence the attractiveness of work environments to individuals. The presence of values that are important for individuals make a job at an organization more attractive. From this study becomes clear that individuals may search jobs where their work values fit with the organizational environment. Thereby value congruence also leads to other positive organizational outcomes of high P-O fit, such as higher job satisfaction (e.g. Kristof, 1996; Boxx, Odom & Dunn, 1991). It suggested that when the perceived value congruence of potential applicants with the organization is low, organizations should take action to change their value orientation (Boxx et al., 1991).

A widespread definition of values, which is used in this research, is that they are enduring beliefs, that a specific mode of conduct or end-state, is preferable to its opposite, thereby guiding individuals' attitudes, judgments and behaviours (Rokeach, 1973: in Cable & Judge, 1996). This definition refers to work values when it is applied to work settings (Judge & Bretz, 1992). That is the case in this research. Most importantly, the definition shows that values guide people, which is also applicable to the context of job choice decisions. Furthermore, it illustrates that it requires time to change values. Chatman (1991) supports the definition of Rokeach (1973) and state that values are important aspects of both individuals and organizations. Organizational values refer to the shared values of people within an organization (Kristof, 1996). A value can be seen as characteristic of an organization when employees of the organization perceive it to be characteristic. Moreover, it is suggested that organizational values form a major component of the organizations culture, which can potentially give a very strong sense, belief, or understanding about the way things are done at the organization (Boxx et al., 1991). Values are suitable for conceptualizing fit of potential applicants with MST as they can be measured for both individuals and organizations similarly. To measure value congruence, O'Reilly, Chatman and Caldwell (1991) developed the 'Organizational Culture Profile' (OCP), which is applied in this research.

## 2.6.2 Recruitment

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Several definitions of recruitment have been used by researchers to determine the variables that are included in the recruitment scope (Breaugh, 2008). The definition developed by Barber (1998) is used here. She described recruitment as 'the practices and activities carried out by organizations with the primary goal of identifying and attracting potential employees' (Barber, 1998: in Lievens, 2006). Recruitment activities have outcomes before the moment of the actual start of employment ('pre-hire'-outcomes, e.g. amount of applicants), on the long term ('post-hire'-outcomes, e.g. turnover) and there can be significant spillover effects to current employees (e.g. Rynes & Barber, 1990).

Recruitment policies and practices should be addressed in congruence with the strategy of the organization (Beer et al., 1984). These authors stress that it is because recruitment provides organizations with the people who are needed for that strategy and recruitment will have a major influence on turnover and employment stability in the long term. Further, recruitment policies and practices affect all four HR-goals that are described in this framework. Recruitment therefore should be handled very carefully.

A number of decisions should be taken with regard to the recruitment of employees. A first choice is about where to recruit employees (Schuler & Jackson, 1987). Organizations can focus on the internal labour market or rely more or less on the external labour market. This decision is particularly important for most jobs above entry level. Internal recruitment essentially means a policy of promotion from within, as is the case in ILMs. That policy can be an important reward for employees but at the same time create a commitment of the organization to the provision of training and career development opportunities when employees who are promoted perform well (Schuler & Jackson, 1987). Another important decision that follows in the process of recruitment is to determine the target applicant population (Breaugh, 2008). An applicant population can be described as the group at which the recruitment efforts of an organization are directed (Lievens, 2006). A consideration of the applicant variables is particularly relevant since different applicants are attracted to different organizations that they perceive to match with. Defining the target applicant population is finally needed because the recruitment sources and message should be adjusted to that group (e.g. Waasdorp, Van Trium, Petri & Van Brummelen, 2008).

Rynes & Barber (1990) identified four components of recruitment that have important consequences for the attractiveness of organizations: content of the recruitment message, recruitment sources used, recruitment timing, and recruiters used. These are the parts of recruitment, which are focused on to examine the current recruitment activities of MST and where organizational decisions might strongly affect the success of the recruitment process.

A first recruitment dimension influencing attraction is the message that is communicated to (potential) applicants. Organizations have considerable discretion with regard to the ways in which the content, favourability and details of vacancies are described and job seekers usually do not have all relevant information (sometimes even very few) (e.g. Rynes & Barber, 1990; Breaugh, 2008). The main objective of the message is that the content should spur (potential) applicants to apply and accept a job offer (e.g. Waasdorp et al., 2008). The message therefore should appeal to them. Further, the realism of the recruitment message is an important component (e.g. Rynes & Barber, 1990). There has been a lot of investigation on Realistic Job Previews (RJP), i.e., providing job applicants with accurate information about what a position within an organization involves, which creates realistic expectations for potential employees (Breaugh, 2008). Too optimistic messages may have negative effects on the long term. The message portrayed during recruitment creates certain expectations among applicants and when these are not fulfilled after job acceptance, this can lead to decreased job satisfaction and commitment and an increased intention to leave the organization (e.g. Breaugh & Stark, 2000). Therefore, an open process of communication of the reality of the organization is needed (Beer et al., 1984).

Furthermore, by providing realistic information, those individuals who do not perceive a good P-O fit are able to withdraw from job consideration (Cable & Judge, 1996). A better self selection would take place. This helps organizations to maintain better long-term relationships with employees (Wanous, 1980: in Cable & Judge, 1996). Although realistic job previews may have a negative effect on attractiveness on the short term (e.g. Lievens, 2006), the focus of this research is on the longer term outcomes.

The success of organizations in attracting the desirable employees also depends on the source(s) that they use to reach (potential) applicants (Rynes & Barber, 1990). It is necessary that the recruitment sources reach the target applicant group, before they can be motivated to apply. Recruitment sources may be classified in various ways. One type of classification focuses on the distinction between active and passive recruitment. In the case of passive recruitment, organizations wait until an applicant gets in touch with them and in the case of active recruitment, they are actively searching for potential candidates (Henkens, Remery & Schippers, 2005). Another distinction is between formal and informal recruitment sources where the former involves the use of an intermediary between the employer and potential employee (e.g. job advertisement) and the latter does not. In tight labour markets, where the competition for available candidates is high, employers need to increase their efforts to find suitable staff, are more likely to use different types of recruitment sources and particularly apply active and informal recruitment sources (Henkens et al., 2005). Boxall & Purcell (2003) formulate as a general rule that more proactive employers do better in tight labour markets. This is directed at 'pre-hire' outcomes. With respect to 'post-hire' outcomes of recruitment sources, it is found that employees who are recruited through informal channels would generally perform better, are more satisfied and less likely to quit (e.g. Breugh, 2008; Zottoli & Wanous, 2000). The main explanation for that comes from the 'realistic information' hypothesis: people who are recruited by certain sources (especially the informal employee referrals), possibly possess more accurate information beforehand, which permits a form of self selection based on the fit with the organization (e.g. Zottoli & Wanous, 2000). Furthermore, employees who perceive a good fit are more willing to recommend their organization as a good place to work (Cable & Judge, 1996).

The third component of recruitment that is discussed concerns the timing. Results from several studies suggest that timing is an important issue in the recruitment process (e.g. Breugh, 2008). Although this component of recruitment may not be that crucial as the former, one thing is particularly interesting. It is found that recruitment activities and selection phases should follow each other relatively quick, so that applicants do not have to wait long and are inclined to drop out and/or accept other job offers (Rynes, Heneman & Schwab, 1980). On the basis of a meta-analysis, Chapman, Uggerslev, Carroll, Piasentin and Jones (2005) concluded that timely responses from employers were linked to greater attraction to a job with the organization.

Finally, several characteristics of recruiters (e.g., informativeness, credibility) have been hypothesized to affect applicants' impressions and decisions about organizations (Rynes & Barber, 1990; Breugh, 2008). Recruiters are the members of the organization that applicants come into contact with. The choice of who will recruit employees and select them, influences which employees enter the organization, what their competencies, values and expectations will be (Beer et al. 1984). Recruiters with greater informativeness and/or credibility influence the attractiveness positively (Breugh, 2008). Theories on this subject suggest that future bosses and direct colleges have a higher informativeness, and because they are in direct contact with the function, are perceived to be more credible than staff recruiters from the HR department (Breugh, 2008).

## 2.7 Research model

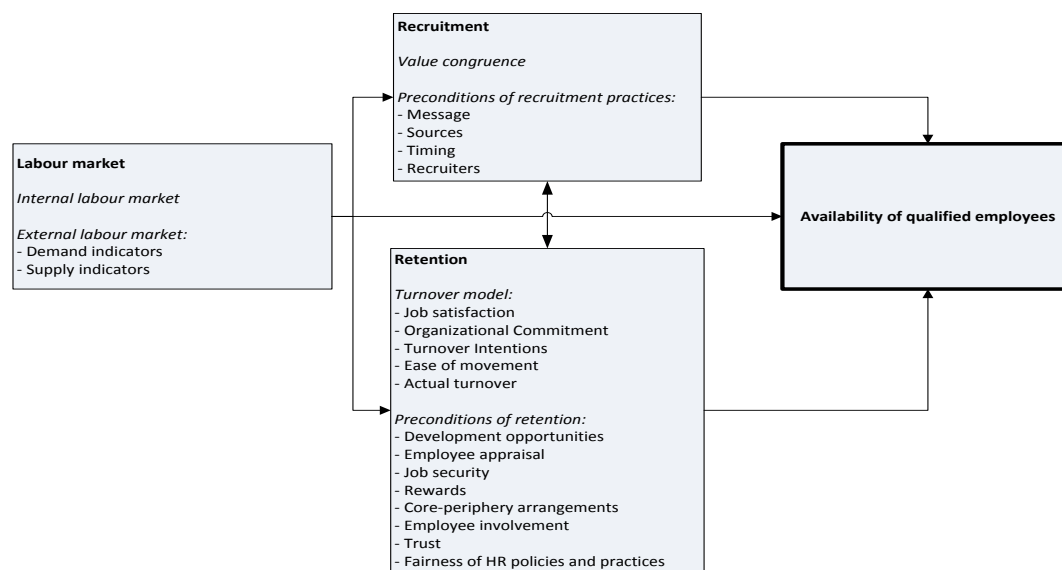
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Based on the theoretical notions that are discussed in this chapter, the research model can be outlined. The model shows the main variables that are addressed in this research and their



relations. The model includes a situational factor (the labour market) and two HRM instruments (retention and recruitment) that are used to analyze how MST can create more certainty about the availability of sufficient qualified IC and OR employees in the future. The labour market is an important factor in the environment of organizations that influences the supply and demand of labour and the competition for workers among employers. In this research both the external and internal labour market for IC nurses and OR assistants are incorporated. With respect to the retention of employees, the preconditions of retention and the main variables in the model of voluntary turnover are applied. Finally, preconditions of recruitment practices and value congruence are used to analyze how recruitment is addressed at MST with regard to short term and long term effects of recruitment. The research model looks as follows:

**Figure 2.3** Research model



## 2.8 Literature exploration

In this section is described which literature broadly is used for the analyses of labour market developments and retention and recruitment of IC and OR employees at MST.

For an overview of the relevant labour market variables, their descriptions and methods, Van der Windt et al. (2008) is used. For many years, they have conducted labour market explorations in the healthcare sector. More information about labour market variables can be obtained from other labour market studies such as one conducted by the ‘Werkgeversvereniging Zorgsector Twente en Achterhoek (WGV Oost)’, which is focused on the regional labour market. Publications from offices that have data on labour market developments provide information about demographic and economic developments, developments in labour force participation and in the demand for employees in the labour market (e.g. CWI, 2007; Centraal Economisch Planbureau [CPB], 2008; WGV Oost, 2008). Two studies on the learning climate at the IC and OR divisions at MST give insight in the inflow of workers through the educational courses.

Many studies are conducted on the separate preconditions of retention that are used, and on relations between job satisfaction and voluntary turnover. Beer et al. (1984) provide a general model of HRM which gives detailed information on various preconditions (e.g. involvement, employee development). Grimshaw et al. (2001) and Osterman (1987) elaborate on ILM arrangements that form preconditions of retention. Besides, Taylor (2008) and Boxall and Purcell (2003) discuss core-periphery models and specifically the model of the flexible firm by Atkinson (1984) that is applied. Furthermore, various meta-analytical studies are conducted that offer more insight in job satisfaction aspects for nurses (e.g. Hayes et al., 2006; Lu et al., 2005). Much information about organizational

commitment can be drawn from Meyer and Allen's influential study in 1991, in which they distinguish components of commitment.

Barber and Rynes (1990) elaborate on strategies to attract employees and summarize dimensions of recruitment that influence applicant attraction and form the preconditions of recruitment practices in this research. These dimensions are also addressed by Breaugh (2008), while Henkens et al. (2005) focused on the use of recruitment sources in tight labour markets. Furthermore, an extensive meta-analysis on the concept of Person-Organization fit is undertaken by Kristof (1996). Cable and Judge (1996) and Judge and Bretz (1992) provide valuable information on the effects of value congruence between job seekers and organizations. Finally, Waasdorp et al. (2008) published their experiences as an expert in labour market communication about recruitment sources and messages.

## 2.9 Methodology

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In this section, a description is presented of the methods that are applied to answer the research questions. To collect the data that is needed for this research, different methods are used: interviews, questionnaires (survey research) and desk research. It is a combination of quantitative and qualitative research. Quantitative research involves the analysis of numerical data. Babbie (2004) defines quantitative analysis as: 'the numerical representation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect'. Qualitative research on the other hand involves non-numerical research of interpretations and observations, for the purpose of discovering underlying meanings and patterns of relationships' (Babbie, 2004). The first part of this study is mainly quantitative as it provides a numerical description of the regional labour market for IC and OR workers. In the following parts of the study are exploratory research questions addressed and more in depth information is needed, for which qualitative methods are very suited. Using a mix of quantitative and qualitative methods increases the validity of the research as the results of various methods can confirm and complement each other (Sanghera, n.d.). Qualitative research can also add meaning and in depth understanding of the context related to the numbers of the surveys.

An aspect of the methodology concerns the selection of units of observation, which can be a broad scale of objects. The units of observation in this research are people. There is a distinction between units of analysis (which you want to say something about) and observational units (on which the analysis is based). These can be the same, but that is not completely the case in this entire research. The units of analysis are the management of MST, IC nurses and OR assistants and potential applicants for these positions. The observational units are IC nurses and OR assistants, students in the courses for these positions, and supervisors and experts within and outside MST on labour market, retention and recruitment issues.

### 2.9.1 Labour market exploration

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The first part of the research is a descriptive analysis of the labour market of IC and OR staff for the region Twente and Achterhoek. Descriptive research is often strongly quantitative in nature and requires the collection of measurable (quantifiable) data, which is applicable for this research question. Quantification can provide a reliable image of the situation as the numbers have a strong objective nature (Van den Berg & Verkleij, 2008). It further makes it easier to aggregate, compare, and summarize the data on labour market characteristics and developments. The situation on the labour market is examined by various indicators such as the amount of open vacancies and amount of students for the jobs. Data about demand and supply indicators show developments in the availability of IC and OR workers. The method of data collection mainly used in this part of the research is desk research. This means that existing data are used (Verschuren & Doorewaard, 2005). Most data on the labour market can be obtained from different existing sources, such as from educational institutions. Data of desk research is often simple and not expensive to gather and is not

influenced by the activities of the researcher (Verschuren & Doorewaard, 2005). The disadvantage they mention is that it is commonly produced for other purposes than the research and therefore not exactly fit with the data that is needed for the research. For some issues where more in depth knowledge is needed or figures are not known, interviews are held with people responsible for the courses for the IC and OR positions and labour market experts. The outcomes of the desk research are analysed by combining the data and presenting many data in proportions, which makes it understandable.

## 2.9.2 Retention

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The second part of the research is focused on the retention of IC nurses and OR assistants at MST. The problems with retention are studied at these divisions. The basis for the data collection for this research question is a quantitative survey, which is complemented by qualitative methods.

First of all, an employee survey is used that is conducted in December 2008 under IC and OR personnel at MST by the organization Effectory. The survey is sent to a large number of employees and it includes various aspects of job satisfaction, commitment and turnover intentions. A survey makes it possible to gather data from a large population and therefore can create a reliable representation of that population (Babbie, 2004). Furthermore, quantitative data are less biased and strive for generalization. In this case it supports generalization of the outcomes of the respondents to all employees of the IC and OR divisions at MST. A note is that the questions should be very clear. The research method for the employee survey is an online questionnaire. It is mainly quantitative since it consists for 95% of closed questions. As is characteristic for quantitative research, the survey uses structured questions where the response categories are predetermined. Respondents are asked to answer on a 5 point Likert scale how satisfied they are with an aspect of the job and with their job in general, well as on items related to commitment and turnover intentions. The Likert scale uses standardized outcomes, making it easier to analyse (Babbie, 2004). The items are positively formulated ('I am satisfied with..') and the answer categories range from totally agree to totally disagree. At the end of the survey two open questions are formulated about the reasons for some employees to take action to search for another job, and the action points employees think will improve the satisfaction directly. Effectory conducted regression analyses to guarantee the validity of the questionnaire.

Next to the employee survey, interviews are conducted with various respondents, which enables studying the real situation as it is perceived by people and it also creates the opportunity to ask complex questions (Babbie, 2004). The interviews are relatively structured and open ended. There is a list of questions to ask the respondents, but the questions have an open form. Open questions, characterized by non standardized answers, give much more information than closed questions. Therefore a clearer image of reality can be obtained. Structured interviews are best suited for studies in which it would be beneficial to compare the responses of the participants to answer a research question (Lindlof & Taylor, 2002). That is the case in this research. To create more valid and comparable answers, respondents are asked largely the same questions. Structured interviews make it possible to set up questions specific for this research, which also increases the validity of the answers. The disadvantage is that the information from structured interviews is normally less in-depth (Fielding & Schreier, 2001). However, interviews in general are a qualitative research method that is suitable to provide in-depth information about a subject and by formulating open questions the interviews can provide sufficient in-depth information. The respondents for the interviews are chosen purposely on their expertise or position.

First, interviews are conducted with the team leaders and business managers (supervisors), and HR advisors of the IC and OR divisions since not all information on the preconditions of retention is included in the survey and more in-depth information is needed as to which extent those conditions are present at MST. Because there are no documents of exit interviews available to examine the reasons for turnover at MST, a question on the outflow that the respondents

experienced is added to the interviews. The interviews are held with persons in various functions as it increases the reliability of the outcomes. Although qualitative research is more subjective in nature, using various perspectives in the interviews makes it possible to gather more objective outcomes.

Further, dissatisfaction of employees on some facets of job satisfaction should be placed in a context, in order to analyze how specific certain feelings at MST are and to what extent the facet can be influenced by MST. Therefore, board members of the professional organizations for IC nurses, surgery assistants and anaesthesia employees are interviewed, who have insight in the situation in the Netherlands for these employees and represent their needs. To explore the context, desk research on specific facets of job satisfaction in the Netherlands is also used.

Finally, interviews are held with employees of the different divisions, to discuss the outcomes of the employee survey and the presence of preconditions of retention. After the employee survey is analyzed on the factors that are in most urgent need of improvement, the causes of dissatisfaction with those factors are discussed in the interviews. Respondents are asked how the issues of job satisfaction and preconditions are perceived by employees of their division, not solely their own opinion. That is particularly useful for the Thorax IC, since it did not participate with the employee survey of Effectory. Restricted by the planning and workload of the respondents, and in consultation with the direct supervisors, is decided to conduct interviews with one or two employees at a time. The respondents are asked for cooperation first by their supervisor and informed that they will be contacted. The sample of employees is chosen by purposive sampling. It is a deliberate choice to interview employees of different ages and gender, to create outcomes that are reliable and can be generalized. Heterogeneous sampling enables researchers to collect data to describe and explain key themes that can be observed (Saunders, Lewis & Thornhill, 2007). The key themes that are discussed are the bottlenecks that result from the employee survey and preconditions of retention. In small samples, heterogeneous units also have stronger claims to representativeness than others (Gerring, 2007).

For the analysis of the employee survey, the answers are converted into report marks. When a respondent totally disagrees on an aspect, a mark of 2.5 is linked to that answer. For respondents who totally agree a 10 is noted. The other three outcome categories lay in between, with steps of 2.5. Since the underlying questions cannot capture the whole main area (e.g. work conditions) the report mark of the main area is based on the answers on the main question and not on the various underlying questions. The marks are presented in this report in tables including the outcomes of the Acute axis as a whole, and the separate marks of the IC, OR and Anaesthesia divisions. The outcomes of the survey are compared to a recent benchmark of 30 hospitals who responded to the same questionnaire. When the response is low, the reasons for the low response are investigated. To find out about the main problems with job satisfaction in the IC and OR divisions, this report focuses on the marks for job satisfaction facets, the deviation from the benchmark and the quantified and clustered answers of respondents on the question which points they think that can increase their satisfaction directly. Some outcomes of the survey may also be used for information about the satisfaction with preconditions of retention from the perspective of employees.

The interviews result in non-standardized data. That requires classification before the outcomes are analyzed (Saunders et al., 2007). The outcomes of the interviews are classified to make them comparable and it is analyzed how often certain answers are given and whether there is agreement among respondents. In the analysis is tried to identify and define the perceptions, feelings and opinions of respondents on a certain subject. Regarding the interviews at professional organizations, it is analyzed whether the situation at MST is specific, or it is common for Dutch hospitals.

### 2.9.3 Recruitment

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Next to the retention of qualified employees it is essential for MST to improve the inflow into the IC and OR positions. Chapter 5 therefore pays attention to employee recruitment. The analysis in this part first of all examines the objectives and policy underlying the current recruitment strategy at MST and what the specific applicant groups are where the recruitment should be directed at. Thereby there is special attention for the possibilities to recruit IC and OR workers from Germany. After that are the current recruitment practices of MST studied by looking at the way the preconditions of recruitment are addressed at MST. Interviews with team leaders at the IC and OR divisions and HR advisors provide insight in these issues so that it can be analyzed which aspects of recruitment MST needs to improve. Furthermore, two interviews are conducted with the directors of the employers association WGV Oost and the organization Career Centre Twente which are connected to the recruitment of MST and provide an external view on some recruitment practices of MST. To examine the recruitment policy of MST, employees of the HR division are questioned. The interviews for this research question are structured and analyzed in the same way as the other interviews in the research.

To assess the value congruence for potential applicants for the IC and OR divisions, a shortened version of the 'Organizational Culture Profile' (OCP) by Cable & Judge (1996) is chosen. This scale consists of 40 items and is based on the original OCP-scale by O'Reilly et al. (1991), which contains 54 items. It measures the difference between organizational values and the values of employees or applicants. The OCP-scale is tested frequently and has grown into one of the most important methods for measuring organisational values (Cable & Judge, 1996; Cable & Judge, 1997). Since the OCP-scale can be used to assess both organizations' values and applicants' values and thus to measure value congruence for potential recruits, the OCP-scale is suitable for this research. With regard to the scope of this research and the overlap in the original OCP-scale that researchers found, the shortened version is used. The items of the shortened version are grouped in accordance to Sarros, Gray, Densten and Cooper (2005) who conducted a factor analysis on the 40 items. 28 items could be grouped under competitiveness, social responsibility, supportiveness, innovation, emphasis on rewards, performance orientation and stability. 12 items could not be placed under one of the groups and form a separate group. Regarding external validity of the measurements, values of a large group of students in the courses for the IC and OR positions are gathered, who form the main supply. The pool of job applicants for these positions at MST is not large enough to gather a reliable sample. A questionnaire on the importance of the various values in the OCP-scale for them is sent to the email addresses of students. The students first are contacted by their direct supervisor or for the students outside MST the coordinator of the course. To increase the response, the students are reminded during the period they can fill in the questionnaire. In order to get an image of the extent to which values of the OCP-scale are characteristic for MST, an online questionnaire is sent to employees who have experience at MST and those in leading positions, who are likely to have a good image of the actual organizational culture. In both questionnaires, respondents rate the items on a 5-point Likert scale. Students are asked to answer for each value how important the value is for him or her, ranging from very unimportant to very important. The senior employees and supervisors answer for each value how characteristic the value is for MST, ranging from least characteristic to very characteristic. The original manner for respondents to fill in the OCP list, by ranking the items in groups, requires a lot of time and problems for respondents, which should be facilitated by the researcher (Schwartz, 1992). The Likert scale does not need facilitating and is perceived to be more informative than ranking. Ranking is criticized in that it forces respondents to choose, while they can find more values evenly important (Hitlin & Piliavan, 2004). The methodological disadvantage of the Likert scale is that it may lead to few variety when only scale points in the middle are used or when many values get the extreme scores, which can make the statistical analysis problematic (Schwartz, 1992). Respondents are therefore stimulated to use the entire scale in the instruction of the questionnaire.

### 3. Labour market exploration

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In this section, the following research question is central: *What are the characteristics and expected developments in the labour market for IC nurses and OR assistants in the region Twente and Achterhoek?* As discussed in the introduction of this report, a contingency approach is adopted to HRM, since it takes place in a context. One factor in this context is the labour market, including both the external, as well as the internal labour market. The conditions of the labour market for the supply of workers may have constraints and opportunities for organizations to compete with other firms for human resources (Taylor, 2008). When the labour market is tight, it may be difficult to recruit and retain sufficient staff with the required skills or attitudes. In order for MST to anticipate on trends in the labour market for IC and OR staff and take advantage of them, an understanding of the conditions of the labour market and expected developments is needed.

Labour market issues are strongly influenced by regional characteristics (De Geest, 2008). It is therefore important for organizations to recognize the conditions of the regional labour market. National trends can thereby serve as a frame of reference. Since MST is situated within-, and focuses their recruitment activities for IC nurses and OR assistants on the region Twente and Achterhoek, the labour market exploration involves these regions. Another reason is that most labour market data is being recorded and administered within those boundaries and there is usually very little mobility of workers between the region and other parts of the Netherlands. Further, Van der Windt et al. (2008) suggest that there are great differences between regions, for instance in the degree of participation of women on the labour market, in the extent of the ageing of the workforce or in turnover levels. Finally, regionally there can be various different developments in the educational courses causing differences on the labour market. These processes influence supply and demand in the labour market of the healthcare sector in which IC and OR staff operates.

The situation on the labour market for IC nurses and OR assistants is viewed by various indicators of the labour market, such as the amount of job openings. Information that is not available or appropriate on the level of IC and OR staff is portrayed on a more general level. This research question asks for objective, descriptive data. That can be partly obtained from generally accepted studies and institutions that gathered labour market figures, or for data on the internal labour market the personnel information system of MST. When certain information is not available at these sources, interviews with experts on a specific subject are suitable. Therefore coordinators are interviewed on the educational courses and experts of the employers association WGV Oost are interviewed, who are specialized on the regional labour market of the healthcare sector. Those experts are most informative. The external labour market is mainly constituted of two parts. On the one hand, there are different factors related to the demand for personnel and on the other hand, there are factors that relate to the supply of specific groups of personnel. Taken together, they show developments in the availability of personnel, if there is a shortage or surplus. These factors also provide an indication of the problems an organization might face in the light of their labour provision. The analysis of the labour market in this chapter starts with a description of the factors that influence the size of the labour force (section 3.1) after which is elaborated on the composition of the internal labour market of IC and OR employees at MST (section 3.2). In section 3.3 and 3.4 are respectively factors of the labour demand and labour supply discussed. The concepts of the labour market that provide an indication of the main issues and expected developments on the labour for IC and OR staff are applied. Finally, the different labour market developments are combined in the conclusion (section 3.5).

### 3.1 Labour force Twente and Achterhoek

The supply of labour in a region is commonly formed by the size of the labour force in that region. Zwegers (2004) makes a distinction between various parts of the labour force. The general labour force is constituted of all people between 15 and the 64 years old, who are available to fill job openings and who are working or are willing to work at least twelve hours a week. Persons actually working at least twelve hours a week are part of the employed labour force. Those working less than twelve hours a week or do not work at all and are actively searching for work, relate to the unemployed labour force. Another group consists of people between 15 and 64 years that are not available for paid labour at a moment because they are not willing to work, for instance because they follow an education or went with early retirement.

There are three types of developments that are of major influence on the size of the labour force: Demographic developments, developments in labour force participation and economic developments. These developments influence the labour- and particularly- supply indicators. Before turning to these developments, numbers about the size of the population and labour forces are needed, where the developments are related to.

**Table 3.1** General labour force numbers

Twente	2003	2004	2005	2006	2007
Total number of inhabitants	613.9	615.3	616.8	617.6	618.2
Labour force (15 – 64 years)	270	264	271	267	275
Employed labour force	254	246	250	250	260
Unemployed labour force	16	18	21	17	15
Percentage of the employed labour force working in the healthcare sector		13.0%	13.1%	13.4%	13.6%
Achterhoek	2003	2004	2005	2006	2007
Total number of inhabitants	385.1	385.3	402.8	402.7	401.7
Labour force (15 – 64 years)	189	191	176	181	182
Employed labour force	181	179	167	175	176
Unemployed labour force	8	12	9	6	6
Percentage of the employed labour force working in the healthcare sector		12.0%	12.9%	12.8%	13.3%

Source: CBS, WGV Oost.

Amounts x 1000

What becomes clear in table 3.1 is at first that the labour force in Twente and Achterhoek increased the last three to four years. The growth rate follows the national trend in the coming years (WGV Oost, 2008). That means that the growth rate is expected to last in 2008 and 2009 after which the increase of the labour force becomes smaller and after 2011 it is likely to decrease. The small growth of the labour force in the next years is expected to come from an increase in the labour participation.

A second point concerns the part of the unemployed labour force that might be available for hospitals. The potential under the unemployed is low in Twente and Achterhoek and not quickly useful. A broad majority of the non employed job seekers in the region is unemployed for a long time, often combined with a low educational level and a high age. It is difficult to retrain these workers to the positions at the IC and OR and it is questionable whether MST should want those workers for the heavy and responsible jobs at the IC and OR. Furthermore, when unemployment is very low, such as in Twente and Achterhoek, the possibilities to staff positions with unemployed is also low. Unemployment even illustrates a decreasing line in the region and is especially low for high educated people. IC nursing staff and OR assistants have a relatively high education. The provision from people with the highest potential (youth with a professional education) is exhausted.

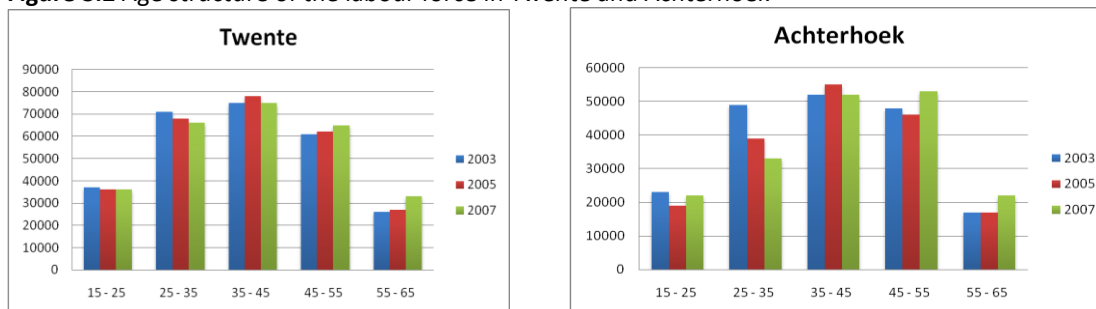
Third, it becomes clear from table 3.1 that the healthcare sector is highly represented in Twente and Achterhoek. That makes the possibilities to attract extra people to the sector small. In Twente and Achterhoek, broadly 13% of the total jobs are filled by people working in the healthcare sector. That is slightly below the Dutch average of 14%. The sector is the largest employment source

in Twente (together with the sector commercial services) and the second largest sector in Achterhoek (WGV Oost, 2008).

### 3.1.1 Demographic developments

The size of the labour force can change due to demographic developments. ‘Ontgroening’, (decrease of the number of young people) and ageing (increase of the number of older people) are demographic developments affecting that size. The age structure of the labour force therefore is an important characteristic of the labour market. According to De Geest (2008), the speed of ageing goes fast at all levels but may differ between regions.

**Figure 3.2** Age structure of the labour force in Twente and Achterhoek



Source: CBS

From figure 3.2 can be concluded that while the proportion of the older age classes (45+) show an increasing trend, the younger groups (particularly 25-35 years) declined in the region Twente en Achterhoek. It is expected by the ‘Centre for Work and Income (CWI)’ that the proportion of older age cohorts in the labour force will increase strongly the coming years in every region. Due to these developments, the size of the labour force will change from a (slight) increase to a decline from 2011. In that year, the population with an age of 15-64 years will decrease because the baby boomers then reach the pensionable age.

More specifically, in the age structure of the sector hospitals in Twente and Achterhoek, the weight also lies at the older age cohorts. A figure on the age structure is included in appendix IX. In accordance to the general trends that are illustrated above, the weight will move to the right in the coming years. The average age of more than forty years in hospitals in Twente and Achterhoek already point at a workforce of higher age, and the average is still growing.

In this line, both an ‘ontgroening’ and ageing of the employed labour force in the healthcare sector in Twente and Achterhoek have been taken place. The share of employees between 15 and 30 years old decreases and the share of people with an age of 50+ grows at the same time. Though, the ageing is much stronger than the ‘ontgroening’ of the employed labour force.

### 3.1.2 Developments in labour force participation

The size and composition of the labour force is also dependent on the degree of participation of groups of people in the age of 15 till 65 years old. A part of the population does not participate on the labour market because they have other activities (care tasks, education, etc.).

The participation degree is usually measured for two population groups: elderly and women. In this section, the emphasis is on the participation of those groups, reflected in table 3.3. By means of the participation degree of different groups, it becomes clear if there is space to employ certain people who do not participate on the labour market yet. The lower the participation degree is, the more potential there is to attract extra people to the labour market in the future.



**Table 3.3** Gross participation degree (%) elderly; men and women

Age cohort	Area	2003	2004	2005	2006	2007
55 - 65 year	Netherlands	39	37	40.7	36.9	45.1
	Twente	38.5	45.7	36.3	46.6	41.4
	Achterhoek	38.2	43.1	36.5	42.2	45.5
Men	Netherlands	78.6	78.2	77.6	77.5	77.9
	Twente	78	75.6	77.3	74.8	76.3
	Achterhoek	81.4	82.1	77.9	79.8	78.6
Women	Netherlands	56.9	57	57.5	59.1	60.7
	Twente	53.4	53.2	54.6	55.6	58.1
	Achterhoek	56.3	58.4	55.7	58.5	61.3

Source: CBS

The gross participation degree is measured by the labour force as a percentage of the total population. The participation of the whole labour force has increased all over the country according to the CWI (2007). This increase is particularly caused by a constant growth of the amount of working women and elderly. The number of women participating on the labour market has increased enormously in Twente and surrounding areas in the previous decades. Table 3.3 shows this trend for the last years. While the participation degree of men slightly decreases, about 5% more women entered the labour market last years in the Netherlands as well as in the regions Twente and Achterhoek. Although hospitals employ many women, the labour participation of women in Twente stays behind with the national average. The participation degree of women in Achterhoek was higher than the average in 2007. It is expected by WGV Oost (2008) that an end has come to the growth in participation of this group. Therefore, there will be less scope in the future to attract new women to the labour market. The growth in participation degree is even stronger for elderly workers. Table 3.3 points out that the amount of elderly on the labour market particularly increased last years in Achterhoek, but an increase is also strongly visible at the numbers of the Netherlands and Twente.

