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# **Influencing quality outcomes of elderly homes through purchasing**

Master's thesis in Supply Chain Management

ANTON DAHLSTRÖM  
TORBJÖRN MAAHERRA

REPORT NO. E2016:011

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ANTON DAHLSTRÖM  
TORBJÖN MAAHERRA

Supervisor and examiner:  
Henrik Eriksson, Chalmers University of Technology

Department of Technology Management and Economics  
*Division of Service Management and Logistics*  
CHALMERS UNIVERSITY OF TECHNOLOGY  
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ANTON E.D. DAHLSTRÖM

TORBJÖRN MAAHERRA

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Technical report no. E2016:011  
Department of Technology management and Economics  
Division of Service Management and Logistics  
Chalmers University of Technology  
SE-412 96 Gothenburg  
Sweden  
Telephone +46 (0) 31-772 1000

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## Abstract

The eldercare system in Sweden has gone through a prominent transition since the start of the 1990's, after a purchaser-provider split began to be implemented in the Swedish health care system. From an almost non-existent presence, private providers of care services for care homes today make up a roughly 20 percent of the total activity in the sector. Historically, research and literature in purchasing health services has mostly concerned the medical aspects of care, with limited prior research existing on the topic of which factors that influence the elderly's subjective satisfaction of the care they receive.

The purpose of this master thesis is *to contribute to knowledge creation and dissemination concerning how public procurement processes and quality criteria can be leveraged to influence quality outcomes of care home services*. The purpose is further divided into three research topics, namely: (i) explore which quality-based criteria in procurement specifications can affect satisfaction levels amongst the elderly living in care homes, (ii) Categorise the purchasing organisation of municipalities procuring eldercare in Sweden, and analysing what effects, if any, this structure has for the possibility to conduct procurement processes of care home services, and (iii) Investigate the characteristics of the relationship between municipalities and providers in Swedish eldercare, and how these characteristics relate to service quality. The study design consists of two parts. The first part is a qualitative multi-case study where eight procurement processes have been studied in detail through interviews with both local authorities and the local managers at the private providers, to gain more insight into the actual procurement process. The second part is a quantitative analysis of procurement specifications for 95 procurement processes of care homes – where the majority were conducted before 2013 – to see if any quality-based criteria can be seen to impact satisfaction levels amongst the elderly.

The key finding in this thesis is that municipalities can affect the subjective satisfaction levels amongst the elderly through purchasing, albeit only to a marginal extent. Through formulating quality-based criteria in the dimensions of the six cornerstones of quality improvement, the average effect is an increase in satisfaction amongst the elderly of 5.2 - 8.4 percentage points. The underlying explanation is that local authorities have a well-developed quality management system that focus on organising the provision of care around the residents of the care home, and have routines and structures in place to handle notifications of deviations in a swift manner.

In terms of purchasing organisations, it was found that many smaller municipalities had problems retaining and developing procurement knowledge. Therefore, this thesis puts forth recommendations that a national procurement unit should be created. Procurement resources could thus be shared between municipalities and the unit can focus on establishing and developing best-practice guidelines.

Lastly, the relationship between the municipalities and the private provider was found to be functioning well in most cases included in this study. Some obstacles to establishing a closer relationship were found, mainly related to the politicised nature of the topic of having private provider in eldercare. Unfortunately, the methodology chosen in this thesis did not yield any statistically significant criteria relating to relationships. An important finding is therefore that the procurement specification itself cannot guarantee that a functional relationship is created. Instead, purchasing mainly functions as a way to help set the stage; it is up to the actors to develop the relationship afterwards.

**Keywords: purchasing, purchasing organisations, quality improvements, quality management systems, care homes, eldercare, quality criteria, relationships**

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Finally, we want to congratulate ourselves for – albeit a bit behind the original schedule – completing this Master's thesis. We have enjoyed researching and writing this thesis immensely and we hope that you will find an equal enjoyment in reading it.