### 3.1.3 Economic developments

Various aspects of the labour market depend on economic conditions in a country, which are subject to changes. The main aspect is the supply/ participation on the labour market. At the time of an economic recession (high unemployment and few job openings) people estimate they have a low chance of getting work. Therefore, a part of the population decides not to search actively for a job and the participation degree reduces. In contrary, an economic boom stimulates that people offer themselves on the labour market and participation becomes higher. Economic growth leads to a tighter labour market and higher job availability. Furthermore, in the healthcare sector particularly, there is a high sensitivity for the attracting strength of the employment in other sectors (e.g. De Geest, 2008). In years of economy-broad growth, the outflow to a job outside the healthcare sector is larger, particularly to the business sector. In periods of tightness on the labour market, organizations in different sectors compete for the scarce manpower. Van der Windt et al. (2008) concluded that the competition from other sectors is largest in the urban regions in the west of the Netherlands and (somewhat) less in the east. Further, the economic expectations used here come from the CPB. The calculations have a conditional character, just as all forecasts. That means that when the economic assumptions deviate from reality afterwards, the forecasts likewise deviate. Last years, the Dutch economy was in a period of boom (constant economic growth of 3% or more) and shortage on the labour market became a fact (CPB, 2008). The CPB announced a tempering of the economic growth and assumes an economic growth of 1 ¾ % in 2009. The lower growth is particularly a consequence of the crisis on the financial markets, which is incorporated in the forecasts. However, the way the financial crisis will develop is uncertain. CPB even assumes that the Dutch economy will shrink the coming year, which is more negative than earlier prospects.

## 3.2 Internal labour market of the IC and OR divisions

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The internal labour market is formed by the current workforce at the IC and OR divisions at MST. This section describes characteristics of the workforce of these divisions. This information provides insight in the kind of people who are working at the organization and on the contractual bases they are employed. Moreover, the composition of the workforce of MST may have implications for their future demand for personnel, for the retention of employees and it gives an indication of the kind of employees who are needed and attracted to MST. The characteristics of the workforce that are thought to be most relevant in the light of this research are elaborated in this section. Figures on the characteristics of the internal labour market can be found in appendix IX. The analysis differentiates between the divisions at MST that are included in this study and only contain IC nursing staff and surgery- and anaesthesia assistants. The amount of these employees at the General IC is 51, 74 employees work at the Thorax IC and a group of 171 surgery-and anaesthesia assistants work at the OR divisions.

A first characteristic is the age structure of the divisions. That has consequences for the size of the demand for new personnel in future years. Information on the age structure is also relevant since it is likely that career needs and development opportunities may differ between older and younger employees. At MST, as in most hospitals, ageing of the workforce takes place. The amount of employees above 50 years has increased strongly in the last years. That is also the case at the separate divisions. When looking at the age structure of the divisions it can be recognized that the youngest age cohort is relatively underrepresented. That has to do with the fact that nurses have to follow a long educational route to become specialized at the IC. Surgery-and anaesthesia assistants can finish their education earlier. The youngest group therefore has a larger share at the OR divisions. Generally do the different divisions know a relative old workforce, although there are just a few people working after their sixtieth age. The overrepresentation of older age cohorts may result in high(er) turnover due to retirement and therefore higher demand for new personnel. The workforce at the Thorax centre, that is relatively new, has a somewhat lower average age, considering the large share of employees between 31 and 40.

Another aspect of the workforce is the proportion of men and women. These groups may have different career needs. Usually, many women work in hospitals. On the IC and OR divisions at MST that is also the case. At the IC divisions, twice as much women are employed compared to men. On the OR divisions the proportion of women in relation to men is even almost three times that high.

A characteristic of the workforce that derives special attention is the tenure or contract situation of the employees at the IC and OR divisions. The types of tenures employees have with MST and the relative presence of different variants indicate the size of the internal, peripheral and external workforce. However, the distinction between internal and peripheral workers may not always be clear from the tenure, particularly since the healthcare sector is characterized by a high part-time level, even for core workers.

One of the differentiating factors of the tenure is the amount of hours employees are working in a week, illustrated by the part-time factor and the proportion of part-time and fulltime contracts. The part-time factor shows the percentage of a full working week (36 hours) that people work on average. There are many employees at the divisions working on a part-time contract. The share of employees working on a part-time base is relatively high in the healthcare sector where the part-time factor is 68% (Van der Windt et al., 2008). That has to do with the fact that there are many women that are working in hospitals, who have a lower part-time factor than men. Women at the IC and OR divisions at MST generally work less hours in a week than men do, because they have more care tasks next to work. Patterns in the relation between the part-time factor and the age structure are more or less the same for the divisions. People in the youngest age cohort (till 30 years) generally have a fulltime job. In the next two age cohorts, employees are working more on a part-time base, particularly at the general IC and OR divisions. Often employees are confronted then with a family situation and many women therefore want to work less. When employees are above 50, this pattern

turns and people start working more hours and at the Thorax IC even fulltime. The explanation for that is threefold: older people want to look after their pension, they have more time for work since their children usually reach an age at which they can care for themselves and they work more so that they can bear the cost of the study of the children. The fact that many young people work at the Thorax IC explains why that is the only division where there are more fulltime contracts than part-time.

Another factor that is related to the tenure of employees is the type of contract they are employed on. Distinguished are permanent, temporary and external contracts. The main distinction is that people with a fixed or temporary contract are employed by the organization, those with an external contract are not. People who are external to the organization may be self-employed or employed by an agency or other service provider. At the IC and OR divisions about 90% of the employees have a permanent contract. The rest mainly has a temporary contract and just a few are employed on an external appointment. These contracts are particularly used in times of high shortages or sickness absence.

An aspect of the internal labour market, which affects the demand for personnel, is health-related absenteeism. The higher the absenteeism, the higher also the demand for temporary replacement personnel. The average percentage of health-related absenteeism in hospitals is 4.3% (Van der Kwartel, Van der Velde & Van der Windt, 2008). That means that employees are on average 4.3% of the working hours a year absent due to sickness. Comparing it to the IC and OR divisions at MST it can be concluded that absenteeism at MST is high, particularly at the latter division. In the end of 2008 health related absenteeism even was 10%. Many employees got sick due to the high production that was performed under high workload. It created a large demand for replacement personnel. It is reduced to 6%, after a decline of short term absenteeism. On the general IC and Thorax IC the absenteeism has been around 6 or 7% percent last years. These percentages also have been fluctuating. That makes it not always easy to plan the amount of beds that are available for patients. The absenteeism can have various causes. Team leaders of the OR and IC division agree that on these divisions, absenteeism is often work related as the work is physically and emotionally heavy. When something happens in private- or working sphere, employees become quickly ill. It is therefore very important that the conditions and climate under which the employees can work is optimal, which was not the case on the OR last year. Moreover, the absenteeism is mainly for a short period and frequently. That characterizes health related absenteeism in hospitals (Unie'91 Ziekteverzuim, n.b.). Replacement is needed more often, but for shorter periods.

### 3.3 Demand indicators

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Several indicators determine the demand for employees by organizations. The main indicators are reported here and concern the development of job openings (including vacancies that are difficult to fulfil), the replacement demand and extension demand. In general, employment in the healthcare sector is strongly influenced by the demand for healthcare. According to different prognoses, the need for healthcare will increase dramatically due to the autonomous process of ageing of the population. From 13% in 2000, in 2030, 25% of the population will be older than 65 years (Ministerie van Volksgezondheid, Welzijn en Sport, 2007). The trend of a growing demand for healthcare subsequently leads to a growing demand for personnel to provide that care. The demand for healthcare in the region Twente and Achterhoek follows the national trend. Two labour market experts of WGV Oost assume that the demand will shift mainly to home- and elderly care but also affects the OR and IC of hospitals.

#### 3.3.1 Development of vacancies

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The demand for employees is usually measured by the amount of job openings. Job openings provide a picture of the situation on the demand side of the labour market as it gives an estimation of the shortages of employees in professions. Some of the vacancies are difficult to fulfil, which is

often noticed by long durations that the vacancy remains unfilled and low percentages of fulfilment. These vacancies can be indicated as 'bottleneck vacancies', which (par example) is frequently the case for nurses and medical specialists (Lamberts, Vandoorne & Denolf, 2000). The bottleneck vacancies show for which positions employers have most difficulties with employee shortages.

The total amount of job openings in the region Twente and Achterhoek has slightly grown in 2008 (about 5%). In the hospital sector, the job openings show a much stronger increase (30%). The amount of job openings will likely even increase yearly. A large part of the job openings consist of bottleneck vacancies as they remain unfilled for a long period. That points at a tight labour market for hospital employees. WGV Oost has noticed a trend in that there is less reaction on the vacancies at all educational levels. However, this downturn is less strong than the national picture shows. 29% of the vacancies in the hospital sector in the Netherlands are hard to fulfil (Prismant, 2007a). The increase in vacancies that are hard to fulfil will remain in the foreseeable future, also since the increase of the labour force lag behind the increase in job openings. The bottleneck vacancies are actually the same for a couple of years. In the hospital sector these vacancies are: IC nursing staff, surgery-assistants and Thorax nursing staff. These are also the positions that are central in this research. The 'Dutch Association of Hospitals' (NVZ) found in a research that hospitals have more and more difficulties with filling vacancies, particularly regarding personnel on the operating room and specialized nurses (Ziekenhuizen: personeelstekort, 2008). The researchers came to the conclusion that hospitals do not arrange sufficient educational places. Since employers only educate for their own needs, there are almost no qualified employees on the external labour market. That is a national problem. The main reason for the lack of educational places is that internal training cost time and money and it is not sure that the employees who are trained also stay working at the hospital due to the competition for these workers.

Job openings consist of two components: the replacement demand and extension demand. The replacement demand concerns replacement of staff leaving and the extension demand is about mutations in the size of the employment. Both are elaborated below.

The replacement demand consists of open places as a result of employees who switch jobs and employees who step out of the labour market. Workers can have a broad scale of reasons to decide, whether or not temporarily, to leave the labour market. This can be for instance because of retirement or labour disability. The replacement demand is determined largely by the age structure of the labour force and participation degrees. A higher proportion of older workers has the implication that employees reach the age of retirement earlier and it leads to a higher outflow and therefore replacement demand. That is also the case when the general participation degree becomes lower as a result of people stepping out of the labour process. The trend of increased participation of women and elderly work against the ageing that causes more (older) people to flow out of the labour market. According to the ministry of VWS, the ageing will have a significant larger influence on the replacement demand on the long term than the increase of the labour force participation. In a couple of years, the increasing average age of the workforce will lead to a strong growing replacement demand.

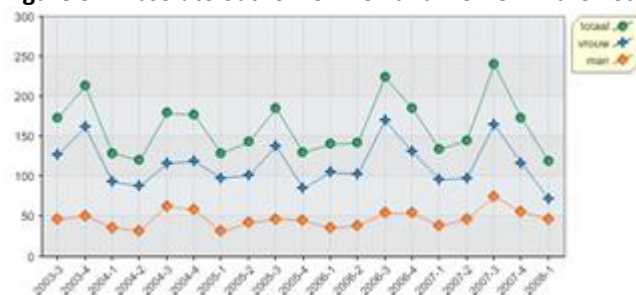
The replacement demand is thus concerned with the outflow of employees. Gross and net turnover play a role thereby. With gross turnover, the total outflow from organizations is measured, while net turnover is the outflow from the sector and from the profession. The difference between both consists of the people who change organizations within the same sector.

Gross turnover nationally lies at 10.1% while this is in the hospital sector 1% lower. In the region Twente and Achterhoek, gross turnover is 9.1% and for the hospital sector in the region 7.9%. Even though gross turnover has increased last years, these numbers illustrate that mobility is small. That finds expression in a generally long average duration of the tenure of individuals at the same employer. Highly educated nurses and OR personnel in the region Twente and Achterhoek generally work in the organization where they followed their specialized education and do not change of

employer often. There is usually less mobility among surgery-and anaesthesia assistants than other professions in the hospital (MDW werkgroep verpleegkundigen en verzorgenden in het ziekenhuis [MDW], 2002). In urban regions in the Netherlands, the mobility of workers between organizations is normally more frequently (Van der Windt et al., 2008). The choice of employers to work for is restricted in this region compared to the 'Randstad', where there are often more hospitals in the same city. That there is little movement of personnel is remarkable since the highest turnover rates are usually found where it is easy for people to find desirable alternative employment and unemployment is low, which is the case for IC and OR personnel of MST. Low mobility is also visible when looking at the total outflow at MST from the last years. From 2004 till 2007, the outflow percentage has been around 7.5%, and last year just 6% of the employees left MST. However, supervisors experienced that the outflow of IC nurses, surgery-and anaesthesia assistants increased last years. Exact figures on the outflow of employees from the IC and OR divisions are unfortunately not available.

Figure 3.4 shows the outflow pattern of men and women in the hospital sector in the region Twente and Achterhoek from 2003. The outflow numbers of MST broadly follow these lines. The outflow of men is relative constant over time; the outflow of women fluctuates more and was in the first quarter of 2008 at the lowest point in five years, just as the overall outflow.

**Figure 3.4** Absolute outflow of men and women in the hospital sector in Twente and Achterhoek



Source: PGGM

With regard to the outflow of different age cohorts, turnover is highest among people in the age of 20-29. Furthermore, last years more people in the age of 50-59 left the hospital sector in Twente and Achterhoek and at MST. That is likely a consequence of the ageing of the workforce. At MST, there is a large outflow of young people who leave after they receive their diploma, particularly on the moment that the labour market is favourable for them. That is really problematic seen the shortages of qualified employees and the difficulties MST has to recruit employees for those positions. From the students who received their diploma for anaesthesia employee at MST in the period between 2002 and 2006, 33% left MST within the first five years. For surgery assistants that is 21%. Those percentages will likely become higher since not all students measured are already five years qualified. These figures are not known for the IC divisions. It is suggested by a business manager that the outflow for the IC is lower, since students in the course for IC nurse mainly come from the internal market and already have a better image of the organization when they make the choice to follow the course.

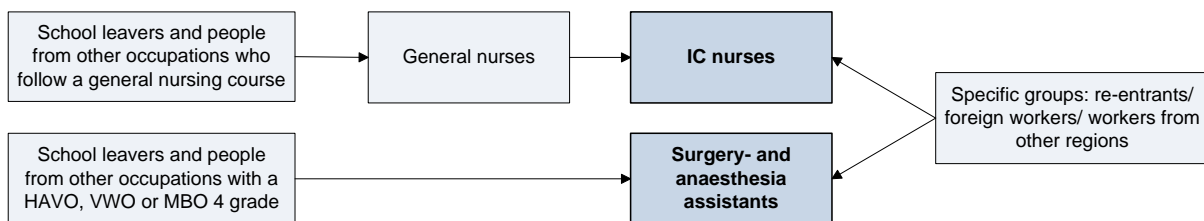
The net turnover is 74% of the total turnover in the healthcare sector. That means that many employees in this sector that leave their organization do not go to another employer in the sector for the same profession but search for a job outside the sector or profession or leave the labour market temporary or permanently. The net turnover in the healthcare sector is relatively high, partly caused by the amount of employees who leave due to (early) retirement. Because the (growth of the) economy declines the coming years, there likely will be less competition from the market sector for employees. That can decrease the net turnover rate.

The extension demand is concerned with mutations in the size of employment. When the economy develops favourably and consequently the number of jobs grows, vacancies are placed to fill this extension of job openings. In the case of shrinking employment (therefore negative extension demand), the job openings only consist of the replacement demand. After stabilization in 2003, the total employment declined in Twente in 2004 and 2005. In 2006, a clear growth of employment was visible. The prognosis is that in the period 2008-2011 employment in the healthcare sector yearly will increase with an average percentage of 1.5%. The employment development in Achterhoek shows a slightly larger growth. Employment in Twente and Achterhoek will especially increase the coming years in the collective sector (WGV Oost, 2008).

### 3.4 Supply indicators

In this section, the supply of workers on the labour market for IC nursing and surgery-assistant functions for MST is described. It should be clear first who composes the group of people that can form the inflow in these positions. Figure 3.5 gives an illustration of the potential target groups and the routes they can follow to the positions at the IC and OR divisions.

**Figure 3.5** Inflow in IC nursing and surgery-assistant positions.



The labour supply for the positions at the IC and OR divisions can relate to three groups: School leavers, people from other occupations that want to follow a healthcare education ('zij-instromers') and specific groups (i.e. foreign workers, workers from other regions, unemployed and re-entrants). Re-entrants are qualified workers that are already available on the labour market but have been out of the labour process for a longer period. By far the largest group of employees at the IC and OR divisions consists of people from the region Twente and Achterhoek that left school with the required diploma to be subsequently educated by MST as IC nurse or surgery- or anaesthesia assistant. People in the course for IC nurse mainly come from the internal labour market. The substitution possibilities that the other groups offer are very low for MST. 'Zij-instromers' as well as re-entrants are according to the experts of WGV Oost no solution for filling positions on the level at which IC nurses and surgery- and anaesthesia assistants operate. Moreover, they suggest that qualified IC and OR workers from other regions are generally not willing to move house and come to this region, unless the partner moves. It further is argued in the labour market exploration of RPA Twente (2005) that when employers are dependent for staffing a position on the labour supply of just one certain educational type, and the profession requires very specific knowledge, there are few substitution possibilities. That is applicable to the IC and OR positions. Every candidate should follow a specific education for those positions with fixed requirements. That makes it more difficult to recruit people from other professions. The issue of which target groups to recruit is further dealt with in chapter five, particularly with regard to the recruitment of employees from Germany. Facing the very high share of school leavers in the inflow in the positions, this labour market exploration is directed at the supply from educational courses.

#### 3.4.1 Educational courses

Educational courses are the main supply source for the IC and OR positions. Data on students therefore create much insight in the potential labour market. The inflow in a profession is ultimately dependent on the inflow in educational courses, the study effectiveness and professional

effectiveness. Developments in the amount of students who start in the courses is the main indicator of the future labour supply. However, there is dropout of premature leavers who not obtain their diploma (measured by study effectiveness) and not all students who obtain the diploma go to work in the profession for which he or she is trained (measured by professional effectiveness). To study these aspects for the IC and OR divisions at MST, interviews are held with the coordinators of the courses at MST for IC nurse, surgery assistant and anaesthesia assistant and are figures on these aspects analyzed. Furthermore, the inflow in general nursing courses in Twente is discussed with two labour market experts at WGV Oost.

Before discussing these aspects, it must be stressed that the courses for IC nurse, surgery assistant and anaesthesia assistant are in-house educational courses. It means that the student has a labour contract with the hospital and follows the course under responsibility and control of the hospital. Only hospitals facilitate the courses. People who want to follow one of the IC- or OR courses need to apply for an educational place and thereby meet certain requirements. The specialized continuation course for the IC is only accessible for general nurses on level 5 or eventually level 4. Surgery and anaesthesia assistants can also come directly from HAVO as it are initial courses, mainly followed by people who do not already have a profession. Since 2009, the educational course for IC nurse is an integrated course for the Thorax- and General IC. The duration of the course depends on the tenure of students; the average is 18 months for the IC and three years for surgery-and anaesthesia assistant.

#### 3.4.1.1 Inflow in the educational courses

Table 3.6 illustrates the inflow in the IC course from the participating hospitals in the region Twente and Achterhoek. The inflow has been fluctuating in the last years with a clear deviating high amount of students in 2004 due to the opening of the new Thorax Intensive Care at MST.

**Table 3.6** Inflow and dropout IC, surgery- and anaesthesia assistant courses in Twente and Achterhoek

Intensive Care Nurse	2003	2004	2005	2006	2007
<b>Inflow</b>	14	30	9	14	10
<b>Dropout</b>	2	6	4	3	2
<b>Dropout percentage</b>	14.3%	20%	44.4%	21.4%	20
Anaesthesia assistant	2003	2004	2005	2006	
<b>Inflow</b>	12	14	14	11	
<b>Dropout</b>	3	3	2	4	
<b>Dropout percentage</b>	25%	21.4%	14.3%	36.4%	
Surgery assistant	2003	2004	2005	2006	
<b>Inflow</b>	42	26	25	28	
<b>Dropout</b>	11	5	8	8	
<b>Dropout percentage</b>	26.2%	19.2%	32%	28.6%	

Source: CIVO, ROC Twente

The inflow in the IC course at MST has decreased till 2007, after which the amount of students slightly increased to 11 in 2008 and 12 in 2009. The inflow into the educational course for IC nurse is a bit constrained, both quantitatively and qualitatively. There is not so much interest for the course as it used to be. It is not the case anymore that there are 30 applicants for two or three places. MST noticed that the interest for the education was shrinking considerably and the choice became restricted. Thereby, the educational background level and competences of potential students has declined. It is not common that there are many students with the right competences. Although the educational places can be filled, it has been needed sometimes to alter the selection criteria. In order to provide for sufficient students, MST came to look at level 4 (MBO) nurses for the first time, and contracted students of whom they were not sure if they would make it.

The amount of students who start the IC course is yearly determined and coordinated by the IC divisions. There are no clear guides, policies or a manpower planning at MST for this educational

capacity. The number of students is mainly based on the amount of employees the divisions need at the moment.

On the long term, the inflow in the profession of IC nurse for MST depends on the inflow into the general nursing courses in the region Twente and Achterhoek. Numbers about the amount of students who start these educations yearly, as figure 3.7 illustrates, suggest that they are still popular. However, the amount of students who start the level 3- and level 4 courses, decreased in 2008, first since a long time. It is not known whether that is a consequence of 'ontgroening' or that other factors play a role, such as competition from other sectors. The number of subscriptions for the education of nurses at level 5 has still increased in 2008. There is for the two highest educational levels still much interest, and it is expected that there will even be a surplus of those students in 2011, particularly at level 5 (WGV Oost, 2008). Labour market experts do not expect that the downfall at level 3 and 4 is the trend for the coming years, but it is assumed that the ageing will lead to fewer students in the nursing courses on the long term.

**Figure 3.7** Inflow in general nursing courses in Twente and Achterhoek

General nursing courses	2005	2006	2007	2008
Level 3	862	1166	1294	1225
Level 4	1092	1251	1345	1162
Level 5	257		263	293

Source: WGV Oost

In interviews with two labour market experts at WGV Oost, it becomes clear that there is sufficient potential of nurses in the region that are educated at level 4 or 5, which MST can recruit to specialize them later for the IC. The respondents agree that IC nursing staff in general might be more difficult to recruit, but that it is strongly connected to the policy on education of the organization and the kind of contracts that are offered to potential recruits. The policy on education for the IC at MST has not been clear last years. It is further suggested that the image of the divisions and organization plays a major role in attracting the potential employees.

Table 3.6 also informs about developments in the inflow into the courses of surgery-and anaesthesia assistant. The amount of students that organizations educate in these courses has been declining. Most of the time though, there are sufficient students applying for the educational places at the OR that MST provides, but the supply varies quantitative as well as qualitative. Quantitatively, the inflow is strongly influenced by the economy. The professions of surgery- and anaesthesia assistant are not professions with a lot of attraction and in times of good economic situation people look for other jobs they find more interesting. When the economy declines, people tend to choose more security, for instance by applying for the OR courses. With respect to the quality of the inflow, the students who follow the courses most of the years meet or even exceed the qualification requirements on paper but their real abilities are not always sufficient. The OR is very stringent in the criteria, because the theoretical requirements are heavy. In cases of doubt they prefer not to educate.

The number of places for the OR courses at MST is yearly determined by the OR staff responsible for the courses, based on their experience and the perceived capacity of support the division can provide for the students, which is highly determining for the capacity it can educate. The latter is also the case for the IC course. Students are guided and supported by employees of the division. When too many students are educated, MST cannot offer them the individual attention and support they need and insufficient places are available to build experiences in real time situations. In the future, the educational capacity might be defined by the Medical School of MST who wants to have more influence over the educational activities at the OR divisions. The Medical School is part of MST and generally coordinates, facilitates and supports educational activities and mediates with educational institutions that deal with the theoretical part of the courses. Just as in the case of the IC course, the establishment of the educational capacity lacks a guiding policy and a manpower planning. The general trends in the workforce can be addressed when making decisions on the



educational capacity. Although the consequences of ageing for instance have become more individual (people retire at different ages), it is known that employees at the OR and IC divisions retire before their sixties, due to the heavy physical and psychological work strain of the professions.

Two business managers and team leaders on the IC and OR divisions are questioned on the determination of the educational capacity and the support capacity. The respondents are on the same line stressing that there is essentially sufficient capacity for support of students or it can be created when MST educates more students. They argue that it is important then that most employees on the divisions take their responsibility in supporting students.

#### *3.4.1.2 Dropout during courses*

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Since not all students get to the finish, a part of them will not be available for a function at an organization. This study effectiveness shows percentages of people who finish the course they started successfully.

The study effectiveness for the IC course at MST was very low in the period between 2003 and 2006, when the dropout from the courses was above 40%. That is (apart from 2005) also high when compared to other hospitals participating in the same course as table 3.6 shows. From 2006, the dropout of MST students has been substantially lower, but still at a percentage of 20%. In a comparable education, 'Spoedeisende Hulp', the dropout is 0% and at the Thorax IC 5%.

The dropout mainly consists of students who do not meet the expectations. Some dropout of students who were selected by the IC divisions might have been foreseen. It is suggested that IC divisions select students themselves, without a much inquiry of others, for instance on the issue if the students are able to cope with the education based on competences, where students should form the learning process themselves. The dropout is also related to the 'learning climate' at the general IC divisions. MST conducted a study in 2007 among IC students about this climate. Many students defined that they did not feel safe on the general IC, which caused students to become insecure and thereby contributed to failing in their functioning (Elders, Nieuwenhuizen, Omvlee, Schenkeveld & Ten Tije, 2007). Much can also be gained from professionalizing the support from mentors. The study showed that there are many mentors who support students to their own experiences and insights, as they are not familiar with how they should perform that role. That is influenced by the lack of a clear vision on education on the divisions. It creates a lot of confusion for students. Moreover, the mentors appraise the students to their own norms. Since MST itself also sets high requirements, much is demanded from students in dealing with these different, sometimes opposing, requirements. The researchers concluded that work mentors should act more as a coach and not determine how students should learn.

The dropout during the courses of surgery- and anaesthesia assistants in the region is also generally very high, presented by table 3.6. For anaesthesia assistants, the average dropout from 2003 till 2006 has been as high as 24% while that is 26.5% for surgery assistants. The dropout of anaesthesia students at MST has been even higher in that period (30.7%), while the dropout of surgery students is lower with 17.4%. The high dropout is partly caused by a deliberate choice of the Dutch ministry to set the theoretical requirements during the first 6 months very high so that only those people remain that can really handle the job. The coordinator of the courses from ROC Twente have never experienced that students who finished the first half year quitted after that period for theoretical reasons. The dropout figures imply that MST should account for these percentages when determining the educational places each year.

Students at MST also leave the courses most of the times during the first six months of the course, in which students perform the theoretical part at ROC Twente. After that selective period, the dropout is smaller. The dropout of students that the course for anaesthesia assistant experienced last years during the practical part was mainly due to sickness. For some women was the course physically and emotionally too heavy. In a study under students at MST in 2008, on the learning

climate at the OR, the researchers concluded that some things should be improved (Bergsma & Methorst, 2009). They particularly suggest that the high workload, employee shortages and too many changes in organizational structure have a negative impact on the support students get. The dropout during the theoretical part has several reasons. First of all, it is partly caused by insufficient level of the students. Although they have the required diplomas, they cannot handle the level of learning. It has been difficult to get a good image of the actual potential of people with a certain diploma. The level of HAVO and level 4 nursing generally is lower than the level of the surgery and anaesthesia courses. Insufficient quality of students to perform the theoretical part has been the major reasons why students of MST quitted last two years. Wrong selection decisions of MST have a large influence on the dropout. A second related cause is that some students are not motivated enough to finish the theory of the course. A third factor that adds to the dropout is that students made the wrong choice; the education was not what they had in mind.

#### *3.4.1.3 Inflow in the profession*

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Not all people who obtain the diploma will go to work in the profession for which he or she is trained or stay at the organization. The professional effectiveness is the percentage of graduates who after receiving their diploma, go to work in the profession for which they are trained. Thereby not only the interest of the graduated students plays a role but also the demand by the employers for employees may vary. In a loose labour market, employers do not need all the students. When the labour market becomes tighter, employers nevertheless want to have as many hands as possible.

There is no general data on the professional effectiveness for the courses to the IC nursing and surgery-and anaesthesia assistant positions. Team leaders and work mentors argue that the main part of the people who finish the educations flow into the positions they are trained for at divisions they were employed during the course. According to the team leaders will there, particularly in times of shortages, always be place for the graduated students at the IC and OR divisions and they are offered a contract. However, it is also described that a large amount of OR students does not stay long at the organization.

In the case of the IC, students are also bounded to MST after finishing the course by an arrangement in their study contract. It states that when somebody leaves MST within a period of two year after finishing the course he or she should pay a proportionate amount of the costs of the course back to MST.

### *3.5 Conclusion labour market*

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In this chapter is for MST the external and internal labour market for IC nurses, surgery assistants and anaesthesia assistants in the region Twente and Achterhoek described. The data collection provided valuable and reliable information on demand and supply indicators. In the analysis, various developments become clear that influence the labour provision of MST for the IC and OR positions. From the description of these developments can be extracted what the consequences are for the organization, so that MST can adapt to the labour market developments with HR policies and practices.

From the labour market exploration comes forward that there are serious problems for MST and other hospitals with regard to employee shortages on IC and OR positions. The factor that influences the labour provision most is the strong ageing of the Dutch population. This demographic development works negatively from two sides. On the one hand it is an autonomous process that leads to an increase in the number of patients and therefore enhances the demand for personnel to provide the care. The demand for IC and OR personnel at MST will especially increase strongly in a few years due to the ageing working through on the workforce. That results in a high outflow of employees who retire. On the other hand does the ageing lead to a smaller labour market as employees retire and step out of the labour process. At the same time, new supply from educations

will decrease in the future when the proportion of younger people further shrinks. The consequence is that the supply is becoming more and more insufficient to fill the IC and OR positions. The slight increase of the labour force participation of women and elderly the coming years is far from sufficient to meet the demand for IC nurses and OR assistants. Since the healthcare sector is already highly represented in Twente and Achterhoek it also restricts the space to attract more people to this labour market.

These developments make the labour market for hospital employees in the future even tighter than it already is. Tightness is visible on the strong growth in the amount of job openings in hospitals in Twente and Achterhoek, of which a large amount is hard to fulfil. These difficulties still increase, particularly for medical assistants and specialized (IC) nurses. The increase in job openings illustrates that hospitals have more and more problems to fill the positions from the internal labour market. For the IC and OR positions also applies that hospitals have problems to recruit people externally. This is a national problem, there is more demand for personnel for these positions than there is supply. A factor that works against the tightness of the labour market is the deteriorated economic situation in the Netherlands which likely reduces the outflow of personnel from hospitals as mobility will be less, just as competition from the market sector for employees.

The labour market developments that are described have consequences for MST with respect to the availability of qualified employees for the IC and OR divisions. The competition with other hospitals for these scarce workers will be heavier and with unchanged policy the current problems and challenges with the shortages will become larger.

A major challenge is the recruitment of qualified IC nurses and OR assistants. To what extent MST succeeds in that depends among others on what is offered to applicants, the educational policy and image of MST as an employer. Moreover, inflow in the IC and OR positions at MST should come mainly from the educational courses. Since hospitals in the Netherlands educate too few IC and OR personnel and mobility of these employees is low, there are almost no qualified workers on the external labour market that can be recruited. Unless arrangements are made between hospitals or by a higher authority, to reduce the risk of losing investments in students in the competitive labour market, not more qualified IC and OR workers will be on the market. Though, MST itself is responsible to provide for sufficient qualified employees and therefore should increase the inflow in the IC and OR professions through the courses and work on employee retention. Since the courses for IC nurse, surgery- and anaesthesia assistant concern internal courses, MST does have much control over this supply and can strongly influence it. MST can determine itself how many educational places it offers for IC and OR students. Of course should there be sufficient supply for the courses to increase the inflow. Although the interest for the courses has been shrinking, the respondents agree that the educational places can be filled. Further, it can be concluded from the labour market figures that there is still enough potential from the highest level nursing courses in the region to recruit and specialize later for the IC. Due to the worse economic prognoses for the coming years also likely more students will choose for the courses of surgery- and anaesthesia assistant. That is because employment is more secure in the healthcare sector. At the OR and IC divisions at MST for instance almost all employees are offered a permanent contract.

Regarding the inflow of IC and OR employees through the courses, there are several factors that MST can influence and need to improve to increase the certainty about the availability of sufficient qualified employees in the end.

First of all, structurally educating the right amount of students requires that the educational capacity for the courses is determined on the basis of clear guidelines focused on the future personnel requirements. Currently however, it is determined by individuals, focusing on the personnel requirements at hand. Such a short term vision does not lead to the inflow of new employees on time. The courses take years, and when MST starts with educating people for the IC or OR only as job openings arise, the shortage for the position will be at least several years of a burden. Many personnel developments impacting the future personnel needs can and should be measured in

front, for instance taking notice of the expected future outflow. A capacity planning, in which such personnel developments are taken into account, is thus necessary. For forecasting personnel requirements, the divisions should work more together with the HRM division who can facilitate in keeping record of personnel developments. Also the divisions need to start keeping track of the outflow percentages.

Second, the capacity of support for the students on the OR and IC divisions has a large impact on the amount of students who can be trained at the same time. To guarantee the quality of the courses, the amount of educational places cannot be expanded endlessly. Students need intensive support in the hospital. In the current situation at MST there is insufficient support to give more students a good learning environment. It is stressed though by supervisors at MST that it is possible to increase the amount of educational places when more employees take responsibility in the support of students. Time should also be made for support, otherwise will the shortages become much higher in the future.

Another aspect that should be handled by MST concerns the large dropout of students during the courses (the Thorax IC excluded). It is unrealistic to think that dropout always can be prevented, but the conditions that prevent students from quitting should be improved by MST. MST could have prevented much of the dropout for the IC and OR courses when it made the right choices in students and created a good learning climate where students feel safe and receive the support and possibilities they need. In comparable courses it is proven that the dropout could be far less. On the Thorax IC students feel much safer than on the general IC and therefore can better meet the requirements of the course. IC nurses on the general IC should be made aware of the influence they have on the students. Furthermore, MST needs to look closely at the selection process and criteria as some dropout could have been prevented when better selection had taken place. Much can also be gained from professionalizing the support of mentors, by training them in their role as a coach and developing a vision on education that forms the basis for their support.

Finally, it does not make much sense educating many students when they walk away soon after they are qualified. In general, students who finished the course also remain working for the organization where they are educated. The low mobility is relatively isolated from labour market developments and will normally lead to low turnover in hospitals. However, it turned out that it has been difficult for MST to retain young IC and OR employees in the first years after they finished the course. MST stands for a major challenge to bind these people. It is crucial that it makes sure that new students have realistic information about their job and the course at MST so that it is less likely that they will be disappointed and find out that they made the wrong choice and leave MST. That is particularly relevant for the OR since those students mainly come from the external labour market and therefore have a less good image of the job and organization already. MST should try to bind students in the OR courses in the first years after they are qualified, by means of a legal construction.

To conclude, the labour market situation for IC and OR staff is and will be unfavourable for MST in the foreseeable future. That means for MST that in order to make the best out of the people who are available on the market, they should educate more itself and do everything to retain the employees during and after they finished the education, so that it can really take care of more qualified personnel in the long term. Particularly in the light of the shortages it is very important that the conditions and climate for employees and students are improved what will result in lower health related absenteeism and less dropout.

## 4. Retention

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In the previous chapter is illustrated how the labour market for IC nursing staff and surgery- and anaesthesia assistants is developing and what it means to MST with regard to staffing these positions with qualified workers. It generally is important that employees can be retained but for MST that is crucial as the labour market for IC and OR personnel is tight and it is difficult to recruit new employees for these positions. Organizations also have more control over the retention of employees than on recruiting new employees, for which they depend on the external labour market situation. However, MST has been experiencing problems with the retention of IC nurses and OR assistants. The IC and OR divisions have been very restless for a few years and many employees left MST out of dissatisfaction. They find a job in another hospital almost immediately. MST does not have sufficient insight in the satisfaction of IC and OR employees and the causes of turnover, which is needed to predict and prevent voluntary turnover in the future. This chapter therefore addresses the issue of retention of IC and OR employees. The following research question is answered: *What are the most urgent changes that MST should make in HR policies and practices to retain IC and OR staff?*

In answering this question, the analysis is directed at the turnover of employees who voluntary leave the organization and the variables that are related to it. The focus is further particularly on the voluntary turnover that is avoidable by management of MST so that they gain insight to how this turnover can be reduced in the (near) future. Of the wide variety of factors that have been theorized in literature in relation to voluntary turnover, in the first place the analysis is concerned with the job satisfaction and commitment of the IC and OR employees, which for a great part are influenced by the organization. It are the main variables in the model of voluntary turnover, further including turnover intentions and ease of movement for employees. The latter two issues are handled in this chapter just as the reasons for the actual turnover the divisions have experienced. The preconditions for employee retention are also incorporated in the analysis.

To point out why these variables are central in this research, existing literature on voluntary turnover and employee retention is used. First, much evidence is found that job satisfaction is the main predictor of voluntary turnover (e.g. Irvine & Evans, 1995). The relation between job satisfaction and voluntary turnover is negative, meaning that turnover will be higher when employees are more dissatisfied with their job. An analysis of the satisfaction of employees with aspects of the job also indicates what employees consider important. That is crucial for organizations, because they can adapt their HR policies and practices to make employees satisfied with those aspects. The models on voluntary turnover illustrate that job satisfaction is not directly related to actual turnover but contains multiple stages in which attitudinal, decisional and behavioural steps follow each other. An important attitudinal component in that process is organizational commitment, which mediates between job satisfaction and turnover. In that stage, employees form an attitude towards the organization that may bind them and which gives direction to their behaviour. Most importantly committed employees want to continue the relationship with their employer (e.g. Meyer & Herscovitch, 2001). Therefore, the components of commitment among IC and OR employees are examined. The last stages in the turnover model consist of cognitive processes in which employees form a turnover intention and they look at the perceived ease of movement with which they can switch employers (e.g. Trevor, 2001).

The preconditions of employee retention are elements that are needed to create long term relations between employers and employees and are therefore crucial for organizations to retain employees. They influence the attitudes and behaviour of employees in a way they are likely to take a long term perspective of their relation. Organizations should at least conform to the preconditions discussed in the theoretical framework. They mainly result from theories on the internal labour market (ILM) and the Harvard model of HRM.

The ILM is the administrative unit of employees of whom the relation with the organization is governed by formal or informal rules (Doeringer & Piore, 1971: in Grimshaw et al., 2001). These rules or arrangements are often used by organizations to retain valued employees. The rules help to create positive expectations for employees on their relationship with- and opportunities within the organization. They thereby create trust and long term relational psychological contracts, which play an important role in the employment relationship. A relational contract is focused on the long term and on the development and growth of employees, and includes an emotional bond (i.e. high commitment) (Boxall & Purcell, 2003). Without the preconditions, contracts will be more transactional and short term and they lack these binding forces. From the ILM arrangements, the following preconditions are used in this research: there should be career development opportunities, fair employee appraisal, job security and fair rewards. From models on core-periphery arrangements in organizations come forward that there should be a relative large core workforce that can benefit from the ILM arrangements.

Further, in the Harvard model, some conditions are indicated to be necessary for long term employment relations. Beer et al. (1984) suggest that management should support, develop and invest in employees who are valuable for the organization and thereby have attention for their interests. The preconditions that are extracted from the Harvard model are: HR policies and practices should be fair, investment of organizations in their employees (in congruence with the condition of development in the ILM theory) and employee involvement in the organization. Fairness is an overarching condition, which is related to other preconditions. Furthermore, trust is a necessary element in long term relations and is therefore seen as a precondition of retention.

The analysis in this chapter starts with outlining the general outcomes of the employee survey that is conducted mainly to examine the job satisfaction of the employees of the Acute axis (section 4.1). In the sections after that are the various job satisfaction facets, preconditions, commitment and turnover of IC and OR employees at MST elaborated on and the main problems studied in depth. The construction of the sections on job satisfaction follows the main job satisfaction areas that are used in the survey. Where they overlap with a precondition of retention, the precondition is described in that section (e.g. rewards). In other instances where preconditions are no part of the employee survey or only minimally, a separate section is devoted on that precondition, as in the case of employee involvement, core-periphery arrangements and job security.

The aspects addressed in this chapter are analyzed from various perspectives. The perspective of employees themselves is mainly the result of the survey. That quantitative method is most suitable for gathering reliable data from a large population. This exploratory research question also asks for underlying causes to come to an understanding of reality. Therefore, interviews are held with employees of the four IC and OR divisions, elaborating on the main problems regarding job satisfaction and the preconditions of retention at MST. Interviews are very informative and enable questions to be asked specifically for this research. Because the general employee perceptions are already known by the survey, small (mixed) groups are interviewed. Five employees of the OR division and four of every other division. Due to the restricted time for the interviews and for measuring agreement, is chosen to interview them individually. Further, information from all the ten team leaders and the two HR advisors and business managers, on how the preconditions are applied at MST and on turnover, is also gathered by individual interviews. In that way, a more objective view is obtained and possible differences between the divisions are exposed. Questions are only asked to respondents in functions who are concerned with the issue. For dealing with retention problems, MST should know whether or not aspects are specific for the organization, indicating if they can be influenced. Three board members, from the professional organization for IC nurses (NVICV), surgery assistants (LVO) and Anaesthesia employees (NVAM) are interviewed and existing studies are used. The organizations represent the interests of employees in the Netherlands.

## 4.1 General survey outcomes

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In this section, the main outcomes of the employee survey are presented. First, the focus is on the general job satisfaction of employees and the satisfaction with the main job satisfaction areas. Further is shown which job satisfaction aspects are found to be in most urgent need of improvement for the employees of the IC, OR and Anaesthesia division.

### 4.1.1 Introduction

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In December 2008 an employee survey is conducted on the Acute axis at MST by the organization Effactory. The survey concentrates on the satisfaction of employees with the job in general and with facets of the job and investigates the commitment and turnover intentions of employees. The questionnaire is consistent with the model of voluntary turnover. Because ease of movement is not dealt with in the survey, it is studied in the interviews with the supervisors and HR advisors. Although both global feelings about the job, as well as the attitudes of employees towards the facets of the job, are included in the survey, the analysis mainly uses a facet approach. Employees can have positive attitudes towards one aspect while they have negative attitudes towards others (Kalleberg, 1977). By using the facet approach, it can be studied which aspects should be improved so that employees are more satisfied with their job. The main areas of job satisfaction in the survey, concerned with organizational characteristics, include: activities, labour conditions, colleagues, team leaders, Acute axis, division, MST, development opportunities and rewards. In this chapter are some of these areas clustered to make the analysis clearer. The division, Acute axis and MST are described under the name organization and team leaders and colleagues relate to workplace relations. The outcomes on satisfaction facets are compared to a recent benchmark of 16.555 employees in 30 hospitals in the Netherlands who responded to most of the same items.

398 employees of the Acute axis are invited to participate in the survey of which 209 returned the questionnaire, a total response of 52.5%. There is a large difference in response rates between various groups of employees. Looking at the response rates of the OR (59.8%), Anaesthesia (53.7%) and IC divisions (35.5%) it can be concluded that the response from IC is low. 27 of the 76 IC nurses have returned the questionnaire. That makes it more difficult to generalize the outcomes of the survey to the whole division. Therefore, the team leaders and employees who have been interviewed are asked how employees reacted on the outcomes of the employee survey. It appeared that the employees could identify with the outcomes. Furthermore, it is suggested that the low response might be caused by the fact that not all IC nurses have an email address of MST that was needed to participate, and that it was not clear what the intention of the survey was. Already action points are made to improve the situation at the division. Employees are sceptical about something happening with the outcomes of the survey.

### 4.1.2 Job satisfaction outcomes

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Before discussing the outcomes on job satisfaction of IC and OR employees it should be clear what job satisfaction is. It is stressed that there are multiple definitions and conceptualizations, with mainly a difference between researchers who focus on the process by which job satisfaction is produced and those who focus on specific needs of employees that should be satisfying. The first researchers often see job satisfaction as a feeling and study how employees develop that feeling. Job satisfaction can include both a feeling of satisfaction and whether the job meets the needs of an employee (Tovey & Adams, 1999). A broad definition of job satisfaction is provided by Spector (1996), who regarded it as an affective response that results from the comparison of actual outcomes with those that are expected, needed, wanted, or perceived to be fair. The feelings employees have towards their job are thus influenced by the expectations, needs and perceived fairness of the job satisfaction facets. Table 4.1 presents the feelings of employees of the Acute axis on the job and main areas of the job.

**Table 4.1** General outcomes employee survey

	Acute axis	Anaesthesia	IC	OR	Benchmark	Deviation from benchmark (%)
<b>Overall job satisfaction</b>	<b>5.4</b>	<b>4.6</b>	<b>5.6</b>	<b>5.1</b>	<b>7</b>	<b>-22.9</b>
Labour conditions	4.2	2.7	4.9	3.2	6	-30.1
Organization	4.6	4	4.9	4.5	6.6	-30.1
Rewards	4.8	3.9	4.5	5.8	5.1	-5.60
Acute axis	4.9	4.3	4.3	5.1	6.6	-26.2
Development opportunities	5.2	4.1	4.8	4.8	5.8	-10.7
Team leader	5.3	2.2	4.9	5.2	6.4	-17.7
Division	5.4	4.2	5.4	4.6	not known	
Activities	6.2	5.7	6.2	6.1	7.3	-14.8
Colleagues	7	7.4	7.2	7.3	7.7	-8.6

Source: Effectory

Looking at the overall feelings employees of the Acute axis have on their job it is clear that the situation within the divisions is characterized by much dissatisfaction. The employees at MST are substantially less satisfied than their colleagues at other hospitals in the Netherlands. At the Acute axis is the most precarious situation on the Anaesthesia division where satisfaction within the job is rated with a 4.6. Further, almost all main areas appear to be unsatisfying for the employees of the IC, OR and Anaesthesia division. The satisfaction of these divisions is in most cases also low compared to the national average. That applies mainly to the labour conditions and aspects related to the organization and Acute axis. The outcomes on rewards, development opportunities and colleagues deviate least from the benchmark. In fact, employees are only satisfied about their colleagues and to a lesser extent about the activities of the job. It is remarkable that the employees will not, due to their dissatisfaction, recommend MST as an employer to others quickly. Only 16.3% of the employees of the Acute axis agree on the statement that they want to recommend MST. That makes recruitment more difficult.

While much should be improved by the management of MST to get employees satisfied, the analysis is focused on the facets that most urgently need to be improved. Not all things can be realized simultaneously and are equally important for the satisfaction of employees. To concentrate on those facets, in this research mainly is analyzed which factors are most mentioned by employees in the survey to the question which action points they think will lead directly to an improvement of the satisfaction. That gives a good perception of the aspects that are in most urgent need of improvement. These answers are clustered and counted up and the five or six points that are mentioned most often are focused on. The outcomes are controlled by looking at the mark(s) that indicate the satisfaction with an aspect, and the deviation of the mark from the benchmark. The analysis leads to the following points, which are confirmed by employees in the interviews:

**Table 4.2** Job satisfaction factors in most urgent need of improvement

Anaesthesia (N= 20)		IC (N=14)		OR (N=29)	
Team leader	(70%)	Communication	(57%)	Labour conditions	(65.5%)
Communication	(60%)	Involvement	(42.9%)	Appreciation	(31%)
Appreciation	(25%)	Training opportunities	(28.6%)	Communication	(20.7%)
Labour conditions	(25%)	Appreciation	(14.3%)	Involvement	(17.2%)
Patient focus	(20%)	Patient focus	(14.3%)	Patient focus	(17.2%)
				Training opportunities	(17.2%)

From table 4.2 can be extracted that the main part of the aspects that are mentioned are the same for the divisions. On all three divisions are communication, appreciation and patient focus stated by many employees. Labour conditions are very dissatisfying for OR and Anaesthesia employees and training opportunities and involvement for IC and OR staff. The team leader is only mentioned on the Anaesthesia division. Of the aspects that are included in table 4.2, communication is clearly stated most often. Furthermore, on all of these aspects the marks are very low and most are rated substantially lower compared to the benchmark (30% or more). The facets of job satisfaction are further described in the following sections.



## 4.2 Involvement

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Employee involvement is a precondition of retention that is associated with the Harvard model of HRM. The authors of that model suggest that organizations should not only focus on management's needs but also have attention for the values and needs of employees and try to form a consensus between both (Beer et al., 1984). They state that the creation of such a consensus depends on the amount of influence employees have in the organization, an idea that is shared by Guest (1987). In the Harvard model is thereby pointed out that it is not so much the formal participation in the board of directors or works council that is important but it mainly concerns the involvement of employees on the workplace and during the execution of their work. That is in congruence with the ideas of Charlton (1983) who saw that the latter, which he referred to as direct participation, is strongly related to job satisfaction. Other outcomes of involvement are that it increases perceptions of fairness of decisions, increases trust and has a positive influence on commitment (Beer et al., 1984). It is argued that employee involvement not only changes the behaviour of employees positively, but more importantly leads to longer term changes in their attitudes. It therefore changes the relation employees have with their employer (Beer et al., 1984).

The perspective of employees on involvement at MST is examined by an item in the survey and interviews with employees of the IC and OR divisions. In the employee survey, a single item is added pertaining to the perception of employees whether they have enough participation in decisions that affect them. The outcome is negative as many employees perceive there is too little space for involvement. Only 30.6% of the employees perceive that they are sufficiently involved in decisions. The three divisions that are analyzed in this research scored even less than average of the Acute axis on involvement.

The employees on the IC and OR divisions who are interviewed indicate that involvement in the decision making process is important to them. Five employees argued, as theorized by Beer et al. (1984), that they want involvement in decisions that affect them in their daily work on the division. A majority of 12 of the 17 respondents however stressed that they find involvement very insufficient at MST. It is noticeable that all the respondents who do not experience insufficient involvement are working on the Thorax IC. The opinions of the employees on that division differ much from each other. Employees see three aspects as the main causes of their dissatisfaction with involvement. Mentioned most is that they miss interaction and consultation from employees before decisions are taken by management. An indication is that respondents having stressed that communication has been top-down mostly. A second cause for the dissatisfaction, pointed out by seven respondents of the Anaesthesia and OR division, is that there is too little time for participation in decision making. It is suggested that time is restricted due to high workload related to the production focus. Work groups, which enable employees to participate in decision making therefore are often not realized. Third, when there is involvement, often nothing is done with the outcomes or suggestions made by employees as almost half of the employees stress. A result of the lack of time for involvement and employees' experiences that nothing is done with their ideas, is that the spirit for participation has decreased, according to four respondents. Five respondents, of whom three of the Anaesthesia division, stressed that involvement is improved on their division but still needs further improvement.

In discussing the perspectives of twelve HR advisors and team leaders and business managers (supervisors) on involvement, it becomes clear that they have a different view on the involvement of employees in the current situation compared to the period before the reorganization in the end of 2008. Three quarters of the respondents indicated that involvement for employees was restricted, where the other quarter, relating to the Thorax IC, has the opinion that is listened to employees. However, the largest part agrees that employees are not given the opportunity to participate in decision making. Three respondents have indicated that participation was low because team leaders lacked time to facilitate involvement. One of them argued that many decisions had to be made ad hoc. Another respondent stated that it is difficult to facilitate involvement as many things are already

decided above the level of team leader. With regard to involvement in the current situation, only two of the twelve respondents find that employees are insufficiently involved. Three team leaders have indicated that there is more time now to listen to the ideas and suggestions of employees. Six respondents argue that there are more work meetings and workgroups for employees to give advice to the organization on specific issues, before decisions are made. The work meetings are perceived to become more interactive where there used to be one way communication. Two respondents however recognize that it is not easy to involve employees as they are not used to involvement and a small group of employees often has a negative influence during meetings. Further, four respondents explicitly make the distinction between involvement in decisions that are taken on a higher management level and decisions employees can participate on at the division they work. On the first decisions, influence of employees is restricted to signalling of issues or participating in the work council, while they have more involvement when it comes to operational practices on their division.

### 4.3 Labour conditions

Another aspect of job satisfaction concerns labour conditions (including workload), which is found to be one of the most urgent problems for OR and Anaesthesia employees regarding their job satisfaction. Labour conditions are theorized to relate to job satisfaction (e.g. Spector, 1997). Researchers found evidence that a high workload leads to higher job stress and lower job satisfaction (e.g. Hayes et al., 2006; Lambert et al., 2001). Spector (1997) defines workload as the demands that are placed on an employee by the performed job. He stresses that these demands can be qualitative or quantitative in nature. Where qualitative demands concern the effort that is required by the tasks of the job or the level of physical and mental difficulty, quantitative workload is the amount of work an employee has to do. According to Cardenas, Major and Bernas (2004), quantitative as well as qualitative factors might cause work overload for employees, which is the perception that there are too many responsibilities or tasks in a certain period. The authors further argue that the perception of work (over)load is very subjective in nature as it results from an interaction between the employee and the environment. Employees thus can have different perceptions of workload in the same situation. Important is the consequence found by researchers that a high workload can create job stress, which is also related to job satisfaction and turnover intentions (e.g. Irvine & Evans, 1995). Job stress can be explained partly by the Job-Control-Demand model of Karasek (1979), who pointed out that it can be caused by an interaction of job demands and job control. Job demands are the quantitative and qualitative requirements of the job and job control refers to the possibilities of employees to steer and control their work activities. According to the Job-Control-Demand model, a situation is perceived as stressful when there are high demands, and employees have low control. They are then less able to cope with the high work demands. Karasek (1979) argues that high demands are not always negative, as long as it is coupled with sufficient control.

In the following sections, the labour conditions and workload are discussed from the view of employees. Table 4.3 illustrates how employees of the IC and OR divisions responded in the employee survey, on the job satisfaction facets labour conditions and workload.

**Table 4.3** Satisfaction with labour conditions and workload perceptions

	Acute axis	Anaesthesia	IC	OR	Benchmark
<b>Labour conditions</b>	<b>4.2</b>	<b>2.7</b>	<b>4.9</b>	<b>3.2</b>	<b>6</b>
Materials are up to date	4.5	4.9	3	3.8	not known
Availability of materials	5.2	4.9	5.5	3.6	6.5
Working hours	5.6	2.5	7.6	3.8	7.4
Support after a traumatic experience	5.8	4.6	6	5.1	6.3
Feeling save during the execution of work	6.2	6.1	6	5.8	7.6
<b>Workload (% good)</b>	<b>43.3</b>	<b>36.4</b>	<b>77.8</b>	<b>26.5</b>	<b>57.3</b>
Can arrange time themselves	3.9	2.2	6.1	2.3	5.5
Sufficient qualified employees to do the work	4.5	2.2	5.4	3.6	5.5

Sufficient time for tasks	4.6	3.4	6.7	3.3	5.3
Consider schedule preferences	6.5	4.4	8.1	6.5	7.1
Can handle the work physically	6.9	7.2	7.6	6.4	7.5
Can handle the work emotionally	7.6	7.7	7.6	7.9	7.8

Source: Effectory

It becomes clear from the data that the labour conditions are generally not satisfying for employees of the Acute axis. The perceptions of employees on the labour conditions deviate most negatively of all main areas from the outcomes of the benchmark, as is shown in table 4.1. It indicates that these conditions can be arranged much better. Further, the labour conditions are particularly dissatisfying for the employees of the anaesthesia and OR division. For the IC employees, labour conditions are slightly more satisfying than average. Furthermore, employees are mainly dissatisfied that the materials and resources which they have to use to do their job are not up to date or not sufficiently available. It is also noticeable that satisfaction with working hours is much higher generally in hospitals in the Netherlands. With respect to the availability and state of the materials it should be noted that the IC recently moved to a new accommodation with new equipment. Therefore, it is expected that IC are currently more satisfied with those aspects. The other two labour condition aspects in table 4.3 are less an issue for IC and OR employees at MST.

It can be seen that employees of the Acute axis generally experience a high workload. Less than half of the respondents indicated that the workload is good in their eyes. The rest of the employees perceive the workload to be too high. The workload experience is thereby higher than in other hospitals, where 57.3% of the employees feel positive about their workload. There is a distinction at MST regarding the workload perceptions at the OR and Anaesthesia division at which the workload is perceived as highest, and the IC division at which those perceptions are significantly fewer. 77.8% of the employees perceive their workload positively. In contrast, at the Anaesthesia and OR divisions, respectively 36.4% and 26.5% is positive about the workload. The employees indicate that the high workload mainly results from the work environment and that they can handle the work emotionally as well as physically. Furthermore, it is indicative for the perceptions of high workload that employees mainly find they are not able to arrange the time themselves, there is insufficient qualified personnel to do the work and they have insufficient time to perform the tasks. The latter is particularly insufficient compared to other hospitals. These aspects are concerned with the quantitative workload. The impact of the shortages on the workload becomes clear as employees perceive that there are not enough employees to perform the tasks. Finally, the fact that employees cannot arrange their time does not give them control, which makes them vulnerable to job stress.

As employees of the OR and Anaesthesia division perceive the labour conditions, including workload, to be a major point of dissatisfaction, employees of these division are questioned on the causes of the high workload perceptions and dissatisfaction with labour conditions. That it is important to improve these factors for employees becomes even clearer during the interviews. Five of the ten employees saw it as the main problem, of which four from Anaesthesia. Others also indicate the importance of improving the labour conditions and workload.

Mainly do the employees see the high workload as a problem. The largest part of the employees of both divisions (seven) sees mainly two factors causing the high workload. The first aspect is that there are not sufficient employees to perform the work. The second aspect is that MST and medical specialists are focused too much on production and efficiency so that too much work is created for the employees who are available. According to three employees, the production of elective care is planned very tight. Another cause according to three employees of the Anaesthesia division is that there is too little time to perform the tasks appropriately. By three OR employees is argued next that the work is physically heavy, particularly for the many older workers. While this cause refers to qualitative workload, the other causes mentioned concern quantitative workload.

Concerning the dissatisfaction of employees with labour conditions, five employees pointed at underlying problems and recognized two factors. Three respondents of the OR division pointed at the lack of materials to perform their work properly. They argue that the materials are important for

OR assistants but perceive MST invests more in other things. Further is indicated by two employees that management does not take enough measures to assure that they can work safely. One of them argues that it has particularly to do with the bad state of some equipment they need to work with. A labour condition that also is important for OR and Anaesthesia staff is their working schedule as they often have to combine work with other tasks. It is noticed that the satisfaction with their schedule is increased since a new schedule is implemented that is developed largely by themselves.

To examine how the workload for the professions of IC nurse and OR assistant is in general, the issue is discussed with board members of the professional organizations and existing sources are looked at. The board members agree that these professions are generally characterized by a high workload. For the IC nurses, the workload fluctuates, depending on the amount of acute patients. The respondents see the high workload as a combination of factors. First of all do IC nurses and OR assistants have the heaviest work in hospitals, emotionally as well as physically. For all three professions further applies that workload is strongly influenced by the production focus of hospitals and medical specialists. Production has become more important as organizations make arrangements with health insurance companies on the production and this production is coupled to the income of hospitals and salary of most medical specialists. Both have a large influence on the workload. Furthermore, the board members of the LVO and NVAM state that the shortage of personnel has strongly increased the workload of the remaining employees, who are often used more hours than is allowed. Workload is particularly perceived as high in case that the hours are not compensated in free time.

High workload is also found by unions in the healthcare sector and researchers in the Netherlands as a major problem for nursing and medical employees. The labour union 'NU'91' stresses that one subject comes back every time problems are reported to them, which is the high workload employees perceive. It is often argued by employees last years that due to the employee shortages, the same amount of work needs to be done with fewer employees and that the interest of hospitals in production has increased (Unie'91 Crisis, n.d.). Researchers have already stated that the mental strain in the healthcare sector is much bigger and the work is also physically heavy compared to most other sectors (Van der Kwartel et al., 2008). Another point the authors have noticed is that autonomy for these employees is generally restricted, which means that employees usually have little influence on the actual execution and division of the work. Autonomy is particularly low for the acute care, which forms a large part of the care IC nurses and OR assistants provide.

#### 4.4 Rewards and secondary employment conditions

This section is focused on the satisfaction of the employees with the financial rewards they receive for their work and the secondary employment conditions. Rewards refer in this research to the wage and additional financial compensation for employees. Spector (1997), who refers to these aspects as pay, found it to be an antecedent of job satisfaction. In nursing literature, the outcomes on the relation between pay and job satisfaction and turnover have not been consistent (e.g. Hayes et al., 2006). Where some researchers concluded that pay does not have much impact on job satisfaction or turnover among nurses, others found a significant relation. Evidence is found that pay becomes more important to the job satisfaction of nurses when they perceive that what they get paid deviates from what employees in other professions receive and when they feel they should get more for the high responsibility of the job (e.g. Tovey and Adams, 1999; Cowin, 2002). It is argued in literature that employees compare their pay with others inside or outside the organization, which plays an important role in the satisfaction of employees with what they are paid and the perceived fairness of it (Shore, Taschian & Jourdan, 2006). Perceived fairness of the rewards is one of the preconditions of employee retention. The fairness of wages depends on how it is determined (Osterman, 1987). ILMs create fair wages because in ILMs, wages are attached to jobs (Grimshaw et al., 2001). That restricts the scope for managerial judgment that may lead to inequality in wages

among employees. Moreover, when wages are related to jobs, increase in wages match career progression in organizations which makes it transparent for employees.

First is analyzed how the employees of the Acute axis feel about their rewards and secondary employment conditions. The outcomes of the survey on these aspects are shown by table 4.4.

**Table 4.4** Satisfaction with rewards

	Acute axis	Anaesthesia	IC	OR	Benchmark
<b>Rewards</b>	<b>4.8</b>	<b>3.9</b>	<b>4.5</b>	<b>5.8</b>	<b>5.1</b>
Rewards for extra activities	3.5	1.5	3.8	3.3	not known
Secondary employment conditions	5.6	3.8	5.1	5.3	6.2

Source: Effectory

In the eyes of many employees, the rewards they receive for their work are insufficient at MST. It can be recognized in table 4.4 that these feelings are not much different from how employees in other hospitals perceive their rewards. That shows that it is not only a problem at MST but in many hospitals in the Netherlands. The degree of dissatisfaction differs between the divisions of the Acute axis, where the OR employees are more satisfied than employees of the IC- and particularly the Anaesthesia division. The dissatisfaction is strongest with the rewards for extra activities.

As fairness of rewards is one of the preconditions of retention, employees of the IC and OR divisions are questioned on their perception of fairness. In line with the results of the survey do the anaesthesia employees most strongly perceive that the rewards are not fair. In general, ten of the seventeen respondents perceive a lack of fairness of their rewards. Those employees point at different references when talking about the unfairness of rewards. The respondents (eight) strongly agree that it is particularly unfair that employees in some other hospitals get a binding premium because there are shortages, and that it does not apply to them. Another aspect stated by four respondents is that they are not compensated for extra activities or efforts that are often asked of them, particularly now there are shortages. Three respondents, from the Thorax IC and Anaesthesia division feel they are paid relatively low for the responsible and heavy work they have to do, compared to other professions at MST in the same salary scale. Also three employees suggest that it is unfair that employees who work on a self-employed base earn much more while they have less tasks. Finally, two surgery- and anaesthesia employees feel they are treated unfair as bonuses were paid to IC nurses last year while they received nothing. It created a lot of unrest on those divisions. The employees who find that the rewards they receive for their work are fair share the opinion that the basic salary is good and that it is the same for different employees in the same function.

Ten supervisors and HR advisors are interviewed to study how the rewards are arranged at MST and how they perceive the fairness of rewards. Nine of them find that the employees are rewarded fairly. Five explicitly mention that employees in the same function mainly receive the same rewards. The two HR advisors suggest that the wage of employees is determined by a fixed scale that is linked to their function. That system leaves little room for managerial discretion and is therefore essentially a fair system. MST only has (restricted) space to promote a function to a higher salary scale by appointing extra responsibilities or tasks to the function, but that has a major effect on employees in other functions. The reward system is determined in the collective labour agreement (CAO) of hospitals and is obligatory, leaving no involvement of employees but neither for management. Further, extra rewards for individuals or groups are rare according to five respondents. Only occasionally management has provided a tightness- or binding premium or are employees rewarded for the extra tasks they perform. Extra tasks are regarded as part of the function. Further, just as noticed by some employees have two respondents stressed that there have been some inequality in rewarding because tightness premiums were only given to IC nurses. According to a manager at the HR staff department, the cause was that there was insufficient control from HRM and

it was not centrally arranged. He stresses that MST has started with the development of a framework on how to deal with such issues and the HRM division increased their control on the execution of HR policies and practices.

The situation on rewards and secondary employment conditions in the hospital sector is addressed in interviews with the three board members of the LVO, NVICV and NVAM. Regarding the rewards of IC nurses and medical assistants, there is much unrest about it in the Netherlands and employees are more dissatisfied about it than usually. The respondents agree that there is becoming more inequality in rewards between hospitals due to the tightness and competition on the labour market. Employees can get higher wages as self-employed workers or at hospitals that make use of the space in the collective labour agreement to compete on rewards. The board member of the NVAM adds that rewards are not the most important aspect of the job for medical assistants, but have become more important for them because they look different to their profession due to the tightness. According to the board member of the organization for IC nurses, it is particularly the new generation for whom rewards are more valuable now. The respondents mention three reasons for the dissatisfaction with rewards. First, the wages of IC and OR employees are low compared to the market sector, particularly seen the heavy labour conditions and irregularity that characterize their work. Second, many workers currently can earn a lot more when they are not under contract of a hospital and therefore choose to be self-employed. The employees who remain employed see these external workers earn more than they do for the same work. Finally, various hospitals make use of binding premiums, which makes that many employees of the hospitals without such a premium perceive their rewards as unfair. There are currently no arrangements which can prevent such behaviour of hospitals. Further, it is stressed that the basic wage does not differ much between hospitals for IC nurses but it is argued that some hospitals fluctuate with the scale for surgery- and anaesthesia assistants. That is because the wage system leaves possibilities for interpretation differences. The main competitors for MST use the same wage levels for IC and OR functions as MST. The basic wage for the employees is perceived by all three board members as generally positive.

With respect to the secondary employment conditions in the Netherlands, the board members noticed that these do not differ much between hospitals. It is argued that these conditions are relatively fixed in the collective labour agreement. There is a bit room in this agreement, stated by the board members of the NVICV and LVO, such as on travelling costs or working hours. Also does one of the board members argue that there can be some difference on the extent to which flexible employment conditions are implemented at hospitals. Generally, the secondary labour conditions in hospitals are on the level that is determined in the collective labour agreement. Hospitals have less influence on the secondary employment conditions than they have on the rewards.

## 4.5 Development opportunities

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Development opportunities are theorized to have an important impact on the job satisfaction and retention of employees. It is seen in this research as a precondition of employee retention as it offers long term possibilities for employees at the organization and it creates expectations for them that when they stay at the organization, they can realize their (career) goals. Development opportunities further signal to employees that their employer wants to invest in them, which increases the commitment and loyalty of employees towards the organization, and employees then will do more than is generally required by their job (e.g. Beer et al., 1984; Tsui & Wu, 2005).

Development opportunities can be divided broadly into two categories, opportunities for career development and opportunities for personal development. That difference is made in this research. The first relates to possibilities for advancement in career or to make a change in jobs, while the latter refers to the possibilities for employees to develop themselves within their current job. In the analysis of development opportunities for IC and OR employees at MST, first the general outcomes of the employee survey are discussed.

**Table 4.5** Satisfaction with development opportunities

	Acute axis	Anaesthesia	IC	OR	Benchmark
<b>Development opportunities</b>	<b>5.2</b>	<b>4.1</b>	<b>4.8</b>	<b>4.8</b>	<b>5.8</b>
Educational opportunities	4.1	2.6	4.6	3.4	5.5
Attention for career development	4.1	2.9	4.4	3.8	5.1
Can accumulate new knowledge	4.6	3.1	4.2	4.2	6.3
Advancement opportunities	4.8	4.1	4.8	4.3	4.9
Will to develop within the profession	7.2	7.1	7.6	7	7.5

Source: Effectory

Employees of the Acute axis do not rate the development opportunities highly and employees of the IC, OR and Anaesthesia rate it even less. It can be seen though when looking at the benchmark that employees in other hospitals generally are not much more satisfied with the development opportunities. Further, the marks that illustrate the satisfaction of employees with different aspects of development opportunities show that these are all strongly dissatisfying. Employees of the Acute axis particularly rate the possibilities to accumulate new knowledge lower than employees forming the benchmark.

Providing development opportunities to employees is discussed in the interviews with employees and HR advisors and supervisors. Before the outcomes on career development and personal development are described, the perceptions of investment in employee development and freedom of employees in their development process are outlined. The latter is an important factor in the development of employees for realizing their own development needs (Beer et al., 1984).

The main outcome of the interviews with employees on investment is that they generally do not perceive that much is invested in them. On the Anaesthesia and OR division even no employee responded that he or she feels that MST invests in them. Three of those employees explicitly mentioned that there is no financial contribution of MST for their training needs. It is argued by four OR employees that MST does not do more than necessary on employee development. These factors give a negative signal about the interest of MST in the development of employees. It is on the other hand noticed by an IC nurse on the Thorax IC that the many development opportunities there, lead to positive feelings about the investment of MST in the employees. Two third of the respondents of the Anaesthesia and OR division find that they do not have much freedom in their own development, while there are no such negative perceptions among IC nurses. To give employees control over their careers it is important that they can show their development needs. In a question on that matter, fourteen of the seventeen employees agree that there are possibilities for that, mainly by contacting their team leader. The three respondents who find that those possibilities are insufficient are surgery assistants. It is further stressed by six employees that it is often the question whether anything happens with the suggestions.