## Terminology and abbreviations

Term	Description
Care home	Refers to a where elderly who in some way are unable to care for themselves live at.
Private provider	A care home provider that is operated by a privately owned organisation
Public provider	A care home that is operated by the local authorities (the municipalities)
Local manager	The local manager at the care homes
Procurement process	The tendering process that the local authorities do.
Procurement specification	The document containing requirements of care services that the municipalities write at the beginning of each procurement process.
MAS	Medically responsible nurse, refers to the actor that has the medical responsibility for the care in either the care home or centrally at the local authorities.
Eldercare	A generic term used to describe all types of care services aimed at the elderly.
Quality Management System	A collection of values, principles and methods that form a basis on how to work with quality management.
Resident Surveys	The annual surveys from The National Board of Health and Welfare (Socialstyrelsen) that measure elderlies' satisfaction with the eldercare.
Local authorities/Municipalities	Used interchangeably to denote the local public organisation that exist on a municipal level.
Notification of deviations	Sv: Avvikelsehantering. A notification from a private provider to the local authorities that a deviation in the provision of care have taken at the care home.
Public committee	Sv: Nämnd. Referring to the political entity at the municipalities that take decisions regarding priorities in the provision of eldercare.
Public administration office	Sv: Förvaltning. Referring to the department at the municipalities that execute the decisions taken by the public committee.
Award criteria	Criteria that is used in order to assess private providers' bids in a procurement process.
IVO	The Health and Social Care Inspectorate in Sweden.
SKL	Swedish association of Local Authorities and Regions. Advocacy group for municipalities and counties in Sweden.
Resident board	Decision board where the elderly can exercise influence on the provision of services at the care homes.
Statistics Sweden	SV: Statistiska centralbyrån. Governmental body responsible for public and other governmental statistics in Sweden.
Representatives for the administrative authority	SV: Biståndshandläggare. Used interchangeably with care service administrator to denote the employee at the public administration office that approves request from elderly regarding the provision of eldercare services.

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# 1 Background and Introduction

For nearly two decades, there has been an intensive debate in Sweden regarding the health care sector. This topic has not only been explored in Sweden, but also in other countries, where public procurement and market competition has been seen as means to modernize, i.e. streamline the production of health care services (Broadbent & Guthrie, 2008; Eriksson-Zetterquist et al., 2011). It has also been presumed, and hoped, that market competition from the private sector will help stimulate efficiency gains in the public sector (Andersson et al., 2014).

The entrance of private providers in the Swedish health care system took place in the end of the 80's and the beginning of the 90's through a series of reforms by the Swedish Government aimed at increasing choice for the citizens (Bergman & Jordahl, 2014). The sectors within the health care systems have been affected to a different degree in terms of the share private providers have of the market sector, much depending on specific market characteristics. One of the sectors which has seen the largest increase in the establishment of private providers is eldercare, out of which private providers currently makes up roughly 20 percent of the activity performed; a percentage which is increasing steadily (Bergman & Jordahl, 2014).

During this time, much media debate has focused on the private providers' effect on the quality of eldercare, or more specifically regarding care quality in care homes. In the public debate, arguments have been put forth that the introduction of private providers in the eldercare system have had, and will have, a negative effect on the care quality the elderly receive in care homes due to the introduction of a profit motive. This could, for example, result in a reduction of available staff, or other cuts that might affect the quality outcome. According to recent investigations, allowing private providers to operate care home has not affected care quality negatively; on the contrary, it seems that the effect has been slightly positive (Bergman & Jordahl, 2014). In general, there is a difference in what public and private providers tend to focus their resources on. While the public providers tend to focus more resources on structural aspects such as personnel, the private providers tend to focus their resources on processes, such as letting the elderly participate in formulating their own care plan (Stolt et al., 2011).

One of the main issues when determining care quality arises from how the term quality is defined and how it is measured and observed. This difficulty impedes overall quality improvement within the eldercare sector and constitutes a market inefficiency (Andersson et al., 2014; Bergman & Jordahl, 2014). Therefore, due to difficulties of producing objective quality-based criteria and the absence of such data, public procurement processes tend to focus on legal compliance rather than service quality in its tenders (Swedish Ministry of Finance, 2013). For example, in public procurement of eldercare, quality-based criteria is rarely what will make the winning bid (Health Navigator, 2013; Stolt & Jansson, 2006). This is also consistent with other finding, which shows that there is an overall lack of criteria and systems for determining the quality of processes and results within many – or rather most – areas of the health care sector (Andersson et al., 2014).

The trend with private providers in eldercare is not unique to Sweden, but rather most European countries have seen a development towards more private providers, driver by the separation of responsibility of purchasing and providing health care services during recent decades (Figueras et al., 2005). This has had the effect that organisations such as WHO have started to recognise the increasing importance of purchasing, and more specifically the importance of strategic purchasing of health care services in terms of which services to be bought, how and from whom (World Health Organization, 2000). The implication of more emphasis on purchasing in health care is that the requirement for a more professionalised purchasing organisation increases. Øvretveit (2003) also highlights this aspect as an important prerequisite to implementing quality-based purchasing strategies. Therefore, it is not sufficient to only look into the field of quality science itself when aiming to incorporate quality-based criteria in procurement of eldercare: the purchasing organisation is a precursor and enabler of quality-based procurement that needs to be addressed.

## 1.1 Purpose

The purpose of this thesis is: *to contribute to knowledge creation and dissemination concerning how public procurement processes and quality criteria can be leveraged to influence quality outcomes of care home services.*

A normal distinction of quality in eldercare is to divide it into two categories: the technical (medical) aspects and the functional (subjective) aspects (Westlund & Edvardsson, 1998). Much of the literature and research that have been done previously has focused on the medical aspects of eldercare, and

few have tried to assess how the subjective satisfaction of the caretakers in eldercare can be affected. Most of the research originates from the United States, but due to large difference in the medical system, these findings are not directly applicable in the Swedish context. Furthermore, the definition and measurements of subjective satisfaction often vary; therefore, results are not always comparable across national boundaries. (Figueras et al., 2005).

Prior research has been done on what affects the interpersonal relationship between caretaker and caregiver has on the subjective satisfaction levels among the elderly (Kajonius, 2015), but no previous research have been done to evaluate how specific requirements in procurement specifications can contribute to an positive impact on subjective satisfaction levels amongst caretakers on care homes. The first research question is therefore to:

- i. Explore which quality-based criteria in procurement specifications can affect satisfaction levels amongst the elderly living in care homes.

Regarding organisational form, some prior research have been conducted regarding what organisational prerequisites that are needed for a purchasing organisation to function efficiently in regards to capacity and required competence (Figueras et al., 2005). However, little research deals with how different purchasing organisation affect the possibilities to conduct purchasing processes in the context that is explored in this thesis. No research has been found that deals with purchasing organisation for eldercare in Sweden as a separate phenomenon. A second research question is therefore to:

- ii. Categorise the purchasing organisation of municipalities procuring eldercare in Sweden, and analysing what effects, if any, this structure has for the possibility to conduct procurement processes of care home services.

In purchasing theory, an integral aspect of purchasing is the relationship between the purchaser and the suppliers (providers). In relation to public procurement of eldercare services, it is within the relationship between the municipality and the private provider that the procurement specification is operationalised. The third research question is therefore to:

- iii. Investigate the characteristics of the relationship between municipalities and providers in Swedish eldercare, and how these characteristics relate to service quality.

## 1.2 Scope

The focus of this thesis is on how quality criteria are currently used in public sector procurement processes of care home services. Thus, the scope of the thesis is restricted to only include public procurement processes of care home services, i.e. no other health service is included, such as eldercare provided directly in the homes of care takers or health care.

The analysis of this topic will be made in the context of the prevalent economic, political and social conditions in Sweden during the time of writing. Only procurements done according to LOU will be dealt with in this thesis, since the LOV procurements function differently.

## 2 Literature study

*The literature study will encompass two major areas: how quality is related to eldercare, and how the purchasing organisation of public organisations is structured. The framework forms a departure point for the analysis of the collected empirical data.*

To answer the purpose and the affixed research questions of this paper, a theoretical study was conducted. This forms an entry point to the analysis of the gathered empirical data. The sources were scientific literature, with emphasis on articles from scientific journals, but also including books, reports and other sources. The sources were selected based on relevance to the subject matter, as well as the assessed quality of each source. The source quality was estimated by the article's content, the renown of the journal where articles were published, as well as the number of external citations.

### 2.1 Quality in eldercare

Quality is an elusive term to characterise unambiguously, and continues to be so when pertaining to eldercare. In this chapter of the literature study, quality and quality management is defined in general, and is connected to the particular characteristics of health care in general, and eldercare in particular.

#### 2.1.1 Defining quality in relation to eldercare

The research area of quality and quality management has throughout the years used a wide array of definitions and approaches to define and understand quality, depending on the perspective taken. Crosby (1979) has a point of departure in the producer perspective and therefore defines it as:

*Conformance to requirements*

The definition presented by Crosby (1979) focuses solely on the producer side. Other author's such as Deming (1986) argue that the definition of quality is inseparable from the customers perspective, and therefore has an definition that includes that perspective:

*Quality should be aimed at the needs of the customers, present and future*

Most definitions do however, in one way or another, define needs as explicit and expressed customer needs in terms of formulated demands concerning the product and/or service. Two notable exceptions when discussing needs in eldercare are that (i) there is a difference between need and demand (Stevens & Raftery, 1996), (ii) and the often prevalent hidden and/or not yet realised needs (Figueras et al., 2005). The difference between need and demand stem from the presence of disadvantaged and fragile groups such as for example patients with dementia and/or mental illness that are not able to formulate or express their demands (Figueras et al., 2005). Due to not having the prerequisites to voice their demands, these two groups of patients might be excluded in the definition of quality if not actively taking into account their actual needs when defining quality for a product or service. Not yet realised needs might be disorders such as early stage cancer, where the customers thus have a demand for a cancer screening and/or treatment, but have not yet realised it themselves.