The view of supervisors and HR advisors on the investment in employees becomes clear when discussing the career and personal development of employees at MST. With regard to the freedom employees have in their personal development, the respondents agree that there is much freedom. Seven of them indicate that employees can inform management about their development needs in the yearly employee interviews, which is the basis to discuss the development of employees. It is argued that that is a two way conversation in which both the employee and his or her team leader can define what they would like to see in their development. It is stressed further by a business manager and HR advisor that the actual freedom of employees depends on the outcome of the yearly employee interviews, and is influenced by the relevance of the development for the current function and the possibilities. They also indicate that the initiative lies mostly with the individual to make sure the development is realized. According to seven respondents, MST does not steer the development of employees. MST has no vision or structure for development. Team leaders are responsible for the development of employees.

### 4.5.1 Career development

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In a meta-analysis on employee turnover among nurses, Hayes et al. (2006) recognized that career development possibilities and interest of the employer in personal career development are highly valued by nurses and strongly related to their job satisfaction and retention. Career development is often associated with ILMs, and concerns the extent to which there are internal promotional opportunities in organizations reserved for their employees (Osterman, 1987). That means that there are long term advancement opportunities which, according to the authors of the Harvard model, create relational contracts because employees are more likely then to focus on the longer term in the relation with their employer. It is important that promotion is based on explicit and understood criteria, creating clarity and fairness for employees (e.g. Boxall & Purcell, 2003; Schuler & Jackson, 1987). It is also crucial that employees' functioning is appraised fairly as that often plays an important role in promotional decisions. That is not easy because the appraisal process is subjective in nature. Career development further requires that organizations offer learning opportunities at the organization, which are further addressed when discussing personal development at MST. When it is not possible to have promotional opportunities, it is suggested that organizations can use horizontal movements to provide career development (Beer et al., 1984). Finally, the satisfaction with both horizontal and vertical movements also depends on the speed with which these movements are possible and whether employees are rewarded for development.

From table 4.5 can be recognized that IC and OR employees experience that opportunities for advancement are limited at MST. Though, they are rated better than other development issues and are rated even low in other hospitals. That points out that advancement opportunities are generally limited in the hospital sector. It may also be a cause for a large part of the employees of the Acute axis (43.4%) to doubt if MST offers them opportunities for career advancement. Further, employees feel that there is too little attention for their personal career development. Only 17.3% responded that there is sufficient attention. There is even more dissatisfaction with the attention for career development among Anaesthesia employees. In other hospitals it is perceived that the organization has more attention for career development.

In the interviews with employees, eight of the seventeen respondents defined how they see the career development possibilities at MST. Four of them indicated that there are almost no possibilities for advancement, and when there are positions, it is difficult to get there. Two employees experience that there are possibilities, in management or as Physician Assistant. Five respondents stated that the throughflow possibilities are not mostly the problem; they know that it is restricted in the hospital sector. Further, it is argued by two employees that there are possibilities to develop in breadth, through extra tasks. However, seven respondents of different divisions share the view that extra tasks can often not be performed during work hours due to the high workload. This is why two employees stress that there is little spirit to perform these tasks. That is also because of the fact that these tasks are not rewarded. Finally, many employees (nine) are neutral about the fairness of their appraisal at MST. It is suggested by eight employees that no real appraisal takes place. On the general- and Thorax IC, employees mainly find that they are appraised fairly.

In the interviews on career development with supervisors and HR advisors, 11 of the 13 respondents agree that career development opportunities are restricted while the other two, related to the Thorax IC and Anaesthesia division, experience that they are sufficient. A business manager stressed that throughflow is somewhat different for IC nurses compared to surgery- and anaesthesia employees. The latter group mainly enters MST at the OR positions, while the position of IC nurse is already an advancement possibility because IC nurses are mostly promoted from within.

It is mainly stressed (by eight respondents) that the only real possibility to a higher, better rewarding job for IC and OR employees on the division is to become a team leader. Three respondents argue that there are also functions in between. Some of the IC and OR employees may



take tasks of the physician and become a Physician Assistant and on the Anaesthesia division there are coordinators. Physician Assistant however requires a totally new education of several years. Although there are very few positions to give away for promotion, it is stressed by the two HR advisors that when promotion is at issue, employees of MST have precedence above external recruited workers. Regarding employee appraisal, the respondents all stressed that there is no formal appraisal system at MST. In case of promotion, employees are evaluated by people of various functions within MST. In general, the yearly employee interviews with team leaders are the platform to discuss the functioning of employees. These interviews are incorporated in a framework of guidelines team leaders largely should stick to.

Furthermore, five respondents stressed that a switch to other functions is limited because OR and IC employees are very specialized. Both horizontal and vertical career steps often require a new education and are not quick. The only horizontal move that is mentioned by one respondent as a realistic opportunity is that IC nurses switch between the general- and Thorax IC. It is finally indicated by ten respondents that the possibilities for horizontal career development in the profession of IC nurse and OR assistant are richer. It is stressed by five respondents that there are possibilities for employees to develop in breadth in the form of extra tasks and areas of attention. Examples are to take responsibility for education or taking part in one of the work groups or projects. Six respondents argue that there is no extra reward for most tasks. Lastly, there are possibilities for Anaesthesia employees to perform various roles, such as working on the pain policlinic.

Interviews with board members of the professional organizations provide more clearance on the career development opportunities of IC and OR employees in hospitals. The board members agree that throughflow for these employees is restricted. One of them argued that becoming a team leader is the only step, but this is not an option for the majority of the employees. They further stressed that there are some 'higher' positions on the work floor in different hospitals, such as coordinator, but these roles are performed next to the normal function and are often not or hardly rewarded extra. Two of the board members however experienced it as a critical point that the IC and OR employees are rewarded for these roles. The board member of LVO further argues that extra tasks for surgery assistants are often found to be difficult by hospitals as the employees can be used less for production in that case. According to the board member of the NVAM the career development opportunities are also restricted by the fact that anaesthesia employees are not registered as nurses anymore. Regarding horizontal career development the respondents share the opinion that there are many possibilities in hospitals. They refer to the possibilities for job enrichment through extra tasks or positions such as senior nurse or mentor for students. It is suggested that these opportunities are also the main challenge for most of the IC nurses.

Other external sources implicate that career development is important for IC nurses but most of them are at the top of their responsibilities and salary after a year of ten (De Veer, Francke, Plas & Vogel, 2008). Further, it is found that a lack of advancement opportunities was, for more than one third of the nurses on HBO level, a main reason to search for another job (Unie'91 Loopbaanmogelijkheden, n.b.).

#### 4.5.2 Personal development

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Hayes et al. (2006) not only concluded that career development is valued by nurses and related to job satisfaction and retention but that it also applies to opportunities for personal development. That training is highly valued by employees in the healthcare sector in the Netherlands and has become more important to them, is found in various studies (e.g. Bekker et al., 2008; Van der Kwartel et al., 2008).

Employees of the Acute axis responded in the survey how satisfied they are with the opportunities for personal development at MST. The items in the survey that are related to personal development are: possibilities to accumulate new knowledge and educational opportunities. The

outcomes of the employee responses on these aspects are shown in table 4.5. What can be extracted is that employees are willing to develop in their specialism. Unfortunately, they perceive that the possibilities to do so are restricted at MST. Employees of the Acute axis, and particularly OR and Anaesthesia employees, rated the educational possibilities as lowest of the development opportunities. Further, the employees indicate that they cannot sufficiently accumulate new knowledge at MST. These possibilities are also perceived by employees in the benchmark to be much larger at the hospital they work for.

In the interviews with employees, there is attention for the training possibilities at MST, which many surgery assistants and IC nurses have stressed in the survey as a major problem regarding their job satisfaction. That conclusion can also be drawn from the interviews. Though, all respondents of the Thorax IC find these opportunities to be positive. At the Anaesthesia division the opinions differ a lot. Eleven of the seventeen respondents find that there are insufficient training possibilities, among which all respondents of the general IC- and OR division. The employees of the Thorax IC and Anaesthesia division who are positive about the training possibilities indicate that there are sufficient possibilities to keep up with the profession such as regular courses, symposia or clinical lessons. The main cause that employees perceive for the lack of training is that there is not enough money (eight respondents) and time (four respondents) that is (made) available for training. One employee compared the situation at MST with the hospital he worked for, concluding that at MST there are too few clinical lessons, too few people participating in training and that there is no feedback after training. Finally, the employees who find the training possibilities at MST insufficient indicate that they feel that much more can be done, that there are enough possibilities. As one of them stressed, the things that are asked from management on training are often not impossible.

In the interviews with twelve supervisors and HR advisors on personal development, a minority of the respondents (five) finds that these opportunities are good for IC and OR employees at MST. Among these respondents two are related to the Thorax IC. The other respondents who are positive stress mainly that employees can develop on personal aspects (e.g. how to associate with others). The respondents who find training insufficient refer to the lack of financial support as having a strong influence on that. Five respondents stress that there is a restricted budget that is, currently even more, under pressure. Moreover, a large part of the budget is already used for students, leaving little space for training of the employees. One of the team leaders experiences that employees often do not participate when training is not compensated. It is suggested by two respondents that there is an agreement that when training is necessary, or very desirable, it will be compensated most of the times and otherwise a larger contribution of employees is required. It depends on whether the training is relevant for the profession, whether it is paid for. Two others stress that it is paid for as long as it is possible within the budget. Although the budget is restricted it is argued by four respondents that many things can be done by MST itself, without it costing lots of money. Finally, eight respondents agree that employees should take more responsibility in their own training, as they are professionals and training is part of their job. Management of the Thorax IC however stressed that the many young employees on that division need to be stimulated less.

The training possibilities for IC nurses, surgery assistants and anaesthesia assistants in the Netherlands are discussed with the board members of the professional organization. They point out that training is one of the most important aspects of the job for IC and OR employees. The board member of LVO state that there are actually many possibilities for training such as clinical lessons, extra training days or professional magazines. The respondents agree though that many employers in the hospital sector in the Netherlands do not invest much in training. The board member of NVICV experienced therefore that many IC nurses have difficulties to obtain the points they need to be registered in their profession. Two of the board members refer to the costs of the training and one of them also pointed to the restricted time for training, due to the shortages among anaesthesia

employees, as causes of low investment. However, it is stated again that a lot of things can be realized relatively inexpensive.

## 4.6 Activities

As described in the theoretical framework of this report, the nature of the work is theorized to be an important facet of job satisfaction (e.g. Spector, 1997). The nature of work refers to the type of work employees do. In this section the facet of job satisfaction is handled. Since satisfaction with the nature of work in the survey falls under the job satisfaction area activities, and the underlying items are concerned with the activities, the term activities is applied. In section 4.2 is already noticed that activities in general are not a point of dissatisfaction for employees. Employees of the IC, OR and Anaesthesia division at MST are more satisfied with it than most other aspects of their job. These divisions do not deviate much from each other on the marks that are given for the underlying aspects of activities. The dimensions of the job satisfaction facet activities are now more closely examined.

**Table 4.6** Satisfaction with activities

	Acute axis	Anaesthesia	IC	OR	Benchmark
<b>Activities</b>	<b>6.2</b>	<b>5.7</b>	<b>6.2</b>	<b>6.1</b>	<b>7.3</b>
Able to work efficiently	4.4	3.8	4.4	3.6	6
Able to utilize capacities	5.2	4.8	5.2	5.3	6.7
Tasks are clear	6.3	6.1	6.4	6.6	7.3
Challenging work	6.7	6.8	6.7	6.5	6.9
Pleasure in work	6.8	6.8	6.7	6.6	7.8
Clarity in execution of activities	6.8	6.9	6.8	6.9	7.9
Apply skills and expertise	7	6.8	7.4	6.7	7.3
Clarity in expected results	7.1	7	7	7.1	7.5
Effort to improve	7.4	6.8	7.3	7.3	7.7
Willingness to put in extra effort	7.4	6.7	7.3	7.7	7.2
Insight in priorities	8	8	8.1	8	7.9

Source: Effectory

Many aspects that are related to the activities of the work of IC nurses and OR assistants are not a source of dissatisfaction for them, although satisfaction is lower on the separate items compared to employees at other hospitals in the Netherlands. Though, employees of the Acute axis indicate that they have more insight in the priorities of the work they perform, which is rated as highest by them. That aspect relates to the role clarity of employees. Other items indicating role clarity are clarity in the expected results of the work, how employees should execute the activities and clarity on their tasks. Even though the employees are not dissatisfied with these aspects it is noticeable that role clarity is relatively low compared to other hospitals in the benchmark. The outcomes of the survey mainly show that employees of the Acute axis experience that they can apply their skills and expertise at MST, have some pleasure in- and feel challenged by their work. Employees are also willing to put in extra efforts in their work and to improve themselves. At the Anaesthesia division, the willingness is lower, just as the overall satisfaction. Finally, aspects employees of the Acute axis are dissatisfied about, concern mainly that they strongly perceive that they are not able to work efficiently at MST and that they cannot make good use of their capacities.

## 4.7 Workplace relations

Among the facets related to job satisfaction of employees are also the relations that employees have with others on the work floor. In this research is referred to the relations of IC nurses and OR assistants with their colleagues, team leaders and medical specialists. These relations, which are part of the work environment of employees, have been found to affect the satisfaction and turnover intentions of (nursing) employees (e.g. Hayes et al., 2006). Furthermore, Lu et al. (2005) stated that the quality of workplace relations is seen as a major source of job satisfaction and

organizational commitment. Other researchers, focusing on job satisfaction of nurses, come to the conclusion that the perception of nurses of a positive work environment with good staff relations increases their job satisfaction (e.g. Irvine & Evans, 1995).

The different relationships that are rated by employees in the survey and the outcomes are illustrated in table 4.7. There is no benchmark data on the relationship with medical-specialists. Also, only the underlying items of this relationship are measured in the survey. The outcomes on these items however provide a good image on how the IC and OR employees think about their relation with medical-specialists at work.

**Table 4.7** Satisfaction with work relations

Colleagues	Acute axis	Anaesthesia	IC	OR	Benchmark
<b>Colleagues</b>	<b>7</b>	<b>7.4</b>	<b>7.2</b>	<b>7.3</b>	<b>7.7</b>
Motivated by colleagues	5.7	4.3	5.6	6.3	6.8
Mutual information sharing	6.6	6.7	7	6.9	7
Willingness to help colleagues	8.1	8.2	8.1	8.1	8.4
Team leader	Acute axis	Anaesthesia	IC	OR	Benchmark
<b>Team leader</b>	<b>5.3</b>	<b>2.2</b>	<b>4.9</b>	<b>5.2</b>	<b>6.4</b>
Can be found on the work floor	3.8	1	2.2	4.5	not known
Gives positive feedback	3.8	1.1	3.1	3.6	5.3
Is clear about the goals	3.9	1.6	3.5	3.3	5.7
Feedback on points of improvement	4	1	3	3.4	6.2
Provides structure in work	4.1	1.5	3.2	3.7	5.6
Motivates in work	4.6	1.4	4	4.7	5.7
Sufficient support from team leader	4.7	1.5	4.5	4.3	5.9
Keeps employees informed	5.1	2.5	4.7	5.9	6.2
Is open for suggestions	6.2	3.3	6.1	7	6.7
Good contact with team leader	6.2	2.9	6.2	6.7	7
Has respect for employees	7.1	4.6	7.2	7.6	7.1
Medical specialists	Acute axis	Anaesthesia	IC	OR	Benchmark
Information sharing with medical specialists	3.3	2.5	2.8	3.8	not known
Collaboration with medical specialists	4	3.6	2.8	4.8	not known

Source: Effortory

It becomes clear that employees are satisfied with the colleagues they are working with daily. Of all the main areas of job satisfaction, employees are most satisfied with them. On the IC, OR and Anaesthesia divisions the satisfaction is even greater than average at the Acute axis. There is mainly a high willingness among the employees to help each other.

A clear difference can be seen in how employees of the IC and OR divisions feel about their relation with their direct colleagues and medical specialists. While they are satisfied with colleagues, that is clearly not the case with the latter. In all divisions, the information sharing and collaboration with medical specialists is very insufficient. Only 18% of the employees responded that they are satisfied with that collaboration. In the interviews with employees, the relation with medical-specialists is addressed, related to the issue of respect.

Looking at the relationship of employees with their team leaders, it is noticeable that it is insufficient. That this is a critical point for the job satisfaction of employees becomes clear from the marks in table 4.7. Though, there are gradations. Particularly Anaesthesia employees are dissatisfied with their team leader. Employees of the Acute axis mainly perceive that team leaders are not present at the work floor enough, give too little positive feedback and are not clear about the goals. Employees are not dissatisfied with all aspects. On the IC and OR division it is perceived that the team leader has respect for them and that they are open to suggestions.

### 4.7.1 Team leader

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The dissatisfaction with team leaders is found earlier on in this chapter to be one of the main problems at the Anaesthesia division. As employees of the IC and OR divisions are also strongly dissatisfied with their team leader, this subject is discussed with the employees of the divisions. Furthermore, appreciation and respect coming from medical specialists is suggested by multiple respondents in the employee survey as points that need to be improved most urgently and is therefore also included in the interviews.

When the perceptions of employees on their team leaders are discussed some things come to the attention. The greatest problem employees have with team leaders by far, has been concerned with their lack of attendance on the work floor. Eleven of the seventeen employees stressed this as a cause of the dissatisfaction with their team leader(s). That team leaders were hardly present is, according to an anaesthesia- and a surgery assistant, particularly influenced by the restricted time they had. Moreover three employees of the Thorax IC state that their team leader is approachable, while three others of the OR and Anaesthesia division find that this was not the case with their team leaders. Another cause of dissatisfaction with team leaders, pointed by four respondents, is that there is a lack of continuity in leadership as MST has changed team leaders very often. It is stressed that it creates much ambiguity for them. Another negative aspect that is argued by two respondents is that the team leader was only focused on production and was not there for the employees. While the responses of the employees mainly refer to the situation at the time of the employee survey, only a few respondents still see the team leader as a large point of dissatisfaction. On the general IC, OR and Anaesthesia division, new and more team leaders were employed recently. It is suggested by five employees of the various divisions that the team leader is more on the work floor and better approachable for employees. It are particularly the employees of the Anaesthesia division at which satisfaction with the team leader have increased much in the last months particularly due to a more open communication from the team leader.

### 4.7.2 Medical specialists

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In the interviews with employees also the perceived lack of appreciation and respect from medical specialists towards them is addressed. That experience is supported by the outcomes of the interviews. Respondents indicated that they particularly feel little respect coming from medical specialists, through which they also perceive that they are not being appreciated. Ten respondents agree on this. Thorax IC nurses are not dissatisfied with it, which may indicate that the relation with medical specialists is different on that division. Further, many employees (eight) are of the opinion that respect is also individual. While five respondents refer here to the different characters of medical specialists, three state that the way employees are approached by specialists also depends on the attitude of employees towards them and particularly whether, and the way in which, employees confront them on their behaviour. It is suggested that when an employee does not discuss it with the specialists their behaviour will not change the next time. Furthermore, four employees who feel little respect stress that they are particularly concerned with the way the specialists treat them. The tone and linguistic usages of medical specialists towards them shows little respect. One of them noted that it is particularly the character of the specialists and culture of the division that determines that behaviour. Further, four employees state that the actions of specialists are often focused on production, and therefore they try to push things through.

The relationship between specialists and nurses or medical assistants is an issue that has gained much attention in the Netherlands. The three board members of the LVO, NVAM and NVICV state that it is found that much can be improved in the collaboration between both groups. Further, they agree that employees mainly have difficulties with the lack of respect with which they are treated by medical specialists. It is suggested that it is to a large extent caused by the culture among medical specialists, who often determine how things are done. IC nurses have often indicated that

they miss positive feedback from specialists and they feel that they are not being heard by them. The board member of the NVICV also argued that collaboration is sometimes difficult since medical specialists mainly reason from science while nurses often reason out of emotion and feelings for the patients. Further, it is stressed by the board member of LVO that the high workload for medical specialists and surgery assistants has a negative influence on their work relationship. Finally, the respondents share the opinion that the relation between specialists and IC nurses or OR assistants can be influenced by hospitals. They also see that cultural change is needed in hospitals where the relation is bad, which is not easy to change and takes a lot of time to realize. According to one of the board members that might require the inflow of many new employees. The board member of the NVAM indicates that it is particularly important to create an environment in which people treat each other with respect and in which mutual responsibility for patient care is emphasized.

## 4.8 Organization

The job satisfaction aspects that are elaborated here are related to the organization as a whole or to parts of MST. Those parts are the Acute axis and more narrow the separate divisions at which the employees work. For these three main areas many different aspects are measured in the employee survey. Moreover, some of them are measured in relation to multiple organizational levels including efficiency, effectiveness, patient focus and communicational issues. Not all aspects are discussed here in detail. After the outcomes of the employee survey are elaborated on, which are visible in table 4.8, this analysis focuses on the aspects that are in most urgent need of improvement to make the IC and OR employees more satisfied.

**Table 4.8** Satisfaction with aspects related to the division, Acute axis and organization

Division	Acute axis	Anaesthesia	IC	OR	Benchmark
<b>Division</b>	<b>5.4</b>	<b>4.2</b>	<b>5.4</b>	<b>4.6</b>	<b>Not known</b>
Participation in decision making	4.4	3	4	4.3	Not known
Efficiency division	4.7	5.2	4.8	3.9	6.2
Effectiveness division	5	5.1	4.9	4.4	6.5
Working climate division	5.5	3.9	6	4.9	6.9
Regularly work meetings	5.7	4.3	4.9	6.3	6.4
Patient focus division	5.9	4.1	6.5	4.7	7.6
Performance division	6	4.6	6	5.6	7.3
Acute axis	Acute axis	Anaesthesia	IC	OR	Benchmark
<b>Acute axis</b>	<b>4.9</b>	<b>4.3</b>	<b>4.3</b>	<b>5.1</b>	<b>6.6</b>
Sufficient communication important issues	3.7	2.4	2.8	4.2	4.8
Informed about the goals	4.1	2.8	3.4	4.6	6.5
Efficiency Acute axis	4.2	3.6	3.8	4.4	not known
Efficient and effective use of materials	4.2	4.3	3.2	4.3	4.6
Collaboration between divisions	4.3	4.2	4.1	4.7	5.5
Trust in management	4.7	3	4.7	4.5	5.3
Importance craftsmanship	6	4.7	5.6	5.9	6.7
Cooperation with changes	6.1	5.1	6.5	5.9	6.9
Challenging work environment	6.5	6.3	6.6	6.3	6.3
Fit with the Acute axis	6.7	6.4	7	6.8	7
Will to learn more about the organization	7	5.9	7	7	7.2
MST	Acute axis	Anaesthesia	IC	OR	Benchmark
<b>MST</b>	<b>4.6</b>	<b>4</b>	<b>4.9</b>	<b>4.5</b>	<b>6.6</b>
Feeling of appreciation	3.4	2.3	3.7	3	5.7
Patient focus organization	3.9	3.2	4.4	3.7	6.7
Informed on developments	5.3	4.5	5.3	5	6.1
Fit with MST	5.9	5.4	6.1	5.5	7

Source: Effectory

It is clear that IC and OR employees are not satisfied with most of the aspects in table 4.8 and that they are even less satisfied than the other employees of the Acute axis. Furthermore, the broader the context, the less satisfied they generally are. Employees give a 5.4 for their satisfaction with the division while that is a 4.9 for the Acute axis and a 4.6 for the organization.

Regarding their own division employees are most dissatisfied with the participation in decision making. Employee involvement is already discussed in more detail in section 4.2. The employees further are mainly dissatisfied that the efficiency and effectiveness of the division is low. These outcomes are much more negative when compared to the results of hospital employees forming the benchmark. Also the patient focus is perceived as low by the employees of the Anaesthesia and OR division. This factor is more positively perceived by IC nurses.

With respect to the Acute axis, the aspects that are most dissatisfying and negatively deviating from the benchmark relate to communication. Employees find that there is very insufficient communication about important issues and that they are not informed about the goals of the Acute axis. Further, just as on their division employees are critical about the efficiency and effectiveness of the Acute axis. Also becomes apparent from table 4.8, that collaboration between the divisions is bad. Outside the ring of direct colleagues, collaboration is found to be more difficult. Furthermore, there is a great lack of trust in management. Only 21% of the respondents stress that they have trust in the management. It also can be seen that the willingness to cooperate with changes is relatively low. Positive outcomes are that the work environment is challenging and that many employees perceive a fit with the Acute axis.

The satisfaction of employees finally is lowest concerning the organization. The main point that indicates this dissatisfaction is that employees perceive very little appreciation. More than half of the employees (54.5%) have stressed that they do not feel appreciated. Furthermore, the employees find the patient focus of MST low. Another aspect, related to communication, is that employees perceive that they are not informed enough about developments in MST. Noticeable at last is that employees, despite their perceived fit with the Acute axis, doubt whether they fit with the organization. This likely is influenced by the lack of information they receive about the organization which is needed for a good perception about the fit.

Some of the aspects discussed above are perceived as the most important aspects that need to be improved urgently to get employees on the Acute axis more satisfied. These aspects are shown in table 4.2 and they include communication, appreciation and patient focus. They are explored in the employee interviews and are described below, just as trust in management, which is crucial in employment relations.

#### 4.8.1 Communication

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In literature, satisfaction with communication is found to be related to job satisfaction, organizational commitment and employee turnover (e.g. Pincus, 1986). Pincus (1986) found in a study on hospital nurses that satisfaction with communication has a positive relationship with job satisfaction, including communication from supervisors as well as from the top management. Also important is the link between communication and involvement. Beer et al. (1984) argued that involvement requires an open process of communication. According to their Harvard model, it is difficult for employees to participate in decision making without sufficient information.

Communication at MST is first viewed from the employees' perspective. Six of the eight employees of the OR and IC division see communication as the largest problem regarding their job satisfaction. On the Anaesthesia division it is also seen as one of the three main issues. On the Thorax IC, the employees are more satisfied with the communication from management. Ten employees of the divisions indicated that communication has been much top-down, which is related to the low involvement they perceive to have at MST. Five of them work on the OR division. The employees stress that things are already decided and then reported to them. Two employees agree that the work meetings are only used for announcements by the management. A second point where nine

employees agree upon is that they are too less informed by the management. The lack of openness leads to unrest for employees due to the ambiguity that it creates in certain situations. Moreover, two employees perceive that team leaders who should inform them also have restricted information from above. As a cause of the restricted communication, five respondents, from the OR and Anaesthesia division, stressed that communication is strongly influenced by the restricted time availability. Team leaders cannot be present to inform employees personally and even when there is a team meeting they are under much time pressure. Therefore, much of the communication is done through spreadsheet and e-mail. Another reason employees suggest to cause the dissatisfaction with communication is that communicated is often done too late. Though, seven employees stressed that communication from management has slightly been improved on their division. These employees mentioned that communication is less top-down, that there are more meetings and they are better and more often informed. The respondents ascribe that mainly to the approach of the new team leaders on their division. One respondent admits that not many people attend to the work meetings on the OR division because of the bad communication in the past.

Interviews are held with supervisors and HR advisors to provide more insight in communication at MST. Seven of the twelve respondents find that communication was insufficient, which is similar to the responses of employees. Only respondents of the IC divisions suggest that there has been sufficient communication from management. Four respondents of the OR and Anaesthesia division indicate that there was much one-way communication from management to employees (top-down). Furthermore, as three respondents point out, communication has often been too late as it passes multiple stations before employees receive the information. Also, one argues that there was too little time for team leaders to be present and inform the employees right and timely. They indicate that team leaders had a large span of control and very much work on the going things. Just as employees have stressed out, there are six respondents of the different divisions who find that communication has been improved. It is suggested that a main factor therein is that team leaders have less people under them and therefore more time to communicate and be approachable for employees. Eight respondents pointed further that communication to employees is done in multiple ways, for instance by work meetings and a weekly bulletin in the lunch room. A business manager and HR advisor state though that communication is very individual for team leaders. There is no organizational structure for communication.

#### 4.8.2 Appreciation

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The interviews with IC and OR employees show support for the feelings of too little appreciation from MST, as fourteen respondents indicate. The other three perceive that management is aware of the work the employees perform and appreciate that. The employees not only indicate that they miss the appreciation from management but also from medical specialists. The responses of employees who do not feel appreciated indicate that several factors cause those feelings. It is particularly mentioned, by eight employees, that they hear too few positive things from management. They want appreciation in the form of a reward, but also more often a pat on the back or a compliment. The same amount of respondents compares that to the high demands MST places on them, but they are disappointed that they get not much back for it in their eyes. These employees perceive that the rewards do not match with the efforts they put in their work. Other points that are stated to cause the feelings of low appreciation are perceived disinterest and low commitment from management towards the employees and that management does not listen to them. Employees miss a personal approach from the organization.



### 4.8.3 Patient focus

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Something that is found to be very important for hospital employees in their work is the care for the patient. That is concluded by researchers in a study on the work experiences of hospital employees (Prismant, 2007b). Employees of the Acute axis however perceive that there is not paid sufficient attention for the patient care at their division and MST.

In the interviews with employees it is generally perceived that patient focus less urgently needs to be improved than do the aspects of communication, appreciation, involvement and labour conditions, but it is still strongly dissatisfying for employees of the OR and Anaesthesia division. On the general- and Thorax IC, the respondents are all positive about the patient focus. The reasons why some employees perceive that patient focus is low differ. The main reason mentioned by seven employees is that the quality of the patient care is made inferior to the quantity due to the production focus of the organization and specialists. Respondents notice that speed is becoming dominant and as a consequence they have to work more often under time pressure. It is suggested that it sometimes created dangerous situations. Three Anaesthesia employees further find that the holding, where patients get an infusion before the surgery, is in a bad condition and often too busy.

### 4.8.4 Trust in management

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Researchers have found evidence for important benefits of trust for organizations and employees. It is seen as an important factor in the psychological contracts employees have with their employer (e.g. Robinson, 1996; Staines & Pate, 1998). Staines & Pate (1998) stress that trust is important for the formation of long term relational contracts between employees and the organization. That is because trust leads to cooperative behaviour that is necessary for long term relations (Morgan & Hunt, 1994). Boxall & Purcell (2003) argue that trust between employees and their employer is crucial as the control of behaviour is limited. Trust can be defined as 'the expectations, assumptions, or beliefs about the likelihood that another's future actions will be beneficial, favourable, or at least not disadvantageous to one's interests' (Robinson, 1996). According to Mayer, Davis and Schoorman (1995) that is one of the conditions of trust and is based on the perception of consistency of the actions of the other and the extent to which they are congruent with his or her words. Another condition that leads to trust they argue is a belief in benevolence when people share a specific attachment to each other.

In the interviews with employees on the trust in management of MST, sixteen of the seventeen respondents share the opinion that trust is low. The respondents point at various causes of those feelings. First of all, eight employees see it as a major cause that management has not listened to them. It is suggested that many ideas are initiated but management has done nothing with them and they expect that it will also not be the case in the future. That gives a bad signal to employees. Another aspect that contributed to the lack of trust, according to three surgery assistants, is that they perceive that management has only interest in production and not in the employees. On the Thorax IC the main cause of the low trust as perceived by three of the four employees is that management is not visible for them which shows no warmth. The main thing these factors have in common is that they illustrate that the employees perceive low commitment of management towards them. Furthermore it is suggested by three employees that most of the times when promises are made to make improvements for employees, those are not followed by management. Employees are therefore sceptical.

## 4.9 Job security

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One of the preconditions of retention, formulated by theories on ILMs, is that employees perceive they have job security. That is concerned with the extent to which an organization makes explicit commitments to employees about how long they probably can stay at the organization

(Osterman, 1987). Job security is in this research explicitly referred to as the security of employment within an organization, whether in the current job or in another job. The expectations of job security may be facilitated by formal and informal arrangements (Grimshaw et al., 2001). When employees perceive job security, that expresses that they can stay and commit themselves to the organization and it makes it more likely that they will take a longer term perspective of the relationship. Although job security is not included in the employee survey, researchers also found it to be a facet of job satisfaction (e.g. Kalleberg, 1977). Furthermore, it is argued that job security is necessary to create long term relational psychological contracts between employees and their employer (e.g. Guest & Conway, 1997; Staines & Pate, 1998). Staines & Pate (1998) reviewed literature on psychological contracts and identified job security as the most important employee need, and suggest that employees who have less fear of losing their job have more positive attitudes towards the organization. Moreover, the expectations that employees have on their job security affect the trust they have in the organization and therefore causes the content of the psychological contract (Guest & Conway, 1997).

Since job security is left out of the survey, employees are asked in an interview to what extent they perceive job security. The outcome is that the 17 respondents unanimously stressed that they expect their job to be secure. Seven of the eight employees that clarified their response suggested that the high job security is related to the healthcare sector, where always people are needed to help patients and there is particularly much demand currently for IC and OR employees. One respondent pointed at the fact that MST gives them a permanent contract.

Six supervisors and HR advisors also all argue that job security for IC and OR employees at MST is high. They mentioned more varied grounds for the high security, including formal and informal arrangements made by the management of MST and external factors. Five respondents stated that a sign of job security is that the employees receive a permanent contract, which is a formal arrangement. More informally is arranged that students in the IC course who already have a permanent contract can turn back to their old function when they do not finish the course. Students in the courses for surgery assistant and anaesthesia assistant are recruited on the prospect that they get a permanent contract when they successfully finish the course. A second major factor influencing job security according to eight respondents is the labour market situation for IC and OR employees. Due to the continuing shortages, there will remain much demand for these positions and MST badly wants to retain the employees. Half of the respondents argued that the MST itself puts a lot of effort in protecting employees from losing their job. When the position an employee is educated for is temporarily unavailable, the mobility office of MST tries to replace him or her temporarily on another position within the organization. One respondent mentioned the link between job security and the healthcare sector. He stated that dismissals out of necessity or not functioning hardly occur and there is always demand for employees in this sector. Finally, a ground of job security argued by one of the business managers is that an informal agreement is being made that there will not be economized on the primary input at the Acute axis. A point of attention for management is that it should emphasize the arrangements it makes in offering job security, because employees do not perceive MST to contribute much to the high job security.

#### 4.10 Core-periphery arrangements

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Core-periphery models, mainly used to create flexibility in organizations, make a distinction between the internal 'core' workforce and various peripheral and external workforces that are used to adapt to changes in demand (Capelli, 1995). The value of these models for the retention of employees concern that the workforces have a different relation with the organization and different psychological contracts. Where the psychological contract of core workers is often characterized as relational and long term does the situation of periphery and external workers leave fewer possibilities to form such a contract. Their contract is often characterized as transactional. Benefits of

ILM arrangements are restricted to the core workforce (Atkinson, 1984: in Osterman, 1987). A relational contract describes long-term relationships and an emotional attachment while transactional contracts are short-term, focused on mutual self interest and pure economic exchange (Boxall & Purcell, 2003). Moreover, in transactional contracts there is less psychological commitment of employees who have no expectations of a long term relation and more likely will leave an organization in the case of alternative employment opportunities (Tsui & Wu, 2005). The main implication of core-periphery models for employee retention is that a large part of the workers should form the core workforce. In the next sections is elaborated on the construction of the workforces at the IC and OR divisions and the relations of employees with MST. Also, the use of external workers in Dutch hospitals is addressed, which has received much attention last years.