Bearing that in mind, a more encompassing definition of quality for eldercare might therefore be the one used by Bergman & Klefsjö (2008):

*The quality of a product is its ability to satisfy, and preferably exceed, the needs and expectations of the customers.*

Product in this sense does not merely refer to a physical product, but rather signifies an article or a service, or a combination of both. Bergman & Klefsjö (2008) also notes that needs and expectations are two separate things. Needs refers to what we actually need from the product and/or service, and includes needs that customer might not yet have realised they have, whereas expectations might include aspects or elements of the product/service that we do not need, but which we expect to be served with.

#### 2.1.2 Quality management

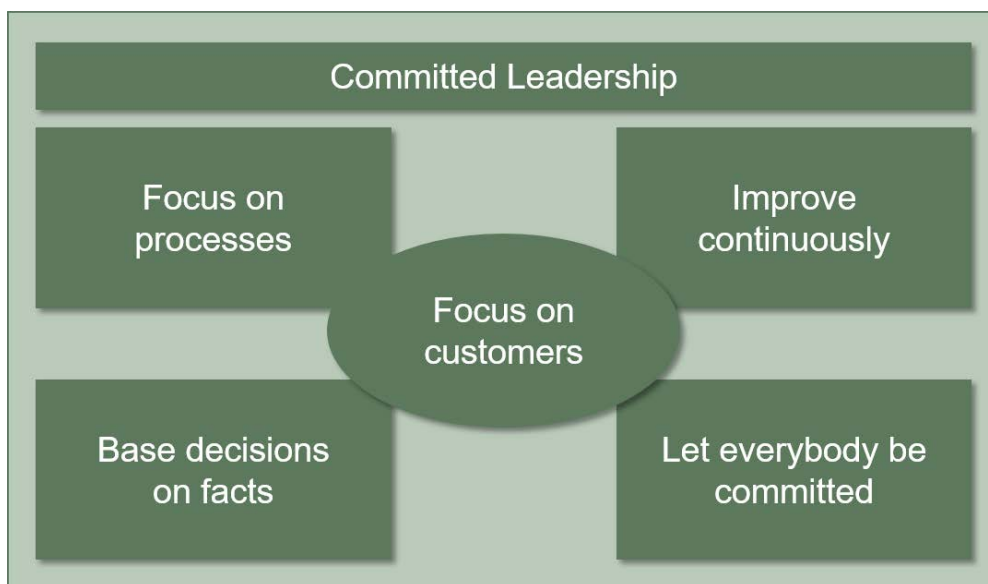
An integral part of quality, is quality management, i.e. to manage aspects of quality, so as to improve quality levels over time. Bergman & Klefsjö (2008) defines quality management, or Total Quality Management (henceforth referred to as TQM), as:

*A constant endeavour to fulfil, and preferably exceed, customer needs and expectations at the lowest cost, by continuous improvement work, to which all involved are committed, focusing on the processes in the organisation.*

In order to support this system of quality management, there are six values that any organisation must incorporate (Bergman & Klefsjö, 2008):

- A. Focus on customers
- B. Focus on processes
- C. Base decisions on facts
- D. Improve continuously
- E. Let everybody be committed
- F. Committed leadership

The six values above are referred to as the cornerstones of quality management and are values that an organisation must support through suitable methodologies and tools.



*Figure 1 The six cornerstones of TQM, adapted from Bergman & Klefsjö (2008)*

Figure 1 illustrates the main idea of the cornerstones which put the customer in the middle, with the four cornerstones acting as supporting mechanisms. *Committed leadership* works as a facilitator and enabler of all the other cornerstones, or as Joseph Juran stated:

*To my knowledge, no company has attained world-class quality without upper management leadership.*

When it comes to quality management systems, such as TQM, research and experience has shown that they can dramatically cut cost and improve quality (Bergman & Klefsjö, 2008). However, in the health care sectors, there is limited evidence that TQM has improved the quality of care (Øvretveit & Gustafson, 2003), and even less so for the eldercare sector in general. However, the fundamental aspects of the model presented by Bergman & Klefsjö (2008) are considered to be good predictors of achieving care quality. This model forms the basis for how quality management is referenced during the course of this thesis. Below, an elaboration of the aspects of this model is presented, where connections are made to eldercare where appropriate.

### Focus on customers

Focusing on customers in this context implies finding out what are their demands and what are their needs, and to systematically incorporate these needs and demands in the development and manufacturing of the product (Bergman & Klefsjö, 2008). To once more emphasise the definition, product in this context refers to physical products and/or services. However, there are two inherent challenges in this, (i) how to assess what the customers actually want, and (ii) to understand who the customer actually is. In assessing what the customer wants, there are a range of tools available: from

market surveys, direct observations from living with the customers, House of Quality etc.