The business managers and HR advisors state that far most employees at the IC and OR divisions have a permanent contract. The type of contract is a major indication of the workforce an employee belongs to. At the Thorax IC and the Acute axis there are just a few employees with a temporary contract and there are currently five external workers on the Acute axis and none on the Thorax IC. The next sections elaborate on the various workforces, wherefore they are used and their relation with MST. The analysis follows the core-periphery model of the flexible firm by Atkinson (1984). He distinguishes three rings of workforces.

The core workforce is in the centre and includes staff that performs the main activities, largely on a fulltime and permanent bases (Atkinson, 1984: in Taylor, 2008). The OR assistants and IC nurses perform the main activities of MST and most of them work on a permanent contract, although many of them part-time. The respondents state that it is a deliberate choice of MST to offer them a contract for unlimited time and use as few external people as possible. Core employees are generally used for functional flexibility in organizations, which refer to the capacity of employees to undertake a range of tasks or skills (Atkinson, 1984: in Taylor, 2008). IC nurses and OR assistants at MST are highly specialized and therefore not broadly useable. Functional flexibility at the IC divisions is improved by putting the educational courses for the general IC and Thorax IC together in one course.

Peripheral workers are also employed by an organization and form the middle ring, in which Atkinson (1984) distinguishes two categories. The primary category is mainly full-time and relative permanent, but with lower skills (Atkinson, 1984: in Taylor, 2008). Although many of these workers are employed by MST, they cannot easily flow through to the IC and OR positions as they should have a relative high educational background and need to follow a specific course of several years. In the secondary category are employees on a part-time or temporary base (Atkinson, 1984: in Taylor, 2008). These are brought in to help an organization temporary and have less security. Two respondents indicate that although many IC and OR employees at MST work part-time, they are not brought in for flexibility and have a permanent contract. They argue that it is the choice of many employees themselves to work part-time. One of the business managers further stressed that the employees are often used flexible by increasing their working hours, which has been structural last years due to the employee shortages. Another business manager noticed that employees of MST's own pool of temporary workers are used as well in times of sickness and increased production. These peripheral workers are used for numerical flexibility, which can be described as the ability of management to vary the amount of labour available in response to changes in levels and patterns of demand (Boxall & Purcell, 2003). Flexibility with peripheral workers is sought by MST both in the number of employees working and the number of hours worked.

The outside ring consists of external workers who are not employed by the organization (Atkinson, 1984: in Taylor, 2008). Professionally qualified people who work on a self-employed basis and employees who work for employment agencies are part of this ring. These workers have the most transactional contracts. On the IC and OR divisions they usually form a very small part of the total workforce. The respondents have experienced however that MST sometimes has been forced to use workers from employment or secondment agencies for short periods. These workers are used in situations of temporary excessive absence, long outstanding vacancies and extra production.

The respondents are further questioned on the relations the various groups of employees have with MST. They share the opinion that MST does not make a distinction between people who are employed by the organization whether they work part time or fulltime. As far as ILM arrangements are present at MST, these are mainly the same for internal employees. It is stated that for instance the remuneration is the same and that employees are also offered the same security and development opportunities. Regarding the difference in relation between temporary workers and employees with a permanent contract however, the respondents do not totally agree. One of them pointed out that employees with a temporary contract at MST are accommodated by an internal office and have the same access to facilities that MST offers as employees with a permanent contract. Another respondent assumed that temporary workers do not have the same opportunities to follow longer courses and have less job security. According to the HR advisor it is mainly a choice of employees to work on a temporary contract and they can get a permanent contract most of the times and thus not have much less job security.

The respondents see more differences in the relation of MST with employees compared to external workers. The HR advisor suggests that the main difference is that all internal employees have priority when it comes to promotion. Furthermore, the respondents see that external employees have a different position as they have to arrange personnel issues with the office that is paid for their services, which is responsible for making sure that the workers remain competent and qualified. Two of them also noticed that external workers are never a fixed part of the team at MST as they are often there for a short period. The HR advisor finally argued that external workers also do not have to do extra tasks and the responsibilities employees have, but are paid a better salary. That inequality has created unrest among the employees.

The analysis shows that the positions of IC nurse and surgery- and anaesthesia assistant at MST are largely staffed with core workers and that external or temporary workers are only used in case it is necessary. Moreover, there are possibilities to create relational contracts with both the part-time and fulltime workers.

There is a strong increase in the use of external workers in Dutch hospitals. Thousands of nurses have made use of the scarcity on the labour market and have become self-employed (Verpleegkundigen, 2008). To focus on how MST can influence the use of these workers for the IC and OR divisions is this issue discussed with the board members of LVO, NVAM and NVICV. The respondents agree that it is a national trend, but the proportion of self-employed workers varies strongly between regions in the Netherlands. The use of these external workers is mainly concentrated in the west, where hospital density is the biggest, but also increases in the other regions of the Netherlands. That means that hospitals face a larger outflow of employees who want to work on a self-employed base. Although they are sometimes hired externally at the same hospital, their relationship has become more short-term and transactional. One of the board members argued that the use of self-employed workers also created much unrest on the work floor as they earn more than the employees and do not have to do extra tasks. Further, the board members gave various reasons for the fact that an increasing amount of employees choose to be self-employed. For IC nurses, surgery assistants and anaesthesia assistants it is perceived that the reason is mainly financial, as they can earn much more salary then. The board members of the NVICV and LVO further suggested that it is also because the employees then have much freedom to determine by whom, when and how they work. It is stated that the trend can only be stopped when hospitals make arrangements together. The phenomenon of self-employment in the hospital sector is studied by the Dutch organization for nurses (V&VN) who found that employees choose to work for external organizations mainly out of dissatisfaction with the workload, career perspectives, salary and appreciation at the hospital (Verpleegkundigen, 2008). The likelihood of employees leaving MST to work on an external base can be reduced when those aspects are improved, which currently are dissatisfying for the IC and OR workers.

## 4.11 Organizational commitment

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In the previous sections, the satisfaction of IC nurses and OR assistants at MST with various aspects of their job is described. As discussed in the theoretical framework it is theorized that the satisfaction not directly relates to the voluntary turnover of employees but is mediated by its effect on organizational commitment. The dominant relation that is found by researchers is that the more satisfied employees are, the more committed they will be, which makes it less likely that they will have an intention to leave. This section is therefore directed at the organizational commitment among employees of the IC and OR divisions. Commitment is defined by Meyer and Allen (1991) as “a psychological state or attitude that binds people to an object, characterizes the relationship between an employee and the organization and has implications for the decisions whether or not to continue the membership at the organization”. This attitude of employees leads to certain behaviours of which the most studied outcome is voluntary turnover, which is the focus of this research. The definition provided by Meyer and Allen (1991) already indicates that commitment has implications for the decisions of employees if they want to remain at an organization. Other researchers have supported the relevance of the link between commitment and turnover (e.g. Mathieu & Zajac, 1990; Meyer & Herscovitch, 2001). Meyer and Herscovitch (2001) found that the main outcome of commitment is that employees want to continue the relation with their employer. Furthermore, high organizational commitment in an employment relationship itself is facilitated by ILM arrangements (e.g. Boxall & Purcell, 2003; Tsui & Wu, 2005). Due to the long term investments employees perceive, they will be more psychologically committed to the organization.

Employees can be committed to an organization for different reasons. Meyer and Allen (1991) distinguish three psychological states or sources of commitment. These components are affective, normative and continuous commitment and illustrate why employees stay at an organization. Affective committed employees want to stay at the organization because they are emotionally attached to- and involved in the organization and they can identify themselves with it. Normative commitment reflects a feeling of obligation to continue working for the organization. Employees who are primary continuance committed stay as they perceive they need to because of the costs that are associated with leaving the organization. This source of commitment is also called calculative commitment by some researchers to reflect the calculative consideration employees make (Mathieu & Zajac, 1990; Torka, 2003). Thereby, employees look at the alternatives they have and what they have invested in the relationship (McGee & Ford, 1987). The latter is based on the theory of ‘side bets’ of Becker (1960) who argued that the side-bets employees make, such as specific skills obtained, make alternative employment outside the organization less attractive.

Since affective commitment has consistent relationships with outcomes like retention, it is most extensively studied of the three components (Meyer and Allen, 1997). Though, employees can be committed for various reasons simultaneously, at varying levels of intensity and the sources of commitment can influence each other positively (Jaros et al., 1993).

The employee survey at the Acute axis provides insight in these sources of commitment of the employees. In the survey, the group of continuance committed employees is combined with the employees who are not committed. The distinction between these two groups therefore cannot be made in the analysis but is less important than the distinction between affective commitment and the other components. In the employee survey, also a difference is made between the commitment of employees who do not have a turnover intention and those that have a turnover intention. The latter group is only distinguished between committed employees and not committed employees. The outcomes are presented in table 4.9.

**Table 4.9** Sources of commitment of employees

No intention to leave	MST	Anaesthesia	IC	OR	Benchmark
Affective committed	46,1%	42.90%	42.30%	44.70%	63.3%
Normative committed	2.0%	0%	3.80%	2.10%	1.9%
Continuance or not committed	38.2%	38.10%	42.30%	42.60%	21.4%
Intention to leave	MST	Anaesthesia	IC	OR	Benchmark
Not committed leavers	10.8%	19.0%	3.80%	10.60%	7.30%
Committed leavers	2.9%		7.70%	0%	6.10%

Source: Effactory

Since many IC and OR employees are dissatisfied with their job it is expected that a large part of them is not strongly committed to MST. That can also be recognized looking at the data in table 4.9. 46.1% of the employees of the Acute axis that do not have an intention to leave are affective committed, which is very low compared to the benchmark where 63.3% is affective committed. Besides, on the Anaesthesia, IC and OR divisions the percentage of employees who are affective committed is even less than at other divisions of the Acute axis. Further, there is (like in many other hospitals) only a very small percentage of the employees normative committed to MST. Few people feel the obligation to stay. Also, only 8.5% of the employees feel guilty when they leave MST while 75% indicate the opposite. At the hospitals that form the benchmark are these percentages more favourable (respectively 15.4% and 62.2%). Finally, it becomes clear from table 4.9 that a relative large part of the employees with no turnover intention is continuance or not committed, which is almost twice as large as at the hospitals in the benchmark.

People who declared that they have an intention to leave MST are mainly employees who are not committed (10.8% of the 13.7%). That is in line with the theory suggesting that not committed employees are more likely to form a turnover intention. These numbers are even better than they are outside MST, where 7.3% of the 13.4% are among the committed leavers. Looking at the divisions at MST it can be recognized that all employees with a turnover intention of the OR and Anaesthesia divisions are not committed. However, at the IC division does 67% of the people with an intention to leave indicate that he or she is committed. When they leave, they are a loss for MST.

The main outcome is that a relative small proportion of IC and OR employees are affective committed. Researchers argued that affective commitment correlates with most positive behavioural outcomes (e.g. Meyer & Herscovitch, 2001; Mowday et al., 1982). Mowday et al. (1982) found that affective committed employees work harder and are more willing to put in extra effort for the organization besides what can be expected normally. The main implication though is that affective commitment is found to correlate most strongly with job satisfaction and turnover (e.g. Meyer et al., 2002; Griffeth et al., 2000). In their meta-analysis on turnover, Griffeth et al. (2000) concluded that affective commitment is one of the best predictors of voluntary turnover. Meyer et al. (2002) further argue that it is the strong emotional and attitudinal attachment with the organization (which lacks in other components) that makes it more strongly related to turnover. Affective committed employees then are more likely to be retained as they have an emotional attachment to the organization and want to be committed and stay (Meyer & Allen, 1997; McGee & Ford, 1987).

At the same time there are too much IC and OR employees who are not committed or only tied to MST because of the perceived high costs when they leave the organization. Continuance committed employees are least committed as it only reflects a calculation of the costs and benefits of quitting; there is no emotional bond (Jaros et al. 1993). These employees will leave MST most often when there are alternative opportunities, which makes leaving more favourable for them. They also are most likely to develop negative work behaviours. Continuance commitment is influenced by the tenure of employees, which is often used as a measure of the side bets (Meyer & Allen, 1984). The fact that many employees have a long tenure at MST makes them more likely to develop continuance commitment as they likely invested much in their relation with MST during the years.

These outcomes implicate that many IC and OR employees who are continuous- or not committed should be made affective committed. Then employees are more strongly attached to MST and less likely want to leave, besides the other positive behavioural outcomes it has. That means that MST should try to create an emotional bond with these employees. Theory on commitment indicates that affective commitment can be developed by an organization. Various organizational variables have been found to influence affective commitment. Meyer & Allen (1997) have done a meta-analytic study on organizational commitment and found that personal characteristics, organizational characteristics and work experiences are most important in the development of affective commitment. They mention factors that are discussed in this chapter: participation in decision-making, fairness of policies and treatment, employee-manager relationship, job challenge, role ambiguity. Also is personal fulfilment very important. Further, it is suggested that work experiences has the largest impact on the development of affective commitment and that job satisfaction is developed through work experiences (Mathieu & Zajac, 1990). Affective commitment can thus be created by enhancing the job satisfaction of the IC and OR employees and particularly with attention for the specific aspects that are mentioned by Meyer & Allen (1997). ILM arrangements do also create affective commitment as it supports the development of long term relational contracts which are often characterized by an emotional bond between the employer and employee.

#### 4.12 Turnover

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It is widely accepted in literature that job (dis)satisfaction of employees, through their impact on organizational commitment, has major consequences for the turnover intentions of employees. Turnover is further influenced by the perceived ease of movement of employees. These variables are therefore analyzed in this section with regard to the IC and OR employees. Also is elaborated on the reasons why employees leave MST and on voluntary turnover in hospitals in the Netherlands.

The intention of employees to leave the organization is the final cognitive step in the process that leads to actual turnover (e.g. Mobley et al., 1987). Another aspect that is considered by employees before they actually leave is the ease at which they perceive that they can move to a job outside the organization (e.g. March & Simon, 1958). When employees perceive that to be difficult they likely will stay. In considering ease of movement, employees look at alternative employment opportunities and their expected utility and also personal characteristics that influence their mobility play a role (Trevor, 2001). It is expected here that both turnover intentions and ease of movement for IC and OR employees at MST are high, which likely leads to relatively high voluntary turnover. That is because many employees are dissatisfied with their job at MST and are not- or loosely committed and there are many alternative employment opportunities at other hospitals. Turnover intentions are measured in the survey by asking the respondents whether they have undertaken action to other work in the last three months or have the intention to do so in the next three months. A distinction is made between other work within MST and outside the organization.

In the survey, a larger proportion of employees at the Acute axis responded that they did not undertake action to other work or have the intention to do that in the near future, compared to employees of other hospitals. That is remarkable because hospital employees in the Netherlands are generally more satisfied and committed. At the Acute axis, 81.6% of the employees do not have a turnover intention while that is 79% of the employees in the benchmark. Furthermore, of the employees of the Acute axis with the intention to leave their work, most (13.6%) also have the intention to leave the organization while 8.3% focuses on other work within MST. For the IC, OR and Anaesthesia divisions, the proportion of employees who have the intention to leave MST as opposed to those that want to work elsewhere in the organization is even higher. There is a difference between the divisions in that a substantially larger percentage of the Anaesthesia employees have a turnover intention compared to IC nurses and particularly surgery assistants. It is remarkable that despite the dissatisfaction and low commitment, relatively few people have the intention to quit

their job at MST. These outcomes implicate that also many employees who are not or continuance committed stay.

To create better insight on the ease of movement among IC and OR staff at MST, a business manager and three HR advisors concerned with these divisions are questioned. All the respondents experienced that IC nurses and OR assistants do not quickly go to another hospital in the region or to another job. They often stay unless they are offered something interesting elsewhere, two HR advisors stressed. The respondents believe that employees perceive a lack of good alternatives even though they can work almost in every hospital due to the scarcity on the labour market. It is suggested that the expected utility of other employment alternatives is often perceived as lower than their current work, which makes leaving disadvantageous for them. The respondents illustrated different reasons underlying the decision of employees to stay despite factors that normally lead to turnover. The only reason that is mentioned by more respondents (three) is that hospital employees in Twente find it important to work closely to their home and are not prepared to travel much for their work. It is also suggested that the private sphere of employees often make them stay (e.g. family, job of the partner, childcare). These reasons refer to the personal situation of employees that make them less mobile. They attach much value to their private life and distance to work. Furthermore, it is stressed that when the employees get older and work longer at MST they become more fixed at work and in their private situation and more likely accept the way things are. At MST, many employees have a long tenure. A respondent declared that younger people are more likely to leave as the threshold to go elsewhere is lower, which is supported by the analysis of the labour market in chapter 3. Job tenure and age are therefore perceived to influence actual turnover at MST.

The following part of this section on turnover focuses on the reasons why IC and OR employees left MST. For the retention of employees it is particularly interesting to know the reasons for the personal decisions of employees to quit, which is known as voluntary turnover (Winterton, 2004). The analysis is further mainly specified at reasons for voluntary turnover that can be avoided by management as opposed to those that are outside the control of an organization. Often voluntary turnover is attributable to the organization. When MST prevents avoidable turnover in the future it increases employee retention. Interviews with HR advisors and supervisors first provide an image why employees leave MST.

An instrument that provides valuable information for organizations on the reasons for employees to leave is the exit interview. At MST it is the task of HR advisors to hold exit interviews when employees leave. However five respondents stress that exit interviews are not held structurally by HR advisors. Most of the times, the exit reasons of employees are discussed in an informal conversation with his or her team leader. No conversations are documented. The reasons for turnover among IC and OR employees are discussed with their HR advisors and supervisors (eleven in total). They agree that voluntary leavers are the main group of leavers at MST. Further, seven of them stress that voluntary leave is individual; they see no clear trends in this outflow. That perception is influenced by the fact that the reasons are not documented and respondents therefore largely look at the outflow they have experienced. That inhibits them to form a broad image of the voluntary turnover at MST that helps to predict and control future turnover.

There is no reason the majority of the 11 respondents pointed at in the interviews. The reason that is mentioned most, by four respondents, is that employees are pushed to seek alternative employment due to dissatisfaction with their job. One respondent stressed that MST experienced more outflow last years of IC and OR employees who left out of dissatisfaction, for instance with development opportunities or the general unrest there has been on the divisions. At the general IC five employees have left MST in a period of two months because they were not satisfied. It is suggested by three respondents that some employees are more "pulled away" from the organization, for instance by a new challenge or a relationship far away. A final reason that is stated by one respondent, and likely is the consequence of both pull and push factors, is that some anaesthesia- and surgery-assistants got offered better secondary employment conditions at another



hospital. When push factors are the reason for employees to leave, that can often be avoided by the organization. MST should focus on dealing with these aspects. The other reasons are more individual and less controllable by MST.

Since the reasons for voluntary turnover at MST are not documented, the answers of the respondents are relatively implicit. In order to get a better view on the voluntary turnover therefore is also looked at an extensive research on the reasons for employees in hospitals in the Netherlands to leave the organization. Researchers of the organization Prismant analyzed exit interviews at 120 healthcare organizations in the Netherlands. Their main conclusion is that half of the leavers suggested that their exit could have been prevented (Van der Windt et al., 2008). Further, employees particularly leave because they find their workload too high and find that there are insufficient career perspectives and development opportunities at the organization. Although the researchers argue that the reasons for leaving are relatively stable, the following avoidable reasons have increased since 2004: workload is too high, too few training possibilities, labour conditions are too heavy and there is insufficient satisfaction with the care that is provided. The avoidable reasons mainly refer to the career and development possibilities, the workload and the care employees provide. For younger employees it is particularly dissatisfaction with personal growth and development opportunities that cause them to leave while the latter categories are more often reasons for elderly to leave.

#### 4.13 Conclusion retention

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In this chapter the issue of employee retention on the IC and OR divisions at MST is addressed. It is analyzed to what extent preconditions of retention are present for the employees, which are necessary to create long term relations. These conditions are particularly crucial in the competitive labour market for these employees as they give MST more control over the labour supply. Further is focused on the satisfaction of employees with various aspects of their job, how committed they are and the turnover (intentions) are examined. The conclusions of this chapter are mainly based on the employee survey that is conducted by Effectory. This survey is widely applied by organizations in the Netherlands. Although organizations use employee surveys for various purposes, the survey is communicated to employees at MST as a zero measurement. It can be seen as the opportunity for employees to provide insight for management on their satisfaction, which is congruent with the goal of this research. From the analysis of the different variables can be concluded that there is much to improve for MST to get the employees satisfied and more likely to be retained, as job satisfaction and organizational commitment are low and some preconditions are not present. The research question that is addressed in this chapter indicates that a distinction is needed on the most urgent changes MST has to make. Priorities are needed for management to direct their attention to. After looking objectively to the variables of retention in practice, the factors that are positive, but mainly those most urgently in need of improvement, are described here. The outcomes mainly apply to the general IC, OR and Anaesthesia division as the Thorax IC has not participated in the survey and other outcomes on that division are generally more positive.

The analysis on the one hand illustrates that there are different aspects IC and OR employees are satisfied with and that contribute to their retention. First, some of the preconditions are applied. Employees perceive to have much job security at MST. This signals to them that they can stay and commit themselves to MST. Another precondition that is positive at MST is that management has created a large core workforce of employees at the IC and OR divisions. There are possibilities to form long term relational contracts with these employees as they have long term perspectives and can benefit from the ILM arrangements. That is more difficult with peripheral and external workers, while the presence of the latter also creates unrest among the employees and is expensive. Furthermore, practices of promotion are fair at MST. Internal employees have precedence when positions become available and career progression is based on explicit criteria that are understandable. Fairness of employee appraisal at MST is not much an issue currently, since there is no formal appraisal system. Perceived fairness of these and other HR policies and practices is

important in the development of organizational commitment. Second, the employee survey shows that some aspects of the job are satisfying for IC and OR employees, mainly the relation with their direct colleagues, the challenging work environment at the Acute axis and their activities at MST.

On the other hand, the results of the analysis show that some preconditions of retention are not present at MST and that critical job satisfaction facets that need to be improved. These aspects should management focus on most urgently to increase employee retention.

A crucial precondition that is very low according to the IC and OR employees is trust in management. Trust is a main building block of relational contracts. Without trust it is difficult to have a long term employment relation as it does not lead to the necessary cooperative behaviour. The employees do not believe that future actions of management will be in their interest and are therefore sceptical. It is of major importance that effort is put in building trust. That is not something that can be created quickly, but when management consistently shows positive behaviour that signals to employees that they have attention for their interests, trust can be build. Furthermore, management should listen to- and make more use of the employees' ideas and, when things are promised or expectations raised, should also be acted thereupon. It are the actions of management that influence trust. Positive actions should be maintained otherwise trust will be lost quickly.

Also is found that the precondition of employee involvement in decisions that affect their daily work is important, but it is dissatisfying for IC nurses and surgery- and anaesthesia assistants. It is indicated by the employees that the main reason is that often is not listened to their ideas and they are not consulted before decisions are made. That not only affects the satisfaction of employees but also the trust they have in management as it creates feelings among employees that they are not taken seriously. Involvement is improved a bit but needs to be changed permanently. That means that the decision making process needs to be changed so that ideas of employees are taken into account. Also structures for involvement should be created, for instance through work meetings.

Furthermore, development opportunities are strongly dissatisfying and employees therefore do not have the feeling that MST invests in them. It also does not indicate to employees that there are long term development perspectives for them. These development opportunities are particularly important to retain younger employees, who are more often leaving MST compared to their older colleagues. Employees can show their development needs but they have experienced that the realization is often difficult in practice. Although both career development and personal development are found to be limited at MST management should worry more about the latter. Employees see the training opportunities to keep up with their profession mainly as a problem and restricted opportunities for career development is inherent to the professions. The main challenge for employees regarding career development is job enrichment because there are many extra responsibilities that can be divided over employees. It is important that these tasks are communicated to employees as opportunities for development. It also requires that more time is made available for the tasks and it should be discussed if employees will be rewarded for them. The limited training opportunities employees perceive can be influenced more by management. Although the opportunities are affected by the restricted budget, there are many possibilities and much can be done inexpensively by MST itself. In this case time is also a major issue. Management should be creative and make development plans. It should not economize on these opportunities, which are very important for employees.

The final precondition that is not present is concerned with the feeling of employees that the rewards they receive for their work are not fair. That is mainly related to the fact that they have not received a binding premium while that is used in some other hospitals, and they are not rewarded for extra tasks. The basic wage on the other hand is fair. Perceived fairness and satisfaction with rewards are difficult to control for MST because it is strongly influenced by the situation on the labour market, the financial situation of MST, and rewards often create inequality between (groups of) employees. Though, it is useful to consider a binding premium for IC and OR employees to show that management appreciates them and want to retain them. Thereby management should account for the impact it has on other employees within the organization.

Next to the preconditions there are some aspects related to job satisfaction that need to be changed urgently. The most dissatisfying aspect for IC and OR employees, and a structural problem, is the management's communication. It forms the basis for many factors related to employee retention. Open communication for instance is necessary for involvement, provides clarity, and increases perceptions of fairness of HR policies and practices. Communication at MST, though a bit improved, should become less top-down and more open so that employees will be informed better. These changes need to be institutionalized in the organization. Therefore, they should be structured and implemented broadly so that it leads to consistent communication practices. Besides that, more bottom-up communication will likely only be created when there comes a different mentality of (top) management that also actively shows that they ask for response.

Another major problem on the Anaesthesia and OR division is the workload of employees. Too much demand is placed on them because there are insufficient qualified employees and management and specialists are strongly focused on production. These quantitative demands of the work environment add up to the high mental and physical demands of the work. Since the employees have low control over their work, it creates a high risk of job stress. MST has more influence on the demands placed on employees by the work environment than it has on their control. A more healthy balance needs to be created also because the workload leaves too little time for things as involvement or training. Even though hospitals have become more dependent on production, the workload must be reduced.

Further, employees have a need for a working environment with more satisfying relations with team leaders and medical specialists. The most urgent change MST should make in this area is on the way employees are treated by medical specialists of whom they feel little appreciation and respect. Gradually a cultural should be developed throughout the organization in which people treat each other with respect and there is attention for social skills.

Finally, a job satisfaction aspect that should be improved quickly is the low appreciation employees perceive to get from management. That means that management should demonstrate attention for the ideas and interests of employees, who want to be valued. Particularly in times when is demanded much of the employees as it has been last years, appreciation is important. Appreciation can also be in the form of a reward but mainly with simple things that have a large effect, such as more often a compliment, thank you or other positive signs. When employees feel appreciated they likely also can cope better with the demands of the work.

When MST makes improvements to these aspects for the IC and OR employees, they will be more satisfied and more employees become affective committed. At the moment there are relatively few employees who are affective committed. The preconditions and satisfaction with aspects of the job create a stronger emotional bond of employees with MST, making that the employees more likely want to continue the relationship and have trust in management. Particularly younger employees will leave more often when they are not committed. It is also important to get the employees who stay at MST more affectively committed as it leads to positive behaviour on the work floor.

What also can be recognized from the analysis is that MST has insufficient explicit insight in the actual voluntary turnover, which is necessary to predict and prevent future turnover. Exit interviews with employees who leave, when they are held consistently and when the outcomes are documented and reported, create an explicit insight in the causes of voluntary turnover over a longer period. To keep the interviews confidential it is best that an HR advisor or someone outside MST conducts the interviews. Management can use the data of the interviews to adapt to the causes with HR policies and practices and thereby avoid (part of) the turnover in the future. Despite relatively few IC and OR employees having an intention to leave MST, many employees left last year out of dissatisfaction. The management of MST should focus on reducing that outflow because it often can be avoided.

To conclude, some general implications result from the description of the aspects that need to be changed. First, the financial situation of MST is noticeable at the work floor as the budget for development is under pressure and it led to an increased interest in production at the expense of the quality of care, workload and available time. These factors make it more difficult to make improvements but may not inhibit them. A plan is needed for the improvements in which is thought about the time and money that is made available for various initiatives. MST should focus on what can be realized and communicate that to the employees. Second, it can be concluded that most of the required changes are not primarily concerned with money, but with how MST is in contact with the employees, the personal attention and commitment of management. Employees feel that the interest of management in production is not in balance with the attention for their interests and needs. They recognize that in that their ideas are not listened to, through which there is low involvement, trust and appreciation. Management should create a more personal approach to the employees. It is mainly because of the signals which show that management cares about them and values their contribution, which creates positive feelings (e.g. trust) and behaviours among employees. It will be a major challenge to overcome the negativity and resistance, but when trust is created and employees are committed it results in more positive work behaviours. It is important that first the workload of anaesthesia- and surgery assistants is reduced and communication and involvement are improved. Then there should be attention for the training needs of the employees. The positive conditions should become structural and eventually part of the culture of MST.

## 5. Recruitment

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The final HRM instrument that is studied to answer the main research question is recruitment. To create more certainty that sufficient qualified employees for the IC and OR positions will be available in the future it next to the retention of employees is important for MST to increase the inflow of new employees. MST however experienced that in the tight labour market it is difficult to recruit employees for these positions. This chapter is therefore concerned with the recruitment of IC and OR employees for MST. The following research question is addressed: *What are the most urgent changes that MST should make in HR policies and practices on recruitment to provide for more qualified IC and OR staff for the long term?* To answer this question various aspects are studied, including the fit of potential applicants with MST regarding their 'ideal' values and also the preconditions that an adequate recruitment strategy should meet, concerned with the recruitment sources, message, timing and the recruiters that are used. Although the ease with which people can be recruited is restricted by the external labour market, these aspects strongly influence recruitment effectiveness. A well thought out recruitment strategy is finally required that takes into consideration the implications for the long term effects of recruitment and which is also specified at the target groups recruitment is directed at. The target applicant groups are therefore also elaborated in this chapter.

The covering concept related to employee inflow is organizational attractiveness for potential recruits, which is mainly managed by organizations to make sure that more people apply (Rynes & Barber, 1990). Due to the shortages on the labour market that has become more important for MST. Attractiveness is strongly influenced by the perceived fit of potential applicants with organizations, a notion that is based on the ASA-model of Schneider (1987). He stated that people are attracted to organizations that fit with their interests, personality and values. Research supports the idea that job seekers make a self-selection among organizations, and prefer to work for an organization they perceive to fit with (e.g. Cable & Judge, 1996). That implicates that MST should provide something that potential applicants need as it has a major impact on their job choice decisions. Evidence is also found that high P-O fit perceptions lead to higher job satisfaction and commitment and less turnover (e.g. Kristof, 1996). Since it is argued that perceptions of P-O fit are mainly based on the congruence between work values of potential applicants and those emphasized in organizations in this chapter is concentrated on the value congruence for potential applicants for the IC and OR positions at MST.

Recruitment then is seen here, following Rynes & Barber (1990), as a strategy to attract new employees to the organization. Research has shown that recruitment practices influence the feelings of attraction of potential applicants to organizations (Breaugh, 2008). Next to the attitudes of applicants towards organizations, they also influence perceptions of fit and intentions to apply (e.g. Kristof, 1996). Recruitment practices are necessary to reach potential applicants and induce them to take action, and they help to form the reputation of the organization as an employer (Waasdorp et al., 2008; Beer et al., 1984). Rynes & Barber (1990) identified four components of recruitment that have a major impact on the attractiveness of organizations: the content of the recruitment message, the sources used, the timing, and recruiters used. Organizational decisions on these preconditions might strongly affect the success of the recruitment process and are therefore used to analyze the current recruitment practices at MST. In the analysis there is not only attention for the influence of the practices on the amount of applications but to create more certainty on the long term, also long term effects recruitment practices have on the retention of new employees should be considered.

This chapter starts in section 5.1 with outlining the current recruitment policy of MST to gain insight in the objectives and principles of recruitment at the organization, which usually forms the basis for the recruitment practices. After that, an analysis follows on the applicant groups at which

recruitment of IC and OR workers is directed and what the possibilities are to recruit other groups to staff the positions. In section 5.3, the congruence between the values of potential applicants and those that are characteristic for MST is looked at. That is done through questionnaires based on the 'Organizational Culture Profile' (OCP) because it is developed to measure both job seekers' and organizational values and is tested frequently. By means of questionnaires, reliable outcomes on the value congruence can be gathered, which can be generalized to the population of potential job seekers. It also provides sufficient information. For reliability, the questionnaire is sent to all students in the IC and OR courses in the region.

In sections 5.4 till 5.7, it is analyzed to what extent the preconditions of recruitment practices are present at MST. Just as the previous chapter, it concerns exploratory research that requires obtaining an understanding of the situation, which interviews provide. The people that are directly involved in recruitment are HR employees and the team leaders of IC nurses and OR assistants. Therefore, the aspects are mainly viewed in separate interviews with three team leaders, two HR advisors and two employees of the HRM division concerned with recruitment. On some of the preconditions and potential target groups, the perspectives of two external experts of WGV Oost and Career Centre Twente (CCT) are included in the analysis. Those specific respondents are questioned because both organizations are involved in the recruitment of MST and the respondents have expertise in recruitment. CCT is an organization that promotes Twente as a good place to work and live for higher educated people and tries to attract people to the region for MST and some other large organizations. The employers association WGV Oost has a larger role in recruitment. The whole external recruitment process of MST is coupled to the mobility centre of WGV Oost called Zorgselect, which places all vacancies on their website.

## 5.1 Recruitment policy

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Before elaborating on the specific recruitment practices at MST, the current recruitment policy and objectives are analyzed. A clear recruitment policy is necessary to coordinate further recruitment practices and make targeted recruitment possible, which is particularly important in a tight labour market like that of IC and OR workers (Waasdorp et al., 2008; Lievens, 2006). Theories on recruitment also point out that organizations need to develop objectives of recruitment as they help to develop a consistent recruitment strategy (e.g. Breaugh, 2008). Part of the objectives concern the type of individuals an organization wants to attract, which is elaborated for MST in section 5.2. The objectives of recruitment can relate to the period before people are hired ('pre-hire' objectives) or afterwards ('post-hire' objectives), which are long term objectives. Although organizations normally place more emphasis on the quantitative short term objectives in times of employee shortages, the long-term qualitative objectives are also important. Organizations should for instance take into account the effects of recruitment practices on ILM arrangements that are necessary to retain employees. Important objectives therefore are to recruit mainly from the internal labour market and to have fixed points of entry that provide career development opportunities. Also it is important that recruitment is stable as it likely creates clear, more realistic expectations when people accept a job offer (e.g. Royal, 2001; Beer et al., 1984). Furthermore, it is stressed in literature that recruitment should be adjusted to the overall strategy of the organization (Beer et al., 1984).

To examine the current recruitment policy and objectives interviews are held with two employees of the HRM division at MST. From those interviews can be concluded first that there are no policies developed on recruitment, neither are there objectives formulated. As argued by one respondent, recruitment at MST is more concentrated on how procedures should be followed than on the content of HRM. Moreover, both respondents state that the recruitment practices are not adjusted to the strategy or long term objectives of MST. Next to this lack of external fit there is also no internal fit (i.e. consistency between recruitment practices) due to a lack of a guiding policy. Both types of fit are needed to support the achievement of organizational objectives. Furthermore, a lack of structure in recruitment becomes visible by looking at the points of entry for new employees. It is

stressed that they come in at the position they apply for, not based on a deliberate policy. However, for the position of IC nurse internal applicants should have experience first as general nurse at MST.

The respondents also state that the HRM division is working on centralizing recruitment and selection. Objectives are not yet formulated but one of the pillars, a central office for recruitment and selection is started. The idea is that next to the administrative proceedings, the office also gives advice on recruitment and the labour market to HR advisors and team leaders. Centralization should also promote speed and clarity by making recruitment more streamlined, creating one face of MST to potential applicants (e.g. one place where they can apply). It is argued that it will take time before the office will start with facilitating recruitment as an administrative process first.

The respondents agree that recruitment is stable at MST. While last year procedures have changed sometimes, generally the practices and procedures do not change quickly. According to both respondents, recruitment is actually too stable through which MST lags behind on developments in the area of recruitment. One respondent state that MST needs to catch up a lot to create a good structure, to be more proactive and to adjust recruitment to the changing environment. The respondents finally stress that since the freedom team leaders have in recruitment, due to the lack of central guidelines and control on their behaviour, recruitment practices may differ between team leaders.

## 5.2 Target groups

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A decision that needs to be made before the decisions on recruitment practices are made is about which group(s) of applicants an organization wants to attract. The decision at which group the recruitment efforts will be directed should play a central role in how recruitment is planned (Breugh, 2008). When target applicant groups are defined clearly, organizations can try to bring a job opening specifically to their attention and induce them to take action by using the right methods (e.g. messages, sources). Various differences are found between applicant populations that make it important to define the target population. First of all different applicants are attracted to different organizations based on the perceived fit of the organization with their interests, personality or values. Different groups also might use different sources to search for a job and differ in motivations to choose for a job or organization.

An important choice regarding the target group concerns whether organizations focus on the internal labour market or whether they rely more on the external market (Schuler & Jackson, 1987). For jobs above entry level, such as that of IC nurse, can internal recruitment provide employees with career development opportunities and therefore support the retention of employees.

According to Rynes & Barber (1990) organizational attractiveness can be enhanced by recruitment of individuals that are less 'desired' or sought after by other organizations, called non-traditional applicant populations. In this case it concerns potential applicants who are less 'desired' or sought after by other Dutch hospitals. Those groups may offer possibilities for MST to increase the inflow into the IC and OR positions for which the traditional group is scarce, but it may contain high costs and risks as it for instance may have negative effects on the current employees. The non-traditional applicant population of workers from Germany is examined, whereby these effects are taken into account. A traditional applicant population that is studied is qualified workers from parts of the Netherlands outside Twente and Achterhoek. Although there is much competition for these workers from Dutch hospitals that group can be interesting as people might want to work at MST who are currently not reached.

### 5.2.1 Current target groups

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First is described, based on interviews with team leaders, HR advisors and HRM employees, at which target groups recruitment of IC and OR workers currently is directed. It can be concluded that although IC nurse and surgery- or anaesthesia assistant are different functions, most of the outcomes apply to all three functions. Four of the six respondents state that it is formally recorded

that for every position that becomes available the internal labour market is focused on first. Only when there are insufficient candidates from the internal market, there may be recruited externally. An HR advisor mentions that for the position of IC nurse the focus is mainly on the internal labour market while for the OR positions employees should mainly come from outside MST. He also argued that the employees who are recruited are actively searching for a job. Both the respondents from the IC and the OR indicate that there are almost no qualified IC nurses or OR assistants at other divisions within MST. Qualified workers should come from the external labour market, even though those actively searching for a job are very scarce. Three respondents noticed that there is a continuously outstanding vacancy which hardly leads to applications. The respondents share the opinion that the inflow for the IC and OR positions therefore should come mainly from educating students. It is suggested by the respondents of the IC that for the course of IC nurse there are sufficient (open) applications from internal candidates. These are most often nurses in the age of 25 till 30. It is stressed by the OR respondents that the target group applying for the course of anaesthesia or surgery assistant are mainly young school leavers in the age of 16 till 18.

## 5.2.2 Substitution possibilities

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From these outcomes becomes clear which applicant populations currently form the inflow in the IC and OR positions. Other applicant populations may also offer possibilities to increase the inflow. Therefore, the substitution possibilities are analyzed here. In chapter 3, attention has been paid shortly to some of these possibilities. It is found that for 'zij-instromers' and re-entrants the IC and OR functions are too specific and the level is too high. Two other possibilities are discussed in this section: IC nurses and OR assistants from regions in the Netherlands outside Twente and Achterhoek and workers from Germany. The latter is a non-traditional applicant population. That population is mainly attention for as MST is located close to the German border and the Dutch labour market is very tight. MST should be careful with recruitment of non-traditional applicant groups because of the possible effects it can have on current employees. Rynes & Barber (1990) stressed that employees often resist the recruitment of new groups in organizations and it may lead to reduced solidarity among workers.

### 5.2.2.1 Other regions

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As it might be interesting to expand the pool of potential applicants by including people outside Twente and Achterhoek, that possibility is discussed with team leaders and external experts, completed with existing studies.

First, the issue is addressed in interviews with three team leaders. They share the opinion that people from other regions do not quickly come to work as an IC nurse or OR assistant in Twente. All respondents state that it is mainly difficult because the willingness of these employees to move is low. One of them suggests that it is also partly because there are many employers (hospitals) in other regions, particularly in the West. Another respondent argued that it requires extra efforts to recruit people from other regions to MST and to keep them. It is stated that only incidentally people outside the region apply, for instance when the partner has got a job nearby or when someone has his or her roots in Twente. According to a respondent, employees for the Thorax IC come from a larger distance as they choose specifically for the Thorax IC, which is not present in every hospital.

Further, two labour market experts of CCT and WGV Oost are interviewed on the possibility to recruit employees outside Twente and Achterhoek. Both agree that nurses or medical assistants do not often come from other regions to a hospital in Twente. According to one of them that is because they are not willing to travel much or move house. However, the respondents see possibilities. The expert of CCT stresses that the Northern and Southern regions of the Netherlands may be most interesting as the culture in those regions matches that of Twente. He states that it is necessary for MST in that case to study what makes IC and OR workers come to the region and adapt to that. Both respondents also have the opinion that it needs to be shown at which aspects Twente



can positively distinguish itself from other regions, such as shorter travel time. The respondents have experienced that people who come from other regions are mainly people who have studied or lived in Twente and therefore have a bond with the region. It is stated by the expert of WGV Oost that it is a risk to recruit people from other regions as it is more likely that they will leave to go back to the region they come from.

Finally, existing research is analyzed. The studies provide evidence for the low mobility to Twente and under IC and OR personnel. A study of the office RPA Twente in 2005 shows that there has been a low incoming flow of workers to Twente and Achterhoek from other regions. Moreover, in a study on the image of Twente under highly educated people is concluded that highly educated people from other regions do not quickly come to Twente (Timmer, 2008). In both studies it is found that the geographical position of the region is the main factor that keeps people from moving to Twente. Timmer (2008) also found that only people who have a connection with Twente or who already have an intention to leave their current region have a stronger intention to settle in Twente.

### *5.2.2.2 Germany*

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Another applicant population concerns qualified workers from Germany. They may be recruited for the IC and OR positions because in the Netherlands qualified workers are hardly available on the market. MST has the advantage over most other hospitals in the Netherlands in that it is located close to Germany, wherefore German workers have to travel less far. Various respondents are questioned how they perceive the possibility to recruit German workers and a study is examined.

In interviews with seven team leaders, HR advisors and experts of the HRM division at MST, six of them agree that it is a possibility to recruit workers from Germany. A HR advisor states that there is a shortage in Germany for IC and OR workers but that the employment conditions are much better in the Netherlands. It is stressed by three respondents that MST only incidentally has focused recruitment on Germany, in times of scarcity. The experiences with German workers on the IC and OR are mixed according to three respondents. Some of the workers fitted well while others had problems adjusting and returned to Germany. The respondents therefore have some reservations. First, five respondents argue that the Dutch language is often a problem for German workers. It is stressed that it is necessary that employees on the IC and OR can communicate in Dutch with patients and colleagues, both verbally and in writing. People who are recruited from abroad first go to a linguistic institute for two weeks after which they start working and then follow an evening course every week. It is suggested by a respondent that some German workers on the OR had problems with the Dutch language, which led to irritation for colleagues due to the communication problems it created. Two respondents argue that it therefore will take half a year before foreign workers can be used. A second constraint mentioned by five respondents concerns the cultural difference between working in a German or Dutch hospital. All respondents see as the main difference that the hierarchy is much stronger in Germany. As one of them expressed: 'German workers are used to a far more formal working culture, where the distance between nurses or medical assistants and physicians is much larger'. Dutch hospital employees are also more assertive due to the independence that is asked from them. Three respondents noticed that some German employees at MST found it difficult to cope with that difference because they are used to certain rules and structure. On the other hand two respondents suggest that the informal culture in the Netherlands, with more responsibilities for IC and OR staff, may also be a motivation for German workers to work in the Netherlands. A third constraint that is mentioned by two respondents is that the education of German employees might not match the requirements in the Netherlands. Both argue that the educational structure may be different. It is stressed that the work of anaesthesia employees in Germany, and the education that is adjusted to that, is completely different from the Netherlands. Therefore, there is a difference in experience and thinking. Only one of the two courses for Anaesthesia employees in Germany might be sufficient. Further, two conditions are mentioned

that should be addressed when recruiting workers from Germany. At first three respondents argue that it requires much support for foreign workers with all the things that come with moving and working in another country. Also one respondent stated that it requires a specific recruitment approach of the labour market in Germany.

The expertise of two respondents of CCT and WGV Oost is incorporated in the analysis on recruitment from Germany. Although both see the risks that are described above, they also see potential. The respondent of CCT argues that MST has a large hinterland just across the border, while the respondent of WGV Oost adds that there is less tightness on the labour market in Germany for IC and OR personnel. Both stress that hospitals should make sure that the diploma of German workers is registered in the Netherlands. Because of that, it may take time before people can start working. It is suggested by the respondent of WGV Oost that the difficulty with the IC and OR courses is that they are not internationally recognized. One suggests that a language course and support for individual labour tracks are required. Further, according to the respondent of WGV Oost the difference in working culture between the Netherlands and Germany can be both a motivation and constraint for German workers. Finally, the respondents agree that even when these issues are addressed appropriately there is a risk that people return to Germany.

An extensive study by J.M. Roosblad (2005) on the experiences of employees and hospitals with the recruitment of foreign nurses, support the previous outcomes. The researcher comes to the conclusion that at first it is important that diploma's in both countries match and that they can be registered in the Netherlands. Second, foreign employees need to have sufficient control of the Dutch language. Third, the authors recognize that it is very important that foreign workers have support from current employees and that they are therefore employed under the same employment conditions. In some cases employees were dissatisfied about the extra provisions that were arranged for foreign nurses and about the difficult communication, particularly in the first half year. Fourth, the researcher found that the capacity an organization has for the support of foreign nurses is an important criterion because it requires intensive support. At last is concluded that hospitals experienced procedures and rules, language and culture as problematic, but the latter two mainly apply to workers from non western countries.

## 5.4 Value congruence

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Studies on P-O fit have shown that (potential) applicants make a subjective assessment of their fit with organizations, based on their own needs and values. That strongly influences the attractiveness of an organization for them and consequently their job choice decisions (e.g. Roberson, Collins & Oreg, 2005; Kristof, 1996). Based on the perception of fit, they make a selection among different organizations, whether or not to pursue to work for one of them (Lievens et al., 2001). It is theorized that job seekers mainly use work values to determine P-O fit. It is the presence of values that are important to them that makes a job at an organization more attractive. Therefore it is crucial for the recruitment of IC and OR employees that the values of MST match with those that potential employees search for in a job. In this section is addressed to what extent the values of potential applicants are also emphasized at MST. High perceptions of value congruence for employees also have a positive effect on job satisfaction, commitment and turnover and make people more willing to recommend their organization as a good place to work (Kristof, 1996; Cable & Judge, 1996).

From theories on value congruence result several implications for the recruitment strategy of an organization. Organizations should first take action to change their value orientation, when value congruence of potential applicants with the organization is low (Boxx et al., 1991). After that, the organization should consider which values are signalled to job seekers during recruitment, as that is the primary mean through which perceptions of value congruence are created (Cable & Judge, 1996; Judge & Bretz, 1992). Organizations that emphasize the values that potential applicants find highly

desirable, may be more successful in attracting workers. Value congruence is also positively affected when clear and accurate information is provided about organizational values (e.g. Kristof, 1996).

Research illustrates various characteristics of values, that are applicable to work settings: they are beliefs that a specific mode of conduct or end-state is preferable to its opposite, these beliefs are enduring and they guide attitudes, judgments and behaviours of employees (Rokeach, 1973: in Cable & Judge, 1996). Moreover, values are important aspects of both individuals and organizations (Chatman, 1991). Organizational values refer to the shared values in organizations, which are part of the culture (Kristof, 1996). Values can also be measured for individuals and organizations similarly. The OCP scale developed by O'Reilly et al. (1991) measures both organizations' values and applicants' values. A shortened version of the original OCP scale by Cable & Judge (1997) is applied here. Appendix X shows the 40 work values, which Sarros et al. (2005) categorized in the following groups: competitiveness, social responsibility, supportiveness, innovation, emphasis on rewards, performance orientation and stability. Twelve items could not be placed under one of these groups.

A questionnaire with these values is send to 139 students in the courses IC nurse, surgery assistant and anaesthesia employee who are representative of potential applicants. A questionnaire is also send to 38 team leaders, HR advisors and senior employees of MST who are familiar with the culture of the organization. Students responded on a 5 point Likert scale for each value to what extent the value is important for him or her ranging from very unimportant to very important. Respondents of MST answered on the same scale how characteristic the value is for MST. 80 of the 139 students returned the questionnaire, leading to a response rate of 57.6% and 23 of the 38 MST respondents responded (60.5%). There are five missing values of two respondents, which are processed in the analyses.

Before describing the results, assumptions and notions are formulated. First, the analysis is primarily based on the separate values in the OCP scale because not all values can be categorized. Second, although the Likert scale is an ordinal scale it is treated as interval as it can be assumed that the distances between response categories are approximately equal and it enables a better data-analysis. Third, to clarify the description of values to respondents the questionnaire is translated for them in Dutch. Fourth, there is not made a distinction in the analysis between students from the different courses. That is because value orientations in an organization cannot easily be segmented for different related groups and it is assumed that people who choose for the acute care in hospitals do not differ much in work values. That is tested by a One-Way ANOVA test that analyses if the students' mean scores on the values differ in the three courses. It comes out that for all but one value (risk taking) the means are not significantly different, which supports the assumption. Fifth, it is noticed that the outcomes of the responses of students are more accurate and reliable because more students than employees of MST have participated.

An overview of all the scores on the values in terms of percentages and means are included in appendices XII and XIII. Table 5.1 shows the total distribution of responses of students and employees over the five response categories. It becomes clear that respondents usually do not use the extreme scores. Only students have relatively often chosen for the highest category, meaning that a value is very important to him or her. It becomes clear that students generally rate the values higher on the importance for them than respondents of MST answered that values are characteristic for MST. A difference in this direction is expected as people often find values important while respondents of MST respond on the values of another entity, but the differences are very large. When reading the analysis of this section, that should be kept in mind.

**Table 5.1** Response distribution

Distribution responses over outcome categories						
Groups	1	2	3	4	5	Total
MST	7.9%	39.6%	36.0%	14.7%	1.7%	100%
Students	1.2%	6.5%	23.0%	48.3%	21.1%	100%

To analyze the extent to which the ideal values of students are emphasized at MST, a ranking of the weighted mean scores on the values is used and the differences in means on those values between both groups are tested by a t-test. It was the purpose to make a ranking of the ten values with the highest means but as two values come in tenth place both are included. By using mean scores all responses in the categories are incorporated. The risk with comparing means is that people with extreme scores have more influence than people with average scores. With five response categories there are not as much extremes.

To verify the outcomes of the ranking and the t-test a ranking is made based on percentages of respondents who responded to a certain value that they find it (very) important or (very) characteristic. Also is analyzed for each value whether the responses of students and employees of MST differ significantly, by applying a chi-square test. For that analysis the scale is converted into a three point scale where answers that point in the same direction are grouped (i.e. important and very important). These outcomes can be found in appendix XIII. It is noticed that with the t-test and chi-square test, those which are used here, theoretically different things are compared (importance and characteristic). What is actually compared in this research however is the strength of importance and characteristic, which can be done by using these tests.

When comparing the rankings of students and employees (included in appendix XIII), it becomes clear that not one value is included in both lists. That means that the values that students consider most important are not most characteristic for the culture at MST. Students particularly rate values highly that relate to supportiveness (collaboration and attention for people individually and as a team) and performance (enthusiasm for the job and high organization). Also fairness, quality of production and services, reflection over own handling and adaptability are important for them. Finally, relating to the way people have contact with each other, they value that people are open for other perspectives (tolerance) and that there are few conflicts on the work floor. On the contrary, most characteristic for MST is the focus on security of employment, working long hours and on performance related values (being result oriented and the presence of high performance expectations) and also on competitiveness (achievement orientation and distinctiveness of employees). Other values that are central at MST are the autonomy of employees, the emphasis on obeying rules and informality of the contacts at work. The main difference is that the culture of MST is directed at performance aspects while students are more concerned about how people are working together and how they are treated. The standard deviations on the values, included in appendix XIII, show that the responses do not deviate much from the mean scores. The respondents strongly agree on the outcomes on the values.

**Table 5.2** Equality of means

Students	Mean students	Mean MST	Mean difference	Sig. (2-tailed)
1. Good collaboration	4.69	2.43	-2.253	0.000
2. Enthusiasm for the job	4.51	2.70	-1.817	0.000
3. Being team oriented	4.51	2.61	-1.904	0.000
4. Being people oriented	4.43	2.35	-2.077	0.000
5. Fairness	4.37	2.50	-1.867	0.000
6. An emphasis on quality	4.24	2.74	-1.498	0.000
7. Being reflective	4.21	2.39	-1.821	0.000
8. Confronting conflict directly	4.18	2.43	-1.740	0.000
9. Being Highly organized	4.14	2.26	-1.877	0.000
10. Tolerance	4.13	2.48	-1.647	0.000
11. Adaptability	4.13	2.52	-1.603	0.000

To analyze the equality of the mean scores between students and MST, an independent-samples t-test is used. That is an appropriate method to compare means of interval variables where two groups are compared that are independent, as is the case here. The main outcomes on the t-test are shown in the last two columns. The two tailed significance indicates the chance that the null

hypothesis, that the means are equal, is rejected. A confidence level of 95% is applied. The differences in means have a two tailed significance of 0. That means that the differences that are found between the means of students and MST are significant. Whether or not equality of variances is assumed in the t-test has no effect on these outcomes. As the outcomes on the two tailed significance levels show no difference between values, in the second last column the absolute differences in means are portrayed. Although those differences do not deviate much from each other it can be concluded that MST particularly differs from students on the value good collaboration, followed by people orientation and team orientation. Those values should be emphasized more at MST to create a better fit with potential applicants.

The ranking based on percentages of respondents who find a value (very) important, and a chi-square test, support these outcomes. The results are shown in appendix XIII. In this ranking, the upper five values are the same, though enthusiasm for the job and team orientation switched places. From the other six values in table 5.2, five of them are also in this ranking in the top 10. Confronting conflict directly is replaced by taking individual responsibility on the 11<sup>th</sup> place. The results of the chi-square test also show a two tailed significance level of 0,000 for each value. In both methods, the differences between the strength of importance of values for potential applicants and the strength of values being characteristic of MST are significant.

## 5.4 Recruitment sources

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In the next sections, it is analysed whether the preconditions of recruitment practices are present at MST regarding the recruitment of IC and OR employees. The analysis starts with the recruitment sources that organizations use to reach out to the applicants. The choice which sources to use is important, as it both influences the amount of applicants reached and long term outcomes (e.g. retention). The success of organizations with reaching applicants has a major influence on the entire recruitment process since the following recruitment stages depend on the size and the quality of the pool of applicants (Carlson, Connerley, & Mecham, 2002).

To clarify the analysis of recruitment sources at MST, classifications are used. Henkens et al. (2005) describe two common classifications, which form a sliding scale. The first classification concerns the distinction between active and passive recruitment, where in the case of the former organizations go in search of potential applicants while passive recruitment indicates that organizations wait until an applicant contacts the organization themselves. The second classification relates to formal or informal recruitment sources. Formal involves the use of an intermediary (e.g. newspaper) and informal means that organizational representatives are in direct contact with potential applicants. Based on prior research Henkens et al. (2005) stress that the greater the difficulties organizations experience with reaching people to fill vacancies, the more they are likely to make use of active and informal sources and use a wider range of sources. That is particularly the case when there is general tightness on the labour market because competition for the available labour is high then. Boxall & Purcell (2003) argue as a general rule that proactive employers are more successful in tight labour markets.

It is stressed in literature that it is crucial to adjust the sources to the specific target groups an organization wants to attract, particularly when vacancies are difficult to fulfil (Waasdorp et al., 2008). Employers therefore should know how the target group orientates in searching for a job, which sources they use. Organizations also should look at the sources that potential applicants use normally (for instance for their hobbies), which can be used to reach people who are not actively searching for a job. When there is scarcity on the labour market, it is important to reach out to these people who are called latent job seekers (Waasdorp et al., 2008). It is outside the scope of this research to examine the sources IC nurses and OR assistants use.

When the effectiveness of recruitment sources is discussed in literature it mainly concentrates on 'post-hire' outcomes of the sources. Zottoli & Wanous (2000) conducted a meta-analysis on the effectiveness of recruitment sources and found that there is much agreement in literature that employees who are recruited through informal channels are more satisfied and less

likely to quit. The main explanation for that comes from the 'realistic information hypothesis', based on the notion that recruitment sources differ in the extent to which they provide detailed and accurate information to potential applicants (Zottoli & Wanous, 2000). People who are recruited by certain sources are likely to have more accurate and realistic information, which makes a better self-selection possible, based on the perceived fit with the organization. This hypothesis is related to the effect of met/unmet expectations. Moser (2005) found that employees who are recruited through internal recruitment sources are better informed about the organizational attributes. That leads to fewer unmet expectations of people after they have accepted a job and therefore to higher job satisfaction and commitment. According to the realistic information hypothesis, informal employee referrals are most effective. Besides employees possessing accurate and realistic information, they are due to their position also able to make a good assessment of fit of the person with the organization (Ullman, 1996: in Zottoli & Wanous, 2000).

Interviews are held with respondents within and outside MST to get an objective view on the recruitment sources MST uses to reach IC and OR employees. First is described how team leaders, HR advisors and experts of the HRM division responded to the sources that are used. Three sources are mentioned by all six respondents because they are used regularly and MST is more or less bound to them. It is suggested that internal vacancies are always displayed on the website of MST and vacancy boards, while external vacancies are all shown on the websites of MST and Zorgselect. The use of other external sources is determined by individual team leaders and their HR advisors. It is stressed by two HR respondents that it is the intention that the HRM division will determine which sources are used in the future. Regarding the sources that are not fixed, four respondents argue that trade journals are used to reach potential applicants. According to a HR advisor trade journals are mostly used when additional external sources are applied. He stresses that IC and OR employees are subscribed to their professional trade journal and can be reached with that source. There is less agreement on whether other sources are used. Two respondents noticed that regional newspapers have been used but state that it has not been fruitful. Other sources that are mentioned (once) are open applications, job markets, connections from team leaders (e.g. other hospitals) and job banks.

The sources MST uses are mainly passive. The only active sources that are mentioned are job markets and the use of connections of team leaders. The respondents generally share the opinion (five of the six) that MST is not active in reaching potential applicants. It is stated that MST does all the 'regular' things, but does not actively search for applicants. It places a job advertisement on the website and wait. Three respondents suggest that it is partly a deliberate choice. It is first of all stated that people who want to work on the IC and OR positions at MST know where they can find the advertisement. It is suggested regarding potential internal candidates that it is their own task to apply, they are not stimulated or considered by team leaders. Another reason is that MST wants to recruit IC and OR personnel who are very active and motivated and search for MST themselves.

Further it can be noticed that MST largely uses formal recruitment sources. Only using the connections of team leaders is an informal method. No respondent mentioned informal employee referrals as a source. When respondents are asked whether they make use of their employees in recruitment of IC and OR personnel they all agree that employees are not stimulated to use their connections to recruit new employees. There is also no active policy about that. Remarkably, one respondent stresses that people regularly apply from the networks of employees while three others state the opposite.

It is questionable whether the recruitment sources are adjusted to the target group at which recruitment is directed. Indicative for a lack of targeted recruitment is that according to two respondents a distinction is not made in recruitment for the course or for qualified workers on the OR division, which concern different applicant groups. For the IC course only the internal labour market is concentrated on. Furthermore, it is suggested by a respondent that there is no explicit knowledge within MST on the search behaviour of potential applicants or the effectiveness of recruitment sources. On the other hand is indicated by three respondents that for the IC and OR positions the trade journal is often the only external option. It is suggested by two of them that the

functions are very specific for which a newspaper is too broad. Finally, the extent to which the recruitment sources are targeted on specific groups also depends on individual team leaders.

In the interviews with experts of WGV Oost and CCT is addressed how MST should try to reach IC and OR personnel. The respondent of CCT first mention that, since every hospital in the Netherlands is searching for the same scarce employees, MST should try to search in a different way than other hospitals, and therefore use other sources than it usually does. Both respondents thereby stress the importance of targeted recruitment, for which the choice of recruitment sources depends on the vacancy and target group. It is suggested that when searching for qualified IC nurses or OR assistants it is not a good option to advertise in a regional newspaper because it will be directed at employees of hospitals only in Hengelo and Almelo. It is better to concentrate on the trade journal they read. Regarding surgery and anaesthesia employees, it is argued by the expert of WGV Oost that it is important that hospitals structurally contact, inform and stimulate people during their prior education. The respondent of CCT argues that targeted recruitment means that MST should have more attention for information about where potential applicants can be found. Another point the respondents agree upon is that it is crucial to make more use of internal employees as a source of recruitment. As one respondent point out, the employees are the best advertisement for good employer ship, when they are satisfied and committed.

## 5.5 Recruitment message

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It is not only necessary that the right applicants are reached but another precondition is that they are also stimulated to apply for the vacancy and accept a job offer. That part of the recruitment process is concerned with the message that is communicated to potential applicants, which influences organizational attractiveness (Rynes & Barber, 1990). Organizations have much freedom to determine in which way the characteristics of the vacancies are described (Rynes & Barber, 1990). Particularly evidence of the effects of the content, favourability and details of the recruitment message is found (e.g. Breugh, 2008). The effects not only concern the amount of people applying but also long term effects on the availability of personnel (e.g. retention). Before analyzing the recruitment message at MST, these characteristics of the recruitment message are elaborated on.

Regarding the content of the recruitment message it is important that it should attract the attention of potential applicants and motivate them to take action (Lievens, 2006; Waasdorp et al., 2008). Organizations should try to convince potential applicants to apply for a position. Waasdorp et al. (2008) state that therefore the potential employees should be central, instead of the organization. It is stressed to be particularly important in a tight labour market to concentrate on what induces people to take action, what their motives and considerations are to choose for a job and an employer and to adjust the recruitment message to those factors.

Crucial is that what an organization communicates to potential applicants matches reality. It is found to be important to provide employees with realistic information about a vacancy, meaning that the message includes both positive and negative information on the job and organization (e.g. Breugh, 2008; Rynes & Barber, 1990). When messages are too optimistic they may lead to higher attractiveness on the short term, but this has negative effects on the long term. That is because the message portrayed during recruitment creates certain expectations among applicants and when these are not fulfilled it can lead to decreased job satisfaction and commitment and an increased intention to leave the organization (e.g. Breugh, 2008; Breugh & Stark, 2000). When organizations provide Realistic Job Previews (RJP), it creates realistic expectations for potential employees and makes a better self selection possible where those who do not perceive a good P-O fit can withdraw from job consideration. It does not mean that every negative aspect of the job should be explained in detail, but organizations should be aware not to create too optimistic expectations. It is suggested that the effect of RJP is largest on people who do not already have an opinion what a position with an employer involves (Breugh, 2008).

A third characteristic of the recruitment message is the detail. Researchers assume that applicants should be provided with sufficient detailed information (Rynes & Barber, 1990). It is argued that potential applicants have little information on important job attributes when they are searching for a job and therefore base the initial decision whether or not to apply on their perceptions and attitudes about organizations (e.g. Rynes, 1991). When they receive detailed information it results in more favourable perceptions on the attributes of an organization. Barber and Roehling (1993) found that job advertisements that contain more information positively influence organizational attractiveness in that way. Their study supports the notion that the extent of the detail of the recruitment message influences the intentions of applicants to seek employment with organizations. Besides, it is theorized that more detailed information may result in a better assessment of P-O fit by applicants and in more informed choices (Roberson et al., 2005).

How the characteristics of recruitment messages are approached by MST is described here based on interviews with respondents of MST, CCT and WGV Oost.

It becomes clear first from the interviews with seven team leaders, HR advisors and employees of the HR division as they all state, that there are no guidelines or vision on what should be communicated to potential applicants. One argues that the message to carry out is not very well thought out. Only two respondents state that on their division (the Thorax IC and Anaesthesia) it is agreed upon to position the division in a certain way towards applicants. According to three HR respondents it is determined by the team leader, with support of a HR advisor, which message is communicated in job advertisements and during the job interviews. Two respondents indicate that some function requirements are fixed in job advertisements but team leaders have a lot of freedom, also in job interviews. An HR expert states that the HRM division is trying to exercise more control on the messages in job advertisements by reducing the room for adjustments in the message.

Regarding the content of the message, the respondents share the opinion (five of the seven) that the job advertisement texts of MST are not appealing. They do not motivate potential applicants to take action. It is declared by two respondents that the messages are very stiff. An HR expert argues further that the message is too much focused on the requirements of the function, which are assumed to be known by most applicants and which do not differ much between hospitals. Three respondents also indicate that job interviews are mainly focused on selection of the applicant. They mainly look whether the applicant is suited for- and motivated to do the job. Applicants are not being persuaded. Furthermore two respondents of the HR division indicate that the recruitment message is not specifically adjusted to the specific target group.

The perspectives on the detail of the recruitment message show a difference between the job advertisement and job interviews. Where two respondents state that much information is provided during the job interview about organizational and job attributes, the information in the advertisement is minimal according to three respondents. That implicates that people might receive detailed information when they have applied but due to the few information in the job advertisements it will be less likely that people apply at all. Furthermore, a respondent argued that people who apply for an educational place for the IC are recruited from the internal labour market and often already have an image of the job and division.

As one respondent is not involved in the job interviews six have given their opinion on the realism of the recruitment message. Five of these respondents have the same opinion, that the information provided to (potential) applicants is realistic. According to two respondents of the OR and IC division realistic information is important so that applicants make a well thought out job choice. That is necessary to success in the courses and professions. Four respondents suggest that applicants are always offered the possibility to get a tour on the division, for one or a few days, to get an image of the practice at MST. Two respondents point out that there usually is a HR advisor involved in the job interviews to prevent that commitments are made that cannot be realized. According to another respondent realism is supported by the fact that employees are also involved in the job interviews and talk about the division. Although most respondents stress that the recruitment message is realistic, two respondents argue that they experienced repeatedly that



information on labour conditions provided to applicants was not realistic on the Thorax IC. As one expressed, commitments are made to applicants that could not be realized, for instance on compensation for travelling expenses. Besides, a respondent state that on the Acute axis it is determined only to talk positive during the job interviews, unless applicants have questions about the negative facets of the job.

To get an objective view on the realism of the message, the issue is also discussed with four employees of the IC and OR divisions that joined MST last year(s) and who still have a good recollection of their application. All respondents perceive the information they received during recruitment as realistic. One respondent stated that expectations on labour conditions are deliberately not raised too high by MST, pointing at the financial situation in the job interview. Three respondents argue that it was possible to walk along for a day on the work floor. As stressed by two of them, they could get a good image of the practice during that day, and by the job interviews in which much information is provided about the organization and content of the profession. Although one IC employee stated that in the job interviews is only talked very positive about the division, the respondents share the opinion that things are not promised when they cannot be realized. Three respondents experienced negative things they had not expected (i.e. that it required much effort to prove themselves on the general IC and the high workload on the Thorax IC) but do not relate that to the information provided during recruitment.

Finally, the experts of CCT and WGV Oost are questioned on the message MST provides in the advertisements and how to appeal to potential employees for the IC and OR positions. Their responses show that things can be improved about the recruitment message. First of all, they stress that the message portrayed in the job advertisement is not appealing. The respondent of CCT notices that the text is very businesslike and superficial. The experts add that the message should be more about the reasons for applicants to choose for MST. The respondent of WGV Oost argues that the message in the advertisement currently too much focuses on the description of the function. The other expert finds that there should be more information in the job advertisement, for instance on the opportunities for development. Furthermore, it is indicated that the labour market has changed to a market in which the demands of (potential) employees has become central. MST, just as other hospitals, is still very much focused on what they offer. According to the respondents, MST instead needs to concentrate on how it can be made attractive for potential applicants for the IC and OR to work at MST. Adjusting the recruitment message to the applicants implies that MST also looks at how that can be organized. When the practice differs from the message, applicants receive unrealistic information.

## 5.6 Recruitment timing

Another component of recruitment that forms a precondition concerns the timing of recruitment activities. Although the recruitment sources and message have more impact on the success of recruitment, some aspects of timing are found to be important. One aspect that is particularly stressed in studies is the timeliness of the actions of the employer during the recruitment process. It is found that recruitment activities and selection phases should follow each other relatively quick and information should be provided to applicants on time so they do not have to wait long (Rynes & Barber, 1990). Rynes et al. (1980) experienced that delays between recruitment stages can discourage applicants, which may have the consequence that they drop out and/or accept other job offers. This indicates that when delays are reduced more candidates remain at the end of the recruitment process. In a study of Waasdorp et al. (2008) 17% of the respondents stressed that an application procedure that is too long is a reason not to chose for an employer. Delays can have a negative influence on attractiveness. Chapman et al. (2005) come to the conclusion that applicants who received timely responses from employers had a more positive view of the employer. A second

aspect that affects recruitment success is that organizations provide a job offer before another organization does. This heightens the chance that the offer is accepted (e.g. Lievens, 2006).