In understanding who the customer is, an important clarification needs to be done in this context and in this thesis: the customer is considered to be the elderly themselves. The motive for this choice is that it is to the elderly the production of eldercare services is targeted, and it is the elderly who are participating together with the employees in the service delivery. An addendum to this definition, is that the distinction between *internal* and *external customers* has to be made. *External customers* would be the elderly, since they are the ones the actual service delivery is aimed at, but the *internal customers*, i.e. the employees in the provider's organisation, cannot be neglected since their satisfaction has an impact on the quality and quality management (Bergman & Klefsjö, 2008).

### Base decisions of facts

In the TQM framework, basing decisions on facts does not imply taking decisions based on information that is affected by random variation, but rather to act on the variation that is dependent on identifiable causes (Bergman & Klefsjö, 2008). An example of this in relation to eldercare are reported errors in service delivery and/or medication in care homes.

In supporting this cornerstone, you normally separate between two broad groups of tools: *The Seven Improvement Tools* aimed at numerical data, and *The Seven Management Tools* aimed at structuring and analysing verbal information (Bergman & Klefsjö, 2008). *The Seven Improvement Tools* contains control charts, Pareto diagrams, scatter plots, data collection, histograms, stratifications and cause-and-effect diagram. *The Seven Management Tools* contains affinity diagrams, tree diagrams, matrix diagrams, interrelation diagrams, matrix data analysis, process decision charts and activity network diagram.

### Focus on processes

Before a description of processes is given in relation to the cornerstones model, a definition of a process should first be given. Bergman & Klefsjö (2008) defines a process as:

*A sequence of interrelated activities that are repeated over time [which] transforms certain input, such as information and material, into certain output in the form of various types of goods or services [with the purpose to] satisfy its customers with the end result produced, while using as little resources as possible.*

The processes in an organisation can then be classified according to three different types of processes: *main processes*, *support processes* and *management processes*. The main processes create value for the external customers, support processes provide resources for the main processes, and management processes have the task of making decisions on the targets and strategies of the organisation. (Bergman & Klefsjö, 2008)

### Improve continuously

The importance of continuous improvement stems from the fact that external customer requirements are constantly changing, or growing in scope, and that new technological solutions appear on the market which enable new ways of working (Bergman & Klefsjö, 2008). According to Bergman & Klefsjö (2008) the basic rule of continuous improvement is that:

*There is always a way to get improved quality using less resources.*

The challenge is to find the steps which will lead you there. Bergman & Klefsjö (2008) does also emphasise that mistakes are a good thing, since they provide information about a process and thus an opportunity for learning; an organisation should therefore never retreat into searching for scapegoats when mistakes happen, but address the underlying problem.

### Let everybody be committed

According to Bergman & Klefsjö (2008), it is essential to create conditions for participation in order for quality work to be successful. Important means to achieve this are to facilitate opportunities for all employees to be committed and to have them participate actively in the decision-making and improvement work. Carlzon (1987) states that the key words to achieve commitment are *communication*, *delegation* and *training*. Communication, because dissemination of information is a

prerequisite to being able to take responsibility for something; delegation, as it is important to provide the opportunity for involvement, and to make each person feel needed; and training, as the employees should be prepared for the task (Carlzon, 1987). Carlzon (1987) clarifies that commitment is important, because:

*when a person in freedom is allowed to take responsibility, resources are released which are otherwise not available.*

Eldercare is characterised by the interpersonal relationships between the employees and the elderly, and it has been shown that the interpersonal factors influences the perceived care quality (Kajonius, 2015). Because of this fact, the well-being of the employees is an important factor in establishing an environment where the relationship with the elderly is prioritised (Kajonius & Kazemi, 2015). An increased level of commitment and more responsibility among the employees are one way of achieving work satisfaction of employees (Rubenowitz, 2004). From the reasoning above, one way to increase the care quality is therefore to allow the employees to take responsibility and increase their commitment. In addition to this, the act of being more involved also increases the employees understanding of their role in delivering a high service quality (Bergman & Klefsjö, 2008).

However, the commitment is not only restricted to personnel when it comes to eldercare. Because of the interpersonal relationship that is integral to the creation of quality, the elderly themselves should also be included in the value-creation process. This is not to say that they should be made responsible for their own care, but there should be opportunities to engage and influence the activities which occur at the eldercare homes. That is, a driver for care quality is the ability for the elderly to influence the care that is given to them (Kajonius, 2015).

### Committed leadership

Bergman & Klefsjö (2008) emphasise the aspect of leadership, and draws an analogy between leadership in the industry and the role of a coach in a sports team; the role of the coach is to stimulate and inspire the team towards agreed goals and draw up guidelines on how the should be played, while leaving room for the different players to decide for themselves how to conduct the match in detail. In their definition of leadership, they also include the aspects of creating a vision for the organisation, communicating clearly, and motivation and inspiring the organisation to move in that direction.