Timing of recruitment is strongly related to the recruitment procedure. Before elaborating on the perspectives of team leaders and HR experts on timing the procedure at MST is described, which is discussed with two employees of the HR division. Since MST is about to make substantial adjustments in the procedure soon those adjustments are also analyzed. Currently the recruitment procedure consists broadly of nine steps. First, the team leader and HR advisor of a division determine that there is a vacancy and draw up the advertisement. Then an employee of the HRM division looks if the advertisement is grammatically right. After that, the advertisement is placed for 48 hours on a specific part of the website of MST for reassignment and mobility candidates. The next step is that the vacancy is released internally for 10 days on the website of MST and on vacancy boards, and the rest of the employees of MST have the opportunity to react. When that does not produce sufficient applications, the job advertisement goes external and is placed on the website of Zorgselect and MST. When the finances of a cluster are overdrawn, permission of the board of directors is needed first. After the vacancy is released, applicants can send a letter or an email to the person who is responsible for the vacancy. When the application comes in directly at MST it depends on the person to which the application is directed when the applicant receives a confirmation. Subsequently all applications are collected and a first selection is made after which the job interviews are planned. Finally, applicants are evaluated and the team leader decides who will be hired.

MST is aware that the speed of the procedure needs to be improved. The new procedure is created to make recruitment quicker, more efficient and unambiguous. MST will make use of a new digital system to post vacancies and handle the whole procedure. Both respondents argue that there still is much to be done to make it work. The main difference with the current procedure is that it becomes centralized. There will be one place where people can apply while applications now come in at multiple places. The recruitment and selection office becomes responsible for the completion of applications. They follow what happens with the vacancies and make sure that deadlines are made. Recruitment also will be arranged digitally. According to the respondents therefore data on applicants can be available and processed quicker and applications and communication will be digital. That makes it possible to automatically send a confirmation when an application is received and makes it easier to signal deadlines in the procedure.

HR advisors, experts of the HRM department and supervisors are questioned how they perceive the timing of recruitment at MST. Most respondents (five of the seven) stress that applicants for educational places had to wait long before the vacancies are released. The three team leaders argue that therefore applicants who openly applied have dropped out of the process and where already hired by another hospital at the time the vacancy was set. An additional negative consequence of the delay, mentioned by two respondents, is that the necessary introduction period for new employees is reduced. According to four respondents is the cause of the delay the long decision making process at the director's board, which has to approve vacancies for educational places.

The majority of the respondents (five) share the opinion that applications are not handled quickly and people are not always informed on time. It is mainly argued by four respondents that a cause of that is that the processing of applications is not structured. Applications come in at multiple places. According to two respondents, it therefore happens that applications remain in the drawer and it may take several weeks before applicants receive a reaction. It is suggested that some employees of MST accumulate all applications before they give a reaction and that some do not even report the application to the responsible person. An employee of the HR division state that it is inherent to the decentralized approach of recruitment that applications come in at multiple places. That makes it difficult to signal deadlines. Another respondent argues that job interviews are often planned too late by team leaders and HR advisors. Furthermore, two respondents stress that there are guidelines, including periods of time for steps in the recruitment procedure, but those change often and it depends on individual team leaders and HR advisors whether they are followed at all. It is also up to the self-discipline of the HR advisor to keep track of incoming external vacancies by

Zorgselect. According to one respondent, external recruitment takes four to six months, while the guideline is three months.

## 5.7 Recruiters

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The last precondition of recruitment that is discussed in this report concerns characteristics of the members of the organization with whom applicants come into contact (i.e. the recruiters). Two characteristics that differ between recruiters from different positions are theorized to affect the impression and decisions of applicants about organizations and thereby have a significant impact on the outcomes of recruitment. These concern the informativeness of recruiters about the organization and job and their credibility perceived by applicants. Recruiters with greater informativeness and/or credibility have a positive influence on the attractiveness of the organization and acceptance of a job offer (e.g. Rynes & Barber, 1990; Breugh, 2008). It is argued by Rynes, Bretz and Gerhart (1991) that the influence of recruiter characteristics on attractiveness can differ, where the influence is generally higher when the applicant possesses less information.

It is found that certain recruiters have a higher informativeness than others: they possess and give more information. Rynes et al. (1991) state that recruiters therefore play an important role in the assessment of fit with the organization, where informative recruiters support applicants in making that assessment. It is argued that future bosses and direct colleagues have a higher informativeness as they know better how the job and organization is in reality (Breugh, 2008). They are also perceived to be more credible than recruiters of the HR division because they are in direct contact with the function and are perceived less as professional job sellers (Fisher, Ilgen & Hoyer, 1979). Recruiters from the HR division are sometimes blamed for 'selling' vacancies to fill in a job opening. The credibility of recruiters is found to be higher when realistic job previews are provided (Fisher et al., 1979). When the message about the organization is too positive, credibility may be lost.

The recruiters that are used at MST and their role in the communication with applicants is analysed through interviews with seven respondents of MST. A first outcome is that according to five respondents there are no formal arrangements about who is responsible for communication with applicants during job interviews. Team leaders can determine who are involved. There is a structure though on the divisions. All respondents stressed that job interviews are held with a team leader, medical specialist, HR advisor and some employees of the work floor. According to three respondents, HR advisors are not always present at the interviews. It is argued by a team leader that in the case MST recruits people for the OR courses, a mentor is often involved in the interviews. People are not trained in doing job interviews with applicants.

The respondents agree that employees are involved in the job interviews with the applicants. As pointed out by four respondents, the role of employees is mainly to advise the team leader on selecting the right employees. One of them suggests that in the interviews, employees try to get an image of the quality, experiences and character of the applicant and also look if they fit with the team. It is stated by a respondent of the IC that the employees do not point out to the applicants what is expected of them or how the culture is at the organization, but there is room to ask such questions. Two others however suggest that employees try to show their experiences and give an image about the division. The role of the HR advisor is stressed to be explaining the procedures and personnel issues to the applicant and supporting the team leader. The team leader has the ultimate responsibility in selecting applicants and that he or she leads the job interview.

## 5.8 Conclusion recruitment

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In this chapter the recruitment of new IC and OR personnel is analyzed. In the analysis is looked at the current recruitment policy, the target groups at which recruitment is directed and the substitution possibilities for those groups, the preconditions recruitment practices should meet and the extent to which values of potential employees are part of the culture of MST. Conclusions are drawn from the analysis of these aspects, which provides insight in the factors that most urgently

need to be improved to structurally increase the inflow of new IC and OR employees. Thereby the effects of recruitment practices on the retention of new employees are taken into account so that recruitment contributes to the availability of personnel on the long term. The crucial outcomes on value congruence are based on the OCP scale. Without saying that the list of values in this scale is complete, the OCP scale consists of a broad list of values and provides a good image of the kind of values that (potential) applicants consider important. In this section, first a general conclusion is formulated. Subsequently conclusions are discussed on the target groups at which recruitment of IC and OR workers should be directed at, and the aspects that are properly applied and particularly those that need to be improved. These outcomes should be included in the recruitment policy.

Many problems with recruitment are related to a lack of policies, through which there is a lack of structure and information. For targeted and consistent recruitment practices, policies and objectives need to be formulated. At the moment, there is no such framework that gives direction to the recruitment activities. Consistency of recruitment is also difficult at MST because team leaders and HR advisors have much freedom to determine how recruitment practices are applied. Thereby, a diversity of practices are developed that are not congruent with the preconditions of recruitment. A recruitment policy should define the freedom they have to fill in recruitment activities for the professions of their division. Also supervision is needed to see if the guidelines are being followed. A positive development is that the first steps are taken to arrange recruitment more central.

The recruitment policy should include a description of the target groups for the recruitment of IC and OR workers. MST has a clear image on the group(s) that the recruitment is directed at, a necessary condition to adjust the recruitment instruments to those groups. Although the target groups for the IC and OR positions are rather similar, there are differences that underline the importance of a targeted approach. While there is sufficient supply from the internal labour market for the course IC nurse, students for the OR courses need to be recruited mainly from outside MST. There is also an age difference between both target groups. Furthermore, it turns out that MST focuses on a small group of potential applicants. This is related to the tightness on the labour market but also to the fact that the recruitment activities are restricted to the region and are only focused on people who are actively searching for a job. People who are dissatisfied at other hospitals and who might want to work for another employer are not reached. Even though it is more difficult to reach that group of job seekers and spur them to take action, it is important in a tight labour market to focus recruitment also on that group. While the substitution possibilities for traditional target groups of MST are generally low, in this chapter the possibilities to recruit qualified employees from other regions within the Netherlands and from Germany are looked at. In the first case can be recognized that the mobility among hospital employees is low and people from other parts of the Netherlands are often not prepared to travel long distances or to move to Twente. Only occasionally people move to Twente who already have a bond with the region. A study on the extent of that potential in other parts of the Netherlands can be useful. For the Thorax IC it is a better opportunity to recruit people from outside Twente and Achterhoek since it is more exclusive. Moreover, it is stressed by external experts that there are possibilities for MST to recruit in other parts of the Netherlands but that it requires extra efforts to attract and retain those people, and that MST needs to emphasize the characteristics that distinguish Twente from other regions and the motives of potential applicants to move to Twente. Recruitment of IC and OR workers from Germany is seen by the respondents as a good opportunity. Though, all sources indicate that risks are involved, and that MST has to meet some conditions in order for it to work. Challenges are first to overcome the cultural and language problems for many foreign workers, which is necessary to work as an IC nurse or OR employee in the Netherlands. The cultural difference between German and Dutch hospitals can also be a motivation for Germans, which MST might anticipate on in the recruitment message. Further, it is important for MST to have the support of the current employees for the recruitment of German workers. Therefore German workers should be employed under the same employment conditions as Dutch employees and henceforth control the Dutch language before they actually start

working. Management of MST must bear in mind that it takes several months before a foreign employee can be used effectively. That is also caused by the fact that the courses workers have followed in Germany are not always (exactly) congruent with the Dutch course, and it therefore may take time before the employee is registered in the Netherlands. Further comes forward from the analysis that intensive support is required from HRM and people from the work floor to make sure that German employees can adapt, and that all kinds of things are arranged for them. MST should consider if it can meet these conditions. When that is the case it will be a good option to approach the German market for qualified IC and OR employees.

From the analysis of recruitment practices at MST can be recognized that several aspects are properly applied. Most important is the condition that (potential) applicants receive realistic information. Most team leaders and HR advisors deliberately pay attention to that, for instance by giving applicants a tour on the work floor prior to a possible job offer. MST is thereby careful not to create too high expectations, which can have negative long term effects on job satisfaction, commitment and retention of new employees. Providing people with realistic information has a particularly large influence on applicants from the external labour market, who usually do not have a clear image of the reality of the organization when they consider applying. Though, it should be prevented in the future that promises are made on the Thorax IC that cannot be realized. Also team leaders and HR advisors should be careful not to talk about the job, division or organization only in a positive way. Second, at MST the internal labour market is always looked at first with the recruitment of new IC and OR employees. That is a good principle as it creates advancement opportunities for current employees. In practice it means the throughflow of nurses to the IC. It also becomes clear that recruitment is stable at MST although many changes are yet to be made. MST should bear in mind that those changes can have an impact on the expectations of new IC and OR employees when they start their job. Finally it can be concluded that the people who are involved in the communication with applicants are generally most informative and perceived by applicants as most credible. That enhances the attractiveness of MST and helps applicants to make a good job choice.

In this chapter becomes clear that there are also several aspects of recruitment that urgently need to be improved and formulated in the recruitment policy. The improvements influence both short- and long term recruitment outcomes. MST has a lot of freedom to alter those aspects.

The main improvement point concerns that values which potential applicants for the IC and OR positions consider most important are not being characteristic for MST. Congruence on those values is important for the attractiveness of MST. It thereby strongly influences the choice of potential applicants whether to work for the organization. It also has a positive effect on the retention of new employees. Adjustments are needed urgently in the value orientation of MST so that it offers what potential applicants need most. It is currently more likely that they will choose for another hospital that does match their values. It cannot be changed overnight but when the most important values in the eyes of potential employees, are regularly emphasized in the organization, and when supervisors act accordingly, they become part of the culture in time. Particularly attention should be paid for collaboration and teamwork, employees should come first, they should be treated fairly and they should be motivated to show enthusiasm for the job. When the values are part of the culture, that subsequently needs to be emphasized in the recruitment message.

Further, some preconditions of recruitment practices are missing or insufficiently applied, which influences the attractiveness of MST negatively. One of those conditions concerns the sources that are used to reach potential employees. It is noticed that MST is therein very passive. It mainly places the initiative at the applicant, and waits until it receives a reaction on a job advertisement. Instead more action should be taken to look for (potential) applicants. There are many possibilities to search actively, for instance by giving guest lessons on secondary schools to make students enthusiastic for the OR courses and for MST in general. An important criterion for using additional sources is their effectiveness. Thereby it is argued that MST has to keep in mind that the motivation of people to apply for the IC and OR courses is also very important. Further, MST hardly makes use of

informal sources, of which employee referrals are the most effective. Using the network of employees is also an inexpensive way to recruit new IC nurses and medical assistants and generally this also has a positive effect on the satisfaction and retention of people who are recruited. It is essential therefore that employees are satisfied. Otherwise they will be less likely to recommend MST to people. Employees subsequently need to be stimulated to use their network, for instance by rewarding them. Further it is remarkable that MST has no explicit image on how potential applicants search for a job and where they can be found, although trade journals are used specifically to recruit qualified people for the IC and OR positions. More insight is needed in their media behaviour to reach the target group(s). It should be examined for active and latent job seekers. For the latter group, information is needed about their normal media behaviour.

Another precondition that urgently needs to be improved is concerned with the recruitment message. From the interviews it can be deduced that the message is not appealing, which is important to stimulate potential applicants to take action. The job advertisement texts should be less businesslike and less focused on the function description. Instead it should be more about the reasons for potential applicants to choose for MST. Job interviews should also be more concentrated on making applicants enthusiastic for the organization. Employees can play an important role in that aspect as they are generally perceived as credible by applicants. It is crucial though that the message matches the reality at MST. That also means that management looks if things can be organized internally to meet the demands of (potential) applicants. Further it is remarkable that the job advertisement texts are not adjusted to the motives of the target groups(s) to choose for a job or an organization. Because many hospitals are unilateral in their messages, MST can distinguish itself by focusing on the potential employees in the recruitment message. Next, vacancies should contain more information. From the reactions of respondents appears that sufficient information is provided in job interviews but that the amount of information in vacancies is limited. Potential employees often have little information and base their choice mainly on the information given in the recruitment message. By providing detailed information MST will become more attractive and potential employees can make a better choice. Vacancies should be expanded with information on the environment of the function as well as work values and other aspects that determine the choice of potential applicants.

A last precondition of recruitment practices that is insufficient is the timing, what is concerned with two aspects. First, from the analysis results that the actions in the recruitment procedure generally do not follow each other quickly, and that applicants are not always informed in a timely manner. That enhances the likelihood that applicants drop out of the application procedure and/or accept a job offer at another hospital. It also may discourage other potential IC and OR employees to apply at MST when they come to know about this. Moreover, delays in the reaction to applicants do not show that MST gladly wants to contract them. To deal with the causes of the delays applications should no longer be received at multiple places. That provides clarity and reduces the dependence on individuals for a timely completion of an application. It is positive that MST has understood these problems and takes action to quicken the procedure, whereby there will be only one contact point. The central office of recruitment and selection should monitor if guidelines are followed by team leaders and HR advisors. Second, it is stated that vacancies for IC and OR courses are released too late due to the decision making process of the board of directors. That led to applicants dropping out. Decision making therefore needs to be quicker so that vacancies can be released long before the courses start and that MST can make use of the supply optimally.

It can be concluded from the analysis of target groups and recruitment practices that it is clear to MST which target group(s) it wants to recruit but it has insufficient insight what the appropriate methods are to recruit them. It should also be more active in reaching and moving potential applicants. In this chapter the fact that targeted and active recruitment is particularly important in a tight labour market is described. That means that MST should do more than it usually does to reach people and persuade them to apply for a position at the IC or OR division at MST and accept a job offer. Potential applicants should become central in decisions about recruitment. Currently, MST is focused too much on its own organization and function requirements.

## 6. Conclusions

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In this research the problems MST experiences with staffing the positions of IC nurse, surgery assistant and anaesthesia employee are looked at. Recent studies show that it is not only an issue for MST, but a major problem for hospitals around the world. It is crucial though for MST that the staffing problems are addressed properly. To get an integral solution for MST, three aspects of HRM are studied in this research. In chapter three the characteristics and developments in the labour market for IC and OR workers in the region Twente and Achterhoek are looked at. In the following chapters, the main problems with the retention and recruitment of IC and OR personnel are analyzed. It is discussed in chapter four and five which changes MST most urgently should make in those areas of HRM. The outcomes of the analyses create insight in the adjustments that are needed in HR policies and practices with regard to the labour market, retention and recruitment. This insight should make MST able to deal with the staffing problems better so that more certainty can be developed about the availability of sufficient qualified IC and OR employees. In this conclusion the main research question is answered: *'How should Medisch Spectrum Twente anticipate on developments in the labour market and which conditions should their retention and recruitment strategies meet to provide for sufficient qualified staff at the IC and OR divisions in the medium-and long term?'*

The conclusions that are presented in this section are obtained by applying various research methods. The labour market exploration is mainly based on objective, quantitative data from existing studies. In order to achieve objectivity and reliability of the outcomes on retention and recruitment at MST, widely accepted questionnaires are used. Also interviews are held with people from different positions internal and external to MST.

A condition that can be extracted from the research is that the retention, recruitment and labour market approaches for IC and OR personnel need to be arranged more centrally and structurally. Many problems can exist eventually due to a lack of central policies. Since there are no policies in those areas of HRM there is also no structure, team leaders and HR advisors have too much freedom in the execution of HR practices and there is a lack of insight that is needed to develop appropriate retention and recruitment strategies. The right process is therefore not clear for people executing the HR practices, which led to the creation of a diversity of individual practices that do not contribute to the retention and recruitment of IC and OR personnel or even make it more difficult. Due to a lack of policies, decisions affecting staffing of the positions on the IC and OR divisions are also too much focused on short term outcomes. Without policies and control on the execution of those policies, there cannot be consistent practices. Consistency of practices is needed so that they can contribute to creating more certainty about the availability of IC and OR personnel. The aspects that are discussed in the rest of this conclusion lead to a formalization of those policies.

From the labour market exploration becomes clear that the external market for IC and OR personnel is already very tight. Due to the ageing of society, the labour force and the workforce, the shortages will increase and it will become even more difficult for MST to fill the vacancies for those positions. Ageing of the workforce leads to a large outflow of IC nurses and OR assistants that retire within several years. Even though MST has no influence on these developments, from the research becomes apparent that there is sufficient room for improvements in HR policies and practices regarding retention, recruitment and labour market anticipation. Because of the shortages and the tightness on the labour market it is important to make optimal use of the available supply that is employed by MST and that is on the external market. The problems with staffing the IC and OR positions and the negative consequences of the absence of sufficient qualified personnel will only increase when MST does not improve the current situation.

Recruitment of qualified IC and OR personnel from the external labour market will become more difficult and expensive due to the increasing competition for these scarce workers. That means that the attractiveness of MST as an employer is of increasing importance, just as active and targeted recruitment. It particularly indicates the necessity of the retention of employees and of students during the IC and OR courses. Every hospital in the Netherlands is currently affected negatively by the external market, and is restricted in the direction it can give to that market. MST has the largest influence on the internal market by means of the educational courses and retention and there are the largest opportunities. It can be concluded from the research that MST should meet several conditions to retain qualified IC and OR employees, prevent dropout of students and it should also meet conditions for the recruitment of new employees. These conditions are discussed after conclusions on the educational courses are portrayed.

A condition that strongly contributes to the availability of qualified personnel is that more students are trained and improvements are made in the educational policy and practices. The internal courses form the major source of inflow in the IC and OR positions. By training more students the shortages of qualified IC and OR employees in the external labour market can be anticipated on. These shortages, MST cannot reduce by itself. Furthermore, training creates certainty because it concerns internal courses that are controllable by MST. Besides, students in the course for IC nurse are already employed for some years by MST and therefore generally have a good image of the organization. In the labour market exploration it turned out that there is sufficient supply for the courses and that it is expected to grow in the near future. It is identified though, that the capacity for support of students should be expanded when more students follow the courses simultaneously, as they all need intensive support. Without sufficient support the dropout of students during the courses will increase. The dropout figures were already high over the past years, a problem that needs to be dealt with urgently. Otherwise educating leads to the waste of valuable money and time and it does not help to solve the employee shortages for MST. The dropout of students is partly caused by applicants making the wrong choice but also by the selection process, unprofessional and ambiguous support of students and an unsafe learning climate for students on the general IC.

It is not only an important point of attention to prevent students from leaving. From the labour market exploration and analysis of voluntary turnover under IC and OR staff it becomes clear that many young IC and OR employees leave MST, despite the low mobility that is characteristic for those positions and the realistic information new employees receive before they are employed. The main point of interest for improving the long term availability of personnel is that qualified IC and OR employees are retained. In the tight labour market it is very difficult to recruit new personnel when those people leave. It becomes clear from the analysis that MST has insufficient information about the reasons for voluntary turnover at the organization, which is needed to predicted and deal with that turnover. Further, several preconditions of retention (to form long term relations) and job satisfaction urgently need to be improved for the general IC, Anaesthesia and OR divisions. Preconditions that are missing or applied inappropriately concern the lack of trust IC and OR employees have in management, low employee involvement in issues that affect them daily, limited development opportunities and perceived unfair rewards on top of their salary. Development opportunities are particularly important to bind young IC and OR employees. Further, employees are mainly dissatisfied with the communication from management because it is not open and it is too much top down, with the high workload on the OR and Anaesthesia divisions, with the disrespectful approach by medical specialists and wit the lack of appreciation from management. These improvement points can be influenced strongly by the management of MST. MST only has little influence on perceptions of the fairness of rewards and risks are involved when rewards are increased. Improvement particularly means that the attitude of management towards employees needs to be changed so that it shows more positive signals. Many of the points relate to the lack of commitment and attention employees feel for their interests as their ideas are not being heard but instead the focus is more on production. Dealing with the improvement points will create more



affective commitment under employees. That not only substantially reduces the likelihood that people leave MST voluntary, but it also leads to more positive attitudes and behaviour of employees who stay. It appeared in the analysis that the lack of time and financial space restricts management in her possibilities to make changes. It is necessary though that time and money is made available in a responsible way to deal with the staffing problems for the crucial IC and OR positions. Otherwise the situation only gets worse. Besides that, it costs more money when surgery rooms are closed due to a lack of qualified employees. It also costs more to recruit new personnel the hospital then requires. Fortunately, the solutions for these problems do not primarily involve money. Showing appreciation, among others, does not have to cost a lot of money but it does have a large impact on the retention of employees. It will take time to overcome the current opposition and negativism, but when trust is regained (which is the main challenge), when employees are satisfied and more emotionally committed, both will decline and new employees will no longer be dragged along in the negative spiral.

Not everything can be solved from within. There are also several conditions in the area of recruitment that need to be created to gain more certainty about the availability of qualified IC and OR personnel. In chapter 5 it becomes clear that the tight labour market demands a more active and targeted recruitment of MST, whereby potential applicants are central instead of the organization. That implicates among others that MST needs to know how the target groups for the IC and OR positions orientate on a job and what motivates them to choose for an organization. That information is not available at MST. The difference in age between applicants for the IC and OR courses and between internal and external candidates implicate that the target groups for the recruitment of IC nurses on the one hand and surgery assistants and anaesthesia employees on the other hand might differ in labour motives and job search behaviour.

Generally a very important motive, and the most urgent improvement point regarding recruitment at MST, is value congruence of potential employees with the organization. They mainly base their job choice decisions on perceived value congruence. In the research, a strong value incongruence of potential IC and OR employees with MST is found though. The values they consider most important are not contained by MST. It is crucial that the fit with potential applicants, based on their work values, is improved. They likely will not come quickly to MST because the organization does not offer what they search for, but instead focus on other values. Particularly there is too little attention for collaboration, team work, people coming first, for motivating employees to show enthusiasm for the job and treating employees fairly. The latter is also a precondition for the retention of employees. These outcomes are congruent with the analysis in chapter 4 that shows that current employees find it important that there is more personal attention for them.

Further, it can be concluded that preconditions of recruitment practices regarding the sources, message and timing need to be improved. Those aspects currently have a negative effect on the attractiveness of MST and the retention of new employees. MST has much freedom to make adjustments on these aspects. With regard to the recruitment sources it is found that sources are too passive and that there is hardly made use of informal sources to reach potential applicants such as employee referrals. The use of that network can have a large effect on the amount of applicants but also on the satisfaction, commitment and retention of people who are recruited. The main problem of the recruitment message is that the content of the job advertisements and job interviews is not appealing. The messages should be directed more on making (potential) applicants enthusiastic. MST should consider if the things that appeal to them can be arranged internally because the recruitment message must match the reality. Further it can be concluded that vacancies contain too little detailed information. A last aspect of recruitment that needs to be improved is the timing. Vacancies for the IC and OR courses are not released on time due to the long decision making process of the board of directors because of which applicants accepted job offers at other hospitals. Also, respondents largely agree that the application procedure is not quick enough and applicants are generally not informed on time. MST is trying to make the procedure quicker and to create more clarity and control over the completion of applications by centralizing and digitalizing the procedure. The

intention is that vacancies no longer come in at multiple places, which contributed strongly to the delays in the procedure.

Besides, the possibilities to expand the target groups for the recruitment of IC and OR personnel are looked at. MST has too narrow a focus on recruitment. There are not many substitution possibilities for the traditional target groups, but it is argued that there are possibilities outside Twente and Achterhoek and recruitment also should be directed at potential employees who are not actively searching for a job. With the recruitment of qualified people from other regions within the Netherlands and also from Germany, there is a risk that those people cannot adjust and leave, and it also requires extra efforts. People from other parts of the Netherlands do not quickly move to Twente to work there but, there likely is a greater opportunity in Germany for increasing the inflow. When German workers are recruited that should be facilitated properly by supporting them and having attention for the mastery of the Dutch language, the cultural differences, the registration of diploma's and support of current employees should also be created. Besides that, it should be kept in mind that German workers are not directly available to perform the job.

Policies and practices in the area of retention and recruitment together should lead to the availability of sufficient qualified IC and OR employees at MST on the medium- and long term. Both HR instruments influence each other strongly. The main link therein is job satisfaction. Practices that lead to satisfaction and thereby improve retention of employees have a large influence on the attractiveness of MST for potential applicants, which becomes of increasing importance the tighter the labour market gets. The current dissatisfaction of IC and OR personnel therefore makes recruitment more difficult. When the most urgent conditions that need to be created in the area of retention are addressed, MST will become more attractive and it is more likely that people will want to work at MST. Besides that, employees will be more willing to recommend MST to others as a good employer. The use of employee referrals in the recruitment of new IC and OR employees is probably the most effective recruitment method but it only works when employees are satisfied and have pleasure in their work. In that case MST has many ambassadors that make positive mouth to mouth publicity, which contributes to the development of their employer reputation. That has a large impact on the success of MST with the recruitment of new employees for the IC and OR. Besides that, employees are reached who are employed at another hospital but who are dissatisfied there. Recruitment practices also contribute to the development of the reputation. A good employer reputation is not won quickly but it can be lost quickly though. What further comes forward in the research is that the recruitment message should depend on the reality within MST and on what the organization can realize. The expectations that are created during recruitment for applicants need to be realized. Otherwise it will create dissatisfaction among those employees and it will be more likely that they leave MST through the backdoor. Therefore it is positive that new employees generally receive realistic information. Furthermore, recruitment activities have an effect on current employees. It is for instance good that MST first looks at the internal labour market for recruitment because that creates promotion opportunities for nurses that are already employed.

Finally, it can be concluded from the research that a long term capacity planning is needed to deal with the shortages, in which the expected turnover and dropout during the IC and OR courses are included. The planning should form the basis for decisions on educational- and recruitment activities. That enables MST for instance to deal with the fact that it takes a long time before students in the IC and OR courses are finished so that this can be anticipated on, by letting sufficient students start the course on time. That also applies to the recruitment of personnel from Germany. Much information that is needed for the planning can be measured or forecasted such as the outflow of people who will retire. Exit interviews also help to make a more accurate prediction of that outflow. There are currently no guidelines and decisions concerning the educational- and recruitment capacity are taken ad hoc, which makes it difficult to staff the IC and OR positions structurally with sufficient qualified employees.

## 7. Recommendations

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Based on the conclusions, recommendations are formulated on the changes MST should make to create more certainty about the availability of sufficient qualified employees in the middle- and long term. The recommendations are focused on the aspects that MST most urgently needs to adjust, and are also prioritized based on their urgency. When the management of MST does not take action on these recommendations, that undermines the wellbeing of the employees, the continuity of the organization and the care for patients. These recommendations therefore cannot be followed with much freedom. The management should finally decide which concrete initiatives will be executed within the framework of recommendations. It is important to involve employees in that decision making process. Also a plan should be made in which the time and money that is available and required for the various initiatives are accounted for. The actions that will be undertaken must be communicated to employees to show that the management is working on the problems, but only when real actions follow.

It is crucial that the recommendations are embedded in an integral policy framework of the labour market approaches, recruitment and retention. Only then can adjustments consistently and structurally lead to the objective of creating more certainty. The aspects that should be addressed and formulated in policies are described below.

### 7.1 Employee retention

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The recommendations which management needs to deal with first are concerned with the retention of qualified IC and OR employees.

#### **Reduce the workload of anaesthesia- and surgery assistants**

Primarily, a better balance needs to be created between the control of anaesthesia- and surgery assistants to organize their own time and activities, and the requirements that are demanded of them. That is necessary for improving involvement, communication and training opportunities, and for preventing stress to occur for those employees. It should be examined if space can be made in the planning to give employees more freedom. With the eye on the long term it is crucial that the production is planned less tight. It is better to take two steps backwards in production to subsequently take five steps forward.

#### **Improve involvement and communication**

Further is most urgent that involvement and communication are improved. Therefore must be actively listened to the ideas and suggestions of employees and often made use of them. Participation should be encouraged by asking for response when decisions need to be made that affect employees, and by showing as management and direct supervisors that you gladly want to involve them. The consequence of not involving employees consistently and not considering their ideas in the decision making process is, that employees will not feel commitment and attention for their personal interests from management. That is necessary though for building trust, it increases satisfaction of employees and develops feelings of being appreciated. It is important that employees are informed on the issues they can participate in and what happens with their ideas so that they really get the feeling that they are being heard. Also fixed structures should be created where employees can show their ideas, for instance by making space for participation in the work meetings, conducting a job satisfaction survey yearly and by introducing a 'compliance officer' on personnel issues. Compliance officers are already very common in other sectors. IC and OR employees can visit them in a safe environment to bring things to the attention of MST. By means of these changes, communication will become less top-down. Subsequently, supervisors must communicate openly so that employees are informed about the important developments and objectives within MST. Fixed communication patterns throughout the organization, which can be based on existing communication channels, should be created to keep people structurally informed.

### **Show more appreciation towards employees**

This is an even important recommendation as the former. It is not only of importance for the feelings of appreciation that team leaders and management show that they have attention for ideas and interests of employees but they should also make use of opportunities to bring a positive message. Particularly crucial is how the messages are communicated to employees. Inexpensive and effective possibilities are to give compliments, a thank you or a pat on the back more often. Besides that, a binding premium is also a sign of appreciation and thereby it can help to retain employees at least for several years. In a later stadium, management also need to make clear to medical specialists that they should treat employees with respect and thereby show appreciation. Specialists should bear in mind that they have a mutual responsibility towards the patient.

### **Create more training opportunities**

Another recommendation is to invest more time and money in training opportunities for IC and OR employees. If not, there are young IC and OR employees, for whom those opportunities are very important, leaving MST. Through separating the budget for the training of employees and students, employees get a more fair chance to participate in training activities. Subsequently plans should be created every year for the development of personnel. By being creative, many things can be organized inexpensively by supervisors and employees themselves, for instance in the form of cases or clinical lessons. Furthermore, the 'Investors in People' philosophy that soon will be applied at MST and audited should give an impulse to the development of IC and OR employees.

## 7.2 Educational courses

The following two recommendations result from the labour market exploration and relate to the inflow through the IC and OR courses.

### **Change the selection procedure and criteria for IC and OR students**

The easiest way of increasing the inflow is decreasing the dropout of students that have already chosen for the IC and OR courses at MST. That should be handled by scrutinizing the selection criteria and procedures so that less students are selected that cannot meet the expectations of the course. It is important to make sure that people are involved in the selection of students who can judge best if applicants are suited for the courses. By also observing applicants from different perspectives (i.e. functions) a good image can be obtained whether he or she can handle the course. Besides that, candidates themselves need to be enabled to make a good choice by providing sufficient information about the course and organization and giving them a tour on the work place. MST already contained the other causes of the dropout that are mentioned in the conclusion.

### **Educate more students**

With regard to the inflow of new employees, MST should focus mainly on the educational courses. From next year on, MST should structurally make more educational places available than usually. Continuing on the same level will increase the shortages, as IC and OR workers are hardly on the external market. To structurally educate more students, first the capacity of support for students should be expanded. There are possibilities to do that by giving many IC and OR employees responsibilities for supporting students. It is desired however that students have 1 or 2 fixed mentors and a good planning is also essential. Second, in cooperation with the HRM division, a capacity planning should be made on the future demand for IC and OR personnel by MST, which shall be used to determine the amount of educational places. That requires a systematic analysis of the workforce, developments in the labour market and the expected outflow. Even in an uncertain environment things can be predicted. Exit interviews are a very suitable mean for making predictions on the voluntary turnover and should also be used for dealing with the avoidable causes of that turnover.

The outcomes of the exit interviews, held by HR advisors or external persons, need to be documented and processed in reports, making trends observable. Besides that, by making a distinction on age cohorts in the reports it can be discovered why many young IC and OR employees leave MST.

### **7.3 Recruitment**

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The following recommendations are mainly directed at the HRM division of MST. The recommendations have in common that (potential) applicants are central for decisions on recruitment policies and practices. When the focus remains on the organization, difficulties with recruitment of IC and OR employees will not decrease or even increase.

#### **Increase value congruence**

One aspect of recruitment MST should start dealing with immediately. That is that the values that potential applicants consider most important are built in the culture of MST. Otherwise potential applicants will likely not want to work at MST. That should be accomplished by regularly emphasizing the importance of good collaboration, teamwork and enthusiasm for the job, putting personnel first and treating them fairly. These values should further be incorporated in the culture by means of work practices, such as team meetings for collaboration and team work or work practices that promote fairness of HR practices and policies. Improving involvement, communication and appreciation also strongly contributes to developing those values. Potential applicants for the IC and OR have to be informed when those values are characteristic for MST, by emphasizing the values in the job advertisements and during job interviews.

#### **Study job search behaviour and labour motives of potential applicants**

Regarding recruitment practices, first insight should be gained in how potential IC and OR employees can be reached and which motives they have to choose for an employer. Information from studies on these issues for the specific target groups should subsequently be used to determine the messages that will be used and to apply more sources. Since only few people are actively searching for a job as IC nurse or OR assistant also their normal media behaviour should be examined, to reach latent job seekers. That means for instance studying which magazines they read or which websites they often visit.

#### **Make the recruitment message more appealing**

It is important that the information in the recruitment message will be described more appealing. When that is the case, MST is actively trying to make people enthusiastic for a function as IC nurse, surgery assistant or anaesthesia employee at MST. People who are responsible for the communication to (potential) applicants should be trained in describing the recruitment message in such a way. Making the message more appealing mainly implicates describing it less business like and focus on reporting the motives, when they are known and are present. Also the messages should contain more detailed information about the environment of the function, for instance the labour conditions. The messages should be checked continuously on their reality.