#### 2.1.3 Quality management systems in Swedish eldercare

In Sweden, there are different quality management systems available that take different views upon quality. The National Board of Health and Welfare's (Socialstyrelsen) quality management directive SOSFS 2011:9 places emphasis on more mechanistic aspects such as processes, compliance, participation of personnel in quality work, guidelines etc. The Swedish Institute for Quality (SIQ, 2015) takes on a different approach in their quality management directive and includes aspects such as leadership, vision and organisational structures, aspects that are more in line with an organic view on quality, meaning that quality is something that should be defined out of the requirements of those involved in the service delivery. municipalities in Sweden tend to favour mechanistic requirements and quality management systems when procuring elderly care services with very detailed requirements on service delivery (Health Navigator, 2013).

#### 2.1.4 A taxonomy for assessing quality criteria when procuring eldercare

One of the most commonly used definitions when defining and conceptualising care quality is the model by Donabedian (1983) regarding *structure-process-outcome*. Structural quality indicators refer to aspects such as personnel, IT-systems, facilities, minimum length of booked appointment with doctor or even quality assurance systems; process indicators refer to mandating or forcing the provider to use certain methods of working – such as evidence-based processes – with the patients; and result indicators refer to measurable outcomes and targets for these. Outcome criteria are prevalent in management research; for example, in the organisational literature regarding how to manage supplier performance – in particular in terms of supplier quality assurance – emphasis is often placed on the purchase order specification and measureable quality agreements and targets (Van Weele, 2009). However, when using outcome measures for the health sector, there are two main difficulties that must be overcome according to Figueras et al. (2005): (i) individual interventions are not easily attributed to a specific health outcome, since initial conditions of the patient and choices made by the patient influence these outcomes (McKee & Hunter, 1995), (ii) and the possibility that focusing too much on performance indicators might deflect attention from others areas that might be of greater importance for the patient (Smith, 1995). An alternative to using outcome measures is to use *surrogate parameters*,



meaning parameters that are directly linked to health outcomes for specific diseases, e.g. blood pressure or cholesterol levels (Figueras et al., 2005). In terms of process quality, it is normally expressed in terms of patients being given effective interventions, e.g. through expressing waiting times for patients (Figueras et al., 2005). In relation to care quality, a variant of process requirements is indirect promotion of quality through requiring a minimum amount of activity for certain type of services. Evidence has shown that especially concerning surgical and medical-interventionist procedures, this has positive effects on the quality of care delivered (Halm et al., 2002).

However, these dimensions are not all equally predictive of care quality. Kajonius & Kazemi (2015) analysed the impact of the process and structure factors as defined in the model by Donabedian (1983). Through their study, they found that:

*The data, analysed at the municipality level, showed that process-related factors were more strongly associated with older persons' satisfaction in both home and nursing home care than structural factors.*

The authors expanded on this by stating that though structural factors are less predictive of care quality, they are still important in establishing a form of base level of care. For example, it would be misguided to assume that the care quality would be unaffected if the budget and staffing levels would be cut in half. The absence of a clear link between quality indicator score and quality is further reported by Nakrem et al. (2009). Despite this weak connection, the use of such quality indicators are common in healthcare and eldercare, which implies that these indicators have little formal testing before being operationalised (Nakrem et al., 2009).

In addition to the model presented above, another way to categorise quality indicators is to follow the model developed by Westlund & Edvardsson (1998) which divides quality into functional and technical quality aspects. Here, technical quality corresponds to the actual service delivered, i.e. the objective result of the health care service such as medical outcomes. Correspondingly, the functional quality refers to the quality perceived by the patient and relates to aspects such as how the patient was treated while the care was administered. An aspect that needs to be taken into consideration when it comes to using functional and technical quality indicators in health care, is that there is asymmetrical information between the health care provider and the patient, i.e. the patients are not knowledgeable enough to assess the aspects of quality of care in any other way than the functional one (Figueras et al., 2005). Thus, merely asking the patients themselves the question "Are you receiving good care?" is insufficient, since this will not capture the technical, objective, aspects of the delivered care.

The challenge when using functional and technical quality indicators to guide organisational decision-making will be to strike a balance between them. The importance from technical quality might be obvious, since the quality of care given will have actual health outcomes. The functional, subjective, quality can however not be ignored. Asking the elderly themselves what they think is important, they do emphasise functional aspects such as participation in formulating treatment plans, confidence in care personnel, sense of security, stress, social stimulation and social relations (Rostgaard & Thorgaard, 2007; Socialstyrelsen, 2014). In a more philosophical sense, one could say that technical quality is about staying alive, whilst functional quality is about being alive. Arguing for the importance of one over the other is futile. It is true that legislation and regulation exists concerning technical quality in eldercare which could be claimed to be a projection of society's priorities through the democratic process. However, trying to attribute importance to either form in favour of the other will still always be deemed as an arbitrary endeavour since it boils down to answering ethical questions, which by nature cannot be empirically defined.