#### **Make actively use of employee referrals**

When the management receives signals that employees are satisfied, it should make actively use of their network through the development of a program by which employees are stimulated to approach that network. Part of this program should be how employees are rewarded for bringing in new employees. That can be done in the form of a monetary reward and also by making them aware of the advantages it has for them and for MST. When the IC and OR employees are satisfied, they will do it by themselves more quickly. It also means that employees need to be informed how they can refer MST to people.

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# Appendices

## Appendix I – Reflection

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About a year ago I started with my master thesis at MST. Looking back on the whole process of writing this thesis it has been a great learning experience for me. Here, I would like to reflect on the preparation and execution of the research, the final content of the report and the social abilities during that period. A general experience for me is that I should have taken more rest. Because I also work on Saturdays, I often worked 7 days a week, which sometimes created difficulties concentrating.

While searching for an assignment I wrote down which subjects and organizations attracted me. It was clear to me that I looked for an external assignment because I find it very important to gain practical experiences at an organization, which will help me during my career. I preferred a large organization in the region, such as Akzo Nobel, Thales or Randstad. After two weeks of searching I got offered an assignment at Medisch Spectrum Twente. I did not have to think long about accepting it. The assignment and organization appealed to me and fitted well in the profile of subjects and principals I had in mind. I saw it as a great opportunity to study the problem, to show my capabilities and see how things work at the organization. I did not concentrate my search on a particular sector, but it was a positive circumstance that MST operates in the health care sector. During my bachelor thesis at Mediant, which is also a healthcare organization, I already gained insights in the sector.

I started the assignment by searching for information about MST and about the research problem. Because of the complexity of the organization and the problems, it has taken more time than I had expected. A meeting with the supervisors of MST and the University of Twente, at the start of the research, helped a lot to clarify the actual problem that the research should address. After that meeting I concentrated on developing the research plan. I think that the final plan formed a good base for the data gathering and analysis. Further, the extensive literature study went well. I found useful articles and books for the theoretical part and screened them carefully. I was aware of the importance of clearly defining the problem so that I could focus my literature search. That was particularly important for my research, since a lot is written about the subjects in it. I also realize that some aspects in the process of developing the research plan can be improved. A first aspect is to be more critical about the initial question that is formulated in the assignment. After the problem description was worked out I focused my literature search on articles and books about HRM and specifically about the labour market and recruitment. In consultation with my first supervisor, Dr. Van Velzen, is decided that retention, which was not addressed in the assignment, should not only be included in the research but also should form them main part of it. That finally helped to create a better a research framework. Further, a next time, I will adjust my planning, when it becomes clear to me that the terms that are stated in the initial planning are not realistic.

In the execution stage I have gathered and analysed information to answer the research questions. First I defined the questions that I have used to structure the interviews, planned many interviews and have created the questionnaire on values. It was not difficult to me to gather data from the questionnaire. I have contacted the persons who are responsible for the IC, Anaesthesia and OR courses. They finally helped me to contact the students and remind them about the questionnaire. With regard to planning the interviews, I knew that professionals should be contacted on time because they often have a busy schedule. Therefore planning most of the interviews was not problematic. When I was about half way with my research it became difficult to arrange interviews with employees of the Acute Axis, while some other appointments with respondents of MST have been postponed multiple times. The employees have participated in many studies recently, and I was told that they likely not want to help me. In the beginning I did not know exactly how to deal with that and could have been a bit more assertive to arrange those interviews. I have talked to my supervisor of MST about the problems and he gave me good advice about how the employees can be

approached best. It finally took many conversations to arrange the interviews with employees. I think that my consistency helped to make sure that the interviews were held.

For obtaining data on the labour market, it was particularly important to know where I could find the specific information for my research, which was divided over many persons and sources. Available information was often too broad for this research or I was referred to others when I contacted people for information. When I created a list of all data that I needed and discussed it with a colleague on the HRM division at MST I came to know better who should have the information.

The analyses of the interviews and surveys in the research provided mixed experiences. The analyses of the labour market developments and questionnaire on value orientation were done without many problems. With regard to the questionnaire, I wrote down how I would like to present the data and which analyses I would like to make. I already was familiar with SPSS and discussed with an expert of the University of Twente, the research methods I could use to analyse my data. Most difficult were the analyses of the different interviews. I found it difficult to quantify and compare the outcomes because I formulated open questions to gain in depth information. I first created an analysis that was too much described in a story form as I was used to that way. I have learned how interviews can be analysed properly.

I have learned a lot on communication and social abilities in this area during the research. Although I can communicate well with all kind of people on different levels and I am open for other perceptions, my communication is something that can be improved. I found it difficult sometimes how to express things best when I wanted to explain something to others or ask for their cooperation. My experience of this research is that the cooperation of others depends strongly on the sources that are used and the way a question is exactly formulated. I have learned how to communicate effectively within an organization, for which it is important to communicate briefly and clear. The communication with respondents in interviews went better after the first interviews. I became more confident and when I listened back the interviews that I recorded, I noticed that time could be used more effectively by explaining things more briefly. As many interviews were on a tight schedule I learned to stay focus on the questions that I have formulated.

Further, I had multiple meetings with my supervisors of MST and the University of Twente. I had chosen to plan those meetings after I finished a part (e.g. chapter) of my research. I think that in the beginning of the research, when the direction of the research was less clear, I should have taken more initiative to plan meetings earlier to know if I was on the right track. Therefore I focused my literature study in the beginning too much on specific (recruitment) practices. I prepared for the meetings by defining questions which I had for my research. In the meetings with supervisors, particularly the progress is discussed. During the meetings I wrote down the feedback so that I could read it over and think about the actions I should take based on the comments. That helped me to improve my report to the way it is now.

It has been very difficult in a period to gather information for my research but I am glad that I continued and finally got the information, which was very valuable for the research. I am satisfied with the content of the final report. The goal was to create an integral solution for the staffing problems. I think that the most relevant aspects to care for sufficient employees are also incorporated in the final report and that it provides MST with the insights that are needed to deal with the staffing problems. Furthermore, I think that it is not only informative for MST but that other organization can also use the research framework to analyse their own organization and the labour market so that they can make optimal use of the labour supply. I hoped that the report could be less extensive, but I think otherwise relevant information should be left out. Although the research question is broad, I realize that it is not a strong capability of me to describe things briefly when I have gathered a lot of information and I found it particularly difficult to describe things briefly in English. A final point of attention is to think more about the structure of the chapters in the beginning. At last, the research provided me with a lot of insights on HRM, and particularly on employee retention and recruitment, and on applying theory in practice.

## Appendix II – Interview protocol 1

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**Subject:** The labour market for IC nurses and OR assistants in Twente and Achterhoek  
**Respondents:** Gerard Nederpelt, Hans Hokke  
**Functions:** Directors of the Employers' office for the healthcare sector in East Netherlands  
**Date:** 18-12-2008  
**Goal:** Gain insight in general labour market characteristics and developments  
**Questions:**

1. What image do you have of the regional labour market for IC nurses and surgery- and anaesthesia assistants?
2. How is the mobility of IC nurses and medical assistants on the labour market?
3. How do you think that the demand for IC nurses and medical assistants will develop in the region?
4. How do you think that the supply of IC nurses and medical assistants will develop in the region?
5. Which developments (will) have a large influence on the demand and supply of IC nurses and medical assistants in the region?
6. What are the most important sticking points on the labour market for IC nurses and medical assistants for hospitals in the region?
7. How do hospitals generally cope with the tightness on the labour market for IC nurses and medical assistants?

## Appendix III – Interview protocol 2

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**Subject:** The internal courses for IC nurse, Surgery-and Anaesthesia assistant  
**Respondents:** Frank van der Holst, Pim Stevenhagen and Robert de Boer  
**Functions:** Training officer for the IC course, and coordinators of the OR and Anaesthesia course  
**Dates:** 25-12-2008; 08-01-2009  
**Goal:** Gain insight in the inflow, dropout, outflow and organization of the courses  
**Questions:**

1. How are the courses for IC nurse, surgery assistant and anaesthesia employee organized?
2. How is the amount of educational places for the courses IC nurse, surgery assistant and anaesthesia employee determined?
3. How difficult is it to fill the educational places that MST makes available?
4. To what extent do the applicants for the courses meet the defined quality requirements?
5. How do you see the possibilities to lower the requirements for applicants?
6. What is expected in the development of the amount of educational places and applicants in the future?
7. What are the causes of the dropout during the courses?
8. Where do students generally going to work when they finished the course?
9. From which positions do people come from that follow the courses?

## Appendix IV – Interview protocol 3

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**Subject:** Retention of IC and OR employees  
**Respondents:** Maurice Sluik, William van Ark, Marc Eijsink, Gea Siekmans, Piet Melief, Jolanda Pol, Jan Veldman, Erwin de Kovel, Thijs Schopman; Cees Schenkeveld and Henny Voss; Theo Beuvink and Margriet Boerma.  
**Functions:** Team leaders of the IC and OR divisions and business managers and HR advisors of the Acute axis and Thorax (IC).

*Period:* 19-02-2009 till 04-03-2009  
*Goal:* Gain insight in the realization of preconditions of retention and in the satisfaction of employees.  
*Questions:* The questions are as much as possible formulated for all respondents in the different functions but as some questions cannot be answered by all respondents and the interviews otherwise will take too much time are some questions included in the interviews with respondents from two functions or one function. After each question, the functions are portrayed from which the respondents are asked the question.

1. How do you perceive the communication from management towards IC and OR employees?  
*Team leaders and business managers*
2. To what extent are IC and OR employees involved in decisions that affect them?  
*Team leaders and business managers*
3. How much job security does MST offer to the IC and OR employees?  
*Team leaders, business managers and HR advisors*
4. How do you perceive the career- and personal development opportunities for IC and OR employees at MST?  
*Team leaders and business managers*
  - To what extent have IC and OR employees freedom regarding the direction of their development process within MST?  
*Team leaders, business managers and HR advisors*
  - How much does MST invest in the development of IC and OR employees?  
*Team leaders, business managers and HR advisors*
5. How is determined within MST when employees are considered for promotion?  
*HR advisors*
6. How is the functioning of IC and OR employees appraised at MST?  
*Team leaders and HR advisors*
7. How are the rewards for IC and OR employees determined at MST?  
*HR advisors*
8. Are there exit interviews conducted when employees leave MST?  
*Team leaders and HR advisors*
9. What are the main reasons that employees had for leaving MST?  
*Team leaders, business managers and HR advisors*
10. How have IC and OR employees reacted on the outcomes of the employee survey that is conducted by Effactory?  
*Team leaders*
11. How large are the proportions of IC and OR employees with a fixed contract, temporary contract and external contract?  
*Business managers and HR advisors*
12. What are the main differences between these groups of IC and OR employees in their relation with MST?  
*Business managers and HR advisors*

## Appendix V – Interview protocol 4

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**Subject:** Aspects of retention in the Dutch hospital sector  
**Respondents:** Pim Aerts (NVAM), Yvonne Maatjens (LVO) and Irma Rust (NVICV)  
**Functions:** (Board) members of the professional organizations for anaesthesia employees, surgery assistants and IC nurses  
**Period:** 22-05-2009 till 27-05-2009  
**Goal:** Discover the context for certain preconditions of retention and job satisfaction facets which affects the degree to which those aspects are specific for MST and to which they can be influenced.

**Questions:**

1. How are generally the labour conditions for IC nurses/ anaesthesia employees/ surgery assistants in the Netherlands and particularly their work pressure?
2. How can the relation between IC nurses/ anaesthesia employees/ surgery assistants and medical specialists in Dutch hospitals be characterized?
3. To what extent are there career development opportunities in Dutch hospitals for IC nurses/ anaesthesia employees/ surgery assistants?
4. To what extent are there opportunities for IC nurses/ anaesthesia employees/ surgery assistants for training in their profession?
5. How is the situation in hospitals in the Netherlands regarding the rewards of IC nurses/ anaesthesia employees/ surgery assistants?
6. How is the situation in hospitals in the Netherlands regarding the secondary employment conditions of IC nurses/ anaesthesia employees/ surgery assistants?
7. To what extent do IC nurses/ anaesthesia employees/ surgery assistants chose to work on a self employed base in regions in the Netherlands?

## Appendix VI – Interview protocol 5

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**Subject:** Retention of IC and OR employees  
**Respondents:** General- and Thorac IC nurses, surgery assistants and anaesthesia employees.  
**Period:** 20-05-2009 till 17-06-2009  
**Goal :** Gathering in depth information on the main problems regarding job satisfaction that follow from the analysis of the employee survey and information on the perception of employees on the presence of preconditions of retention.  
**Questions:** Respondents are broadly asked two questions in the interviews.

### Question 1

For the first question are the main problems with job satisfaction displayed for the different divisions that result from the analysis of the employee survey. Those problems are illustrated in table 4.2 of the final report. Respondents are asked to rank those aspects based on the question: *‘What should MST most urgently improve to enhance the satisfaction of IC nurses/ surgery assistants/ anaesthesia assistants?’* Respondents are further questioned on the perceived causes for the dissatisfaction with those aspects. With four respondents is also discussed if the information they received before they were employed at MST was realistic.

### Question 2

Secondly, statements are formulated positively on the preconditions of retention that are used in the research. Respondents are asked to answer on each statement to what extent they agree with that statement. Figure 1 shows the statements.



**Figure 1.** Statements on preconditions of retention

Statements	Totally disagree	Agree	Not agree/ Not disagree	Agree	Totally agree
1. The rewards that I receive for my work at MST are fair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. My functioning is appraised fairly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. MST offers job security for me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I have the idea that MST is willing to invest in me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Management of MST takes the initiative to realize my development needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I have sufficient freedom to determine the direction of my development within MST	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I receive sufficient information from MST on the career development opportunities within the organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. There are sufficient possibilities for me to illustrate my development needs within MST	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix VII – Interview protocol 6

- Subject:** Recruitment of IC and OR workers
- Respondents:** Theo Beuvink and Margriet Boerma; Maurice Sluik, William van Ark and Marc Eijnsink; Martin Nieuwenhuizen and Willemien Minderhoud
- Functions:** HR advisors of the Acute axis and Thorax (IC); team leaders of the IC and OR divisions; team leader of the HRM division and HR mobility staff member.
- Period:** 26-06-2009 till 07-08-2009
- Goal:** Gain insight in the application of preconditions of recruitment practices at MST and the (possible) target groups for the IC and OR positions.
- Questions:** Similar to the interviews on employee retention at MST are questions as much as possible included in interviews with respondents from different functions but cannot all questions be answered by all respondents. After each question therefore, are the functions portrayed from which the respondents are asked the question.

- How does the current recruitment policy of MST looks like?  
*HR experts*
- How does the current recruitment procedure of MST looks like?  
*HR experts*
- What are the objectives of the recruitment of IC and OR employees at MST?  
*HR experts*
- How are the tasks and responsibilities for recruitment divided within MST?  
*HR experts*
- To what extent are there fixed points where new employees enter MST?  
*HR experts*
- How do you perceive the stability of the recruitment policy of MST?  
*HR experts*
- What are the possibilities regarding internal and external target groups to staff the positions of IC nurse, surgery assistant and/or anaesthesia assistant?  
*Team leaders and HR advisors*
- How do you perceive the opportunity to recruit qualified employees from Germany for the positions of IC nurse, surgery assistant and/or anaesthesia assistant?

*Team leaders, HR advisors and HR experts*

9. How do you perceive the sources that are used by MST to locate potential IC nurses, surgery assistants and/or anaesthesia employees?
- Which sources are applied?
  - Does MST make use of employee referrals?

*Team leaders, HR advisors and HR experts*

10. How active is MST with the recruitment of IC nurses, surgery assistants and/or anaesthesia assistants?

*Team leaders, HR advisors and HR experts*

11. How do you perceive the message that MST communicates to (potential) applicants in the job advertisements and job interviews?

*Team leaders, HR advisors and HR experts*

12. To what extent is the information that is provided to (potential) applicants for the IC and OR positions during recruitment realistic?

*Team leaders, HR advisors and HR experts*

13. To what extent is the recruitment procedure quick and are applicants informed on time?

*Team leaders, HR advisors and HR experts*

14. Who are responsible at MST for the communication with applicants during the job interviews?

*Team leaders, HR advisors and HR experts*

## Appendix VIII – Interview protocol 7

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**Subject:** Recruitment of IC and OR workers

**Respondents:** Gerard Nederpelt and Joop Meijer

**Function(s):** Directors of respectively WGV Oost and Career Centre Twente

**Date:** 28-05-2009

**Goal:** Gain external insights in certain preconditions of retention and possibilities for recruitment of various target groups

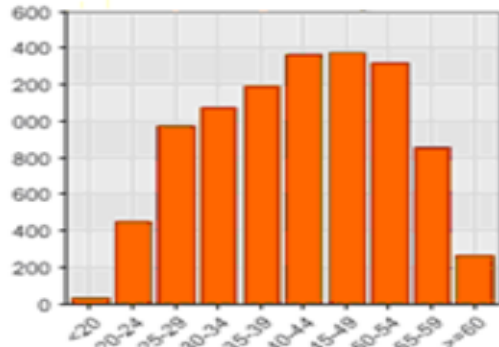
**Questions:**

1. What is the role of CCT/WGV Oost with respect to the recruitment activities of Medisch Spectrum Twente?
2. How do you perceive the possibility for MST to recruit IC nurses and OR assistant staff from parts of the Netherlands outside Twente and Achterhoek?
3. How do you perceive the possibility for MST to recruit IC nurses and OR assistant staff from Germany?
4. Where do hospitals mainly compete on to attract potential IC and OR employees?
5. How do you perceive the recruitment sources MST uses to locate potential IC and OR employees?
6. How do you perceive the message that MST carries out to (potential) applicants for the IC and OR positions in the job advertisements?
7. What do you think that MST should improve mainly in the recruitment of IC and OR employees?

## Appendix IX – Labour market figures

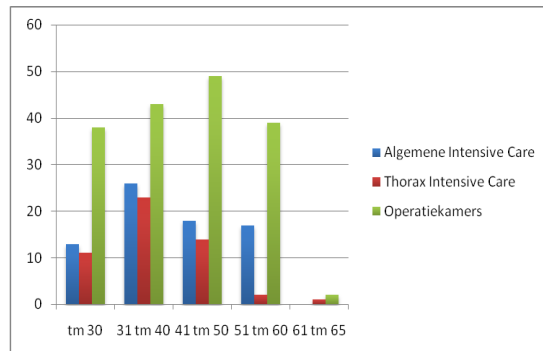
In appendix IX figures are portrayed on which descriptions of some external and internal labour market indicators are based in chapter three of the report.

**Figure 2.** Age structure of the hospital sector In Twente and Achterhoek



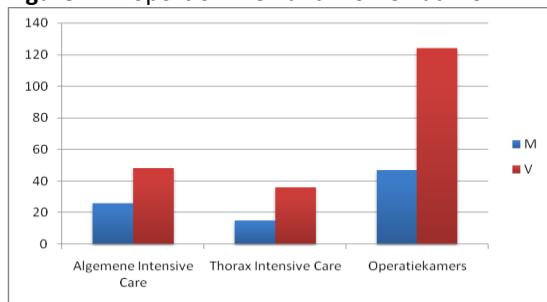
Source: PGGM

**Figure 3.** Age structure at the IC and OR divisions at MST



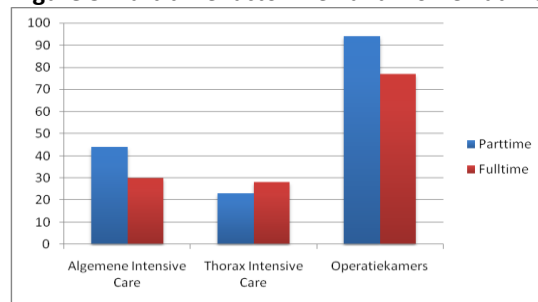
Source: MST, personnel administration

**Figure 4.** Proportion men and women at MST

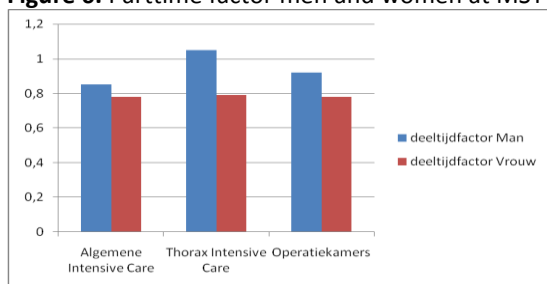


Source: MST, personnel administration

**Figure 5.** Part-time factor men and women at MST

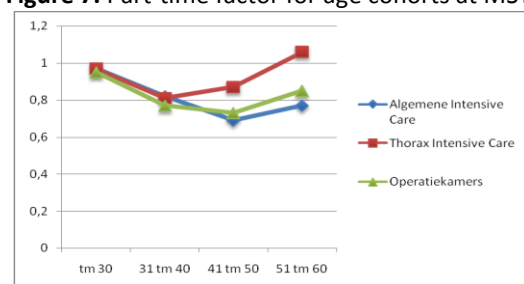


**Figure 6.** Parttime factor men and women at MST



Source: MST, personnel administration

**Figure 7.** Part-time factor for age cohorts at MST



## Appendix X – OCP scale

This appendix includes a shortened version of the OCP-scale by Cable & Judge (1997), and categorized by Sarros et al. (2005).

**Figure 8.** OCP-Scale

OCP - Scale	
<b>Competitiveness</b>	<b>Performance orientation</b>
Achievement orientation	High performance expectations
An emphasis on quality	Enthusiasm for the job
Being distinctive	Being result oriented

Being competitive	Being highly organized
<b>Social responsibility</b>	<b>Stability</b>
Being reflective	Stability
Having a good reputation	Being calm
Being socially responsible	Security of employment
A clear guiding philosophy	Confronting conflict directly
<b>Supportiveness</b>	<b>Remaining values</b>
Being team oriented	Adaptability
Sharing information freely	Autonomy
Being people oriented	Being rule oriented
Good collaboration	Being analytical
<b>Innovation</b>	Paying attention to detail.
Being innovative	Not being constrained by many rules
Quick to take advantage of opportunities	Tolerance
Risk taking	Informality
Taking individual responsibility	Decisiveness
<b>Emphasis on rewards</b>	Being aggressive
Fairness	Developing friends at work
Opportunities for professional growth	Working long hours
High pay for good performance	
Praise for good performance	

## Appendix XI – Questionnaire on value congruence

The following questionnaire is send to students. The difference in the questionnaire for employees of MST is that they are questioned to what extent the value is characteristic for MST, ranging from least characteristic to very characteristic.

Deze enquête is gemaakt om te weten te komen welke waarden jullie belangrijk vinden in het werk. Het is de bedoeling dat voor elke waarde antwoord gegeven wordt op de vraag: 'hoe belangrijk is deze waarde voor jou?'. Houd er bij het invullen rekening mee dat mensen gemiddeld slechts enkele keren de uiterste scores gebruiken.

1. Welke opleiding volg je?					
Operatieassistent	<input type="checkbox"/>				
Anesthesiemedewerker	<input type="checkbox"/>				
Intensive Care Verpleegkundige	<input type="checkbox"/>				

2. Concurrentievermogen					
Hoe belangrijk zijn de volgende waarden voor jou?	<i>Ze er onbelangrijk</i>	<i>Onbelangrijk</i>	<i>Niet belangrijk/ niet onbelangrijk</i>	<i>Belangrijk</i>	<i>Ze er belangrijk</i>
Gericht zijn op het behalen van successen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nadruk op de kwaliteit van de productie of dienstverlening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Onderscheidend zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Concurrerend zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Maatschappelijke verantwoordelijkheid					
Hoe belangrijk zijn de volgende waarden voor jou?	<i>Ze er onbelangrijk</i>	<i>Onbelangrijk</i>	<i>Niet belangrijk/ niet onbelangrijk</i>	<i>Belangrijk</i>	<i>Ze er belangrijk</i>
Reflectief zijn (eigen handelen overdenken)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Een goede reputatie hebben	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maatschappelijk verantwoord zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Een duidelijke filosofie hebben	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Hulpvaardigheid					
Hoe belangrijk zijn de volgende waarden voor jou?	<i>Zeer onbelangrijk</i>	<i>Onbelangrijk</i>	<i>Niet belangrijk/ niet onbelangrijk</i>	<i>Belangrijk</i>	<i>Zeer belangrijk</i>
Teamgericht zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informatie vrij delen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Op mensen gericht zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goede samenwerking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Innovatie					
Hoe belangrijk zijn de volgende waarden voor jou?	<i>Zeer onbelangrijk</i>	<i>Onbelangrijk</i>	<i>Niet belangrijk/ niet onbelangrijk</i>	<i>Belangrijk</i>	<i>Zeer belangrijk</i>
Innovatief zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kansen die zich voordoen snel benutten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Risico nemen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Individuele verantwoordelijkheid nemen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Nadruk op beloningen					
Hoe belangrijk zijn de volgende waarden voor jou?	<i>Zeer onbelangrijk</i>	<i>Onbelangrijk</i>	<i>Niet belangrijk/ niet onbelangrijk</i>	<i>Belangrijk</i>	<i>Zeer belangrijk</i>
Eerlijkheid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mogelijkheden voor professionele groei en ontwikkeling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hoge beloning voor goede prestaties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complimenten krijgen voor goede prestaties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Prestatiegerichtheid					
Hoe belangrijk zijn de volgende waarden voor jou?	<i>Zeer onbelangrijk</i>	<i>Onbelangrijk</i>	<i>Niet belangrijk/ niet onbelangrijk</i>	<i>Belangrijk</i>	<i>Zeer belangrijk</i>
Hoge verwachtingen voor prestaties hebben	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enthousiasme voor het werk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resultaat gericht zijn (resultaat staat voorop)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goed georganiseerd zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Stabiliteit					
Hoe belangrijk zijn de volgende waarden voor jou?	<i>Zeer onbelangrijk</i>	<i>Onbelangrijk</i>	<i>Niet belangrijk/ niet onbelangrijk</i>	<i>Belangrijk</i>	<i>Zeer belangrijk</i>
Stabiliteit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rustig zijn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Werkzekerheid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weinig conflicten op de werkvloer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Overig					
Hoe belangrijk zijn de volgende waarden voor jou?	<i>Zeer onbelangrijk</i>	<i>Onbelangrijk</i>	<i>Niet belangrijk/ niet onbelangrijk</i>	<i>Belangrijk</i>	<i>Zeer belangrijk</i>
Aanpassingsvermogen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Autonomie (zelfstandigheid en onafhankelijkheid)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Op regels georiënteerd zijn (aan de regels houden)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analytisch werken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aandacht schenken aan details	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Niet worden tegengehouden door veel regels	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tolerantie (openstaan voor verschillende opvattingen)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contacten met anderen in een informele sfeer laten verlopen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Besluitvaardigheid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zakelijk agressief zijn (anderen desnoods offensief benaderen)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vrienden maken op werk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Veel uren werken	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix XII – General questionnaire outcomes

The general outcomes of the questionnaires to students and respondents of MST are presented in figure 10, including the responses (%) on the separate values, the mean scores and standard deviations.

**Figure 10.** general questionnaire outcomes

Values/ responses (%)	1		2		3		4		5		Mean		Std.	
	Students	MST	Students	MST	Students	MST	Students	MST	Students	MST	Students	MST	Students	MST
<b>Competitiveness</b>														
Achievement orientation	0	4.3	3.8	21.7	37.5	47.8	48.8	21.7	10	4.3	3.65	3.00	,713	,905
An emphasis on quality	0	4.3	2.5	43.5	11.3	30.4	46.3	17.4	40	4.3	4.2	2.74	,750	,964
Being distinctive	0	4.3	18.8	30.4	42.5	17.4	33.8	47.8	5	0	3.25	3.09	,819	,996
Being competitive	13.8	4.3	35	34.8	37.5	34.8	13.8	26.1	0	0	2.51	2.83	,900	,887
<b>Social responsibility</b>														
Being reflective	0	13	0	43.5	12.5	34.8	53.8	8.7	33.8	0	4.21	2.39	,650	,839
Having a good reputation	0	8.7	5	30.4	25	34.8	61.3	21.7	8.8	4.3	3.74	2.83	,689	1,029
Being socially responsible	0	0	1.3	26.1	18.8	60.9	60	13	20	0	3.99	2.87	,665	,626
A clear guiding philosophy	1.3	4.3	6.3	60.9	50	26.1	37.5	8.7	5	0	3.39	2.39	,738	,722
<b>Supportiveness</b>														
Being team oriented	0	0	0	52.2	1.3	39.1	46.3	4.3	52.5	4.3	4.51	2.61	,528	,783
Sharing information freely	0	13	2.5	47.8	21.3	30.4	52.5	8.7	23.8	0	3.98	2.35	,746	,832
Being people oriented	0	21.7	0	30.4	3.8	39.1	50	8.7	46.3	0	4.43	2.35	,569	,935
Good collaboration	0	13	0	39.1	0	43.5	31.3	0	68.8	4.3	4.69	2.43	,466	,896
<b>Innovation</b>														
Being innovative	0	0	2.5	60.9	25	30.4	63.8	4.3	8.8	4.3	3.79	2.52	,630	,790
Quick to take advantage of opportunities	1.3	13	1.3	60.9	30	26.1	57.5	0	10	0	3.74	2.13	,707	,626
Risk taking	2.5	4.3	32.5	43.5	42.5	39.1	22.5	13	0	0	2.85	2.61	,797	,783
Taking individual responsibility	0	4.3	0	47.8	13.8	39.1	62.5	8.7	23.8	0	4.1	2.52	,608	,730
<b>Emphasis on rewards</b>														
Fairness	1.3	4.5	2.5	54.5	3.8	31.8	43	4.5	49.4	4.5	4.37	2.5	,787	,859
Opportunities for professional growth	1.3	8.7	1.3	21.7	11.4	52.2	59.5	17.4	26.6	0	4.09	2.78	,737	,850
High pay for good performance	1.3	39.1	20.3	47.8	32.9	8.7	39.2	4.3	6.3	0	3.29	1.78	,908	,795
Praise for good performance	1.3	30.4	0	43.5	12.7	17.4	58.2	8.7	27.8	0	4.11	2.04	,716	,928
<b>Performance orientation</b>														
High performance expectations	1.3	0	8.8	39.1	46.3	30.4	38.8	26.1	5	4.3	3.38	2.96	,769	,928
Enthusiasm for the job	1.3	0	0	43.5	1.3	43.5	41.3	13	56.3	0	4.51	2.7	,656	,703
Being result oriented	1.3	0	3.8	30.4	37.5	30.4	47.5	34.8	10	4.3	3.61	3.13	,771	,920
Being highly organized	1.3	17.4	0	47.8	8.8	26.1	63.8	8.7	26.3	0	4.14	2.26	,670	,864
<b>Stability</b>														
Stability	1.3	13	0	30.4	13.8	47.8	61.3	8.7	23.8	0	4.06	2.52	,700	,846
Being calm	1.3	8.7	1.3	43.5	12.5	34.8	57.5	13	27.5	0	4.09	2.52	,750	,846
Security of employment	1.3	0	2.5	8.7	11.3	34.8	55	47.8	30	8.7	4.1	3.57	,789	,788
Confronting conflict directly	1.3	13	0	43.5	15	30.4	47.5	13	36.3	0	4.18	2.43	,776	,896
<b>Remaining values</b>														
Adaptability	1.3	0	0	56.5	11.3	34.8	60	8.7	27.5	0	4.13	2.52	,700	,665
Autonomy	1.3	4.3	0	26.1	18.8	39.1	63.8	21.7	16.3	8.7	3.94	3.04	,681	1,022
Being rule oriented	0	0	5	26.1	32.5	52.2	47.5	17.4	15	4.3	3.73	3.00	,779	,798
Being analytical	0	0	2.5	43.5	36.3	47.8	53.8	8.7	7.5	0	3.66	2.65	,655	,647
Paying attention to detail	0	13	3.8	43.5	18.8	30.4	65	13	12.5	0	3.86	2.43	,670	,896
Not being constrained by many rules	0	17.4	8.8	39.1	33.8	43.5	41.3	0	16.3	0	3.65	2.26	,858	,752
Tolerance	0	4.3	1.3	47.8	10	43.5	63.8	4.3	25	0	4.13	2.48	,624	,665
Informality	0	0	5	34.8	31.3	47.8	52.5	13	11.3	4.3	3.7	2.87	,736	,815
Decisiveness	1.3	21.7	0	34.8	18.8	30.4	60	13	20	0	3.98	2.35	,711	,962
Being aggressive	7.5	0	41.3	47.8	33.8	34.8	15	17.4	2.5	0	2.64	2.7	,917	,765
Developing friends at work	1.3	8.7	16.3	39.1	43.8	43.5	32.5	8.7	6.3	0	3.26	2.52	,853	,790
Working long hours	0	0	2.5	17.4	50	30.4	23.8	47.8	1.3	4.3	3.01	3.39	,738	,839

## Appendix XIII – Ranking of values

Rankings of the values that are considered most important by students based on the mean scores on the separate values (table 11) and based on percentages of respondents that stated that a value is (very) important (table 13). Table 12 shows the ranking of values that are perceived to be most characteristic for MST.

**Table 11** Ranking students (mean)

Students	Mean Students	Std. Deviation
1. Good collaboration	4.69	.466
2. Enthusiasm for the job	4.51	.656
3. Being team oriented	4.51	.528
4. Being people oriented	4.43	.569
5. Fairness	4.37	.787
6. An emphasis on quality	4.24	.750
7. Being reflective	4.21	.650
8. Confronting conflict directly	4.18	.776
9. Being Highly organized	4.14	.670
10. Tolerance	4.13	.624
11. Adaptability	4.13	.700

**Table 12** Ranking respondents MST (mean)

MST	Mean MST	Std. Deviation
1. Security of employment	3.57	.788
2. Working long hours	3.39	.839
3. Being result oriented	3.13	.920
4. Being distinctive	3.09	.996
5. Autonomy	3.04	1.022
6. Being rule oriented	3.00	.798
7. Achievement orientation	3.00	.905
8. High performance expectations	2.96	.928
9. Informality	2.87	.815
10. Being socially responsible	2.87	.626
11. Having a good reputation	2.83	1.029

**Table 13** Ranking students (%)

Students	Per. Students	Per. MST	Pearson Chi-Square
1. Collaboration	100%	4.30%	0.000
2. Being team oriented	98.80%	8.70%	0.000
3. Enthusiasm for the job	97.50%	13.00%	0.000
4. Being people oriented	96.20%	8.70%	0.000
5. Fairness	92.40%	9.10%	0.000
6. Being highly organized	90.00%	8.70%	0.000
7. Tolerance	88.80%	4.30%	0.000
8. Adaptability	87.50%	8.70%	0.000
9. Being reflective	87.50%	8.70%	0.000
10. An emphasis on quality	86.20%	21.70%	0.000
11. Taking individual responsibility	86.20%	8.70%	0.000

## Appendix XIV – Organization chart

**Figure 14** Organizational structure MST