## 2.2 Organisation of purchasing functions

In this second part of the literature study, the topic of organising purchasing will be addressed. This subject area has received much attention from the scientific and business community in the past decade; however, the same cannot be said for the procurement in the private market (Lember et al., 2014; Telgen et al., 2007; Thai, 2001). In the following chapters, an overview of the specific characteristics of public procurement – and specifically procurement of health care services – will be made. In addition, a model of organisation of purchasing in private companies will be presented. Finally, a description of the relationship-building aspects of purchasing will be presented.

### 2.2.1 Characteristics of Public procurement

Public expenditure is financed through taxes, which makes the citizen an important stakeholder to consider for public procurement officials; there is a demand to increase the value of each tax unit. In

comparison, public procurement is a more expensive endeavour compared to its private counterpart (Murray, 1999). These extra costs come from larger buying groups, a costlier selection process, and the proliferation of post-purchase monitoring (Lian & Laing, 2004). The purchasing functions of private companies and public institutions differ in many ways, but are similar at the most basic level: to provide the most value with the resources being put into the process as possible (Telgen et al., 2007). One way to look at private procurement is to view the government as a large organisation that is trying to satisfy its needs. In private companies, the size of the organisation tends to correlate with the complexity of the purchasing structure (Trent, 2004). This increase in complexity comes from the increased demands of the large organisation leading to a proliferation of information, which necessitates larger purchasing teams and more sophisticated methods of managing this complexity (Glock & Hochrein, 2011). The effect of this is often a higher degree of centralisation of the purchasing function in the organisation (Glock & Hochrein, 2011). However, this analysis is not directly transferrable to public institutions, because of the intrinsic characteristics of such organisations (Murray, 1999). Public procurement is subjugated to additional – and possibly contradictory – demands, compared to private purchasing (Telgen et al., 2007).

At the most basic level, the procurement process should satisfy the immediate need while following the prescriptions from laws and regulations. For Sweden, as a member of the European Union, the foundation is laid by the five fundamental principles: non-discrimination, equal treatment, transparency, proportionality and mutual recognition (Lindskog et al., 2013). Building on this foundation, the national laws of Sweden provide a more detailed legal framework for public procurement processes in the country. According to Telgen et al. (2007), the legal environment around public procurement can be so complex that the process sometimes becomes more of a legal process than a procurement process. These formal demands on the process have the effect of limiting the scope of possible actions that a public institution has (Lian & Laing, 2004). An example of this is that the possibility to form long-term relationships with suppliers can reduce, as the restrictions put in place by the legal framework prohibits their formation (Telgen et al., 2007).

A second level of demands is that public procurement can be used as a tool of government (Telgen et al., 2007). Because public procurement contracts can be large in scale, the effects for the private market of such contracts can be substantial (Telgen et al., 2007). This effect could be used to stimulate job growth or innovation in certain sectors of the economy (Lember et al., 2014; Murray, 1999). Furthermore, because of the high relative buying power resulting from the public procurement process, public institutions can utilise these processes to implement direct changes in society, for example related to environmental requirements, or as a tool to ensure a healthy competitive market (Telgen et al., 2007). However, because there are multiple levels of government and a multitude of policies in effect at each given instance, these policies might not harmonise with each other (Murray, 1999). The political influence of public procurement also entails certain artefacts, such as the fulfilment of promises made during election campaigns.

In Sweden, local governments such as the municipalities and counties, are to a high degree autonomous from the central government when it comes to decision-making. In terms of accountability of the private organisation towards the government, Figueras et al. (2005) argues that it is mainly this devolution of the decision-making which matters, i.e. how decentralised the decision-making authority is in a health system. Local decision-making is regulated in the *Kommunallag (1991:900)* and the access to health care services are to some extent regulated through different laws such as *Hälso- och Sjukvårdslagen (1982:763)*, *Tandvårdslagen (1985:125)*, *Lagen om stöd och service till vissa funktionshindrade (1993:125)* and *Tredje stycket Socialtjänstlagen (2001:453)*. The responsibility for financing and provision of eldercare in Sweden are however delegated to the roughly 290 municipalities, where local managers decide upon how many, how often and what kind of services the elderly are entitled to (Stolt et al., 2011). Figueras et al. (2005) argue that the positive effects of devolution of decision-making are manifold: the increased managerial autonomy leads to improved decision-making; entrepreneurship and innovation are stimulated; and provisioning of health services becomes more responsive to patients and the public. In summary, contracting becomes a more effective mechanism when it is taking place between local decision-makers (Figueras et al., 2005). The down-side is that public health goals and equity might vary, something which can be seen in Sweden for example through varying local spending on eldercare services and varying local elderly satisfaction<sup>1</sup>.

The private actors that are contracted can be influenced through public procurement. In knowing how providers are affected by purchasing, it is hard to disentangle the impact of purchasing from other

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<sup>1</sup> Swedish Social Service's database *Öppna Jämförelser*.

contextual factors such as the overall economy, technological innovation and the regulatory regime. An important aspect is to increase providers' accountability (Figueras et al., 2005). There are many ways to materialise this concept of accountability, but reputation is one key component. Reputation can act as a driver for quality improvement (Figueras et al., 2005). In assessing implementation of quality assurance programmes in three comparable Swedish counties, Garpenby (1997) found that where you had most exposure of competition, reputation became increasingly important and acted as a driver for implementing quality assurance initiatives:

*The professional incentive for pursuing quality assurance is not in any way connected to finances, but instead the desire is to show that one's own department is doing a good job and that it is just as good as our neighbour's. It is a matter of professional pride.*

Finally, as mentioned previously, a foundation of public procurement is the concept of transparency. This principle means that budgets, processes, results and more are made available to the public. This is a way of reducing the risk of corruption by increasing public accountability of public officials (Telgen et al., 2007). Having this principle in place while conducting business transactions with private organisations can be a delicate balancing act, where the competitive interests of the private organisation need to be harmonised with the desire to make as much information as possible available to the public. In Sweden, the right of the citizen to access public documentation is regulated in the second chapter of *Tryckfrihetsförordning (1949:105)*, which is part of Swedish constitutional laws.

### 2.2.2 A model for the structure of Purchasing Functions

When analysing the effectiveness of the purchasing function in an organisation, it is of interest to look at where the purchasing function is located in the organisational hierarchy. The way an organisation structures its purchasing function is highly dependent on the characteristics of the organisation's operations, as well as environmental factors (Van Weele, 2009, p.279).

In a model developed by Van Weele (2014), four alternative structures of the purchasing function are presented. These structures refer to where the purchasing functions are located in the organisational hierarchy, as well as what functional responsibility these units have. The different structures are: i) decentralized purchasing structure, ii) centralized purchasing structure, and ii) hybrid structure. The characteristics of these structures, in terms of benefits and drawbacks, will be presented in the following paragraphs.

A decentralised purchasing structure entails that individual business units have full responsibility over their performance, which in turn entails responsibility over the purchasing function (Van Weele, 2009). Furthermore, in a decentralised purchasing structure, there is no central purchasing department present in the organisation (Van Weele, 2009). As such, there is inherently no formal cooperation or coordination between business units' purchasing efforts within the organisation. This allows a large degree of freedom for each business unit, which can increase flexibility and responsiveness of the organisation, and is particularly attractive if each business unit has a distinct purchasing need, i.e. if the operational characteristics between business units vary to a high degree. However, having no coordination of purchasing in an organisation can be disadvantageous in several ways. Firstly, intra-organisational competition might occur if several business units require a certain good or service, when the supply capacity of this good or service is limited. Secondly, the negotiation power of each business unit taken separately is smaller than if the entire organisational demand is aggregated. There is also the possibility that different business units will end up with different price-levels for the same products. (Van Weele, 2009)

In contrast, the centralised purchasing structure entails that a single unit is responsible for fulfilling the entire purchasing needs of the organisation. Thus, the needs of all business units are aggregated. This allows the purchasing unit to become highly specialised, through employing experienced personnel and implementing sophisticated purchasing processes. As a consequence of the multitude of involved stakeholders and the sophistication of the purchasing agreements, the contract periods tend to be longer when centralised purchasing is used. The increased competence, as well as the larger purchasing volumes, also lead to a higher negotiating power *vis-à-vis* the supplier. This has the potential to result in purchasing agreements which are more beneficial for the company as a whole. Furthermore, a centralised purchasing unit can operate with strategic and long-term goals in mind. As such, the relationship with the supplier can be developed in a more controlled manner. This can have the benefit of increasing the quality of the product in question. However, having a centralised purchasing structure does not cause exclusively positive effects. Concentrating all purchasing decisions to one unit inevitably

introduces more bureaucracy. This makes the individual business units of the organisation less responsive, as they have less influence over their operation and development. The increase in sluggishness of operations can cause business units to avoid including the central purchasing unit, thus undermining the organisational hierarchy. As such, a pure centralised structure is only suitable in certain situations, such as when several business units are in need of the same products, and these products have a high strategic importance. (Van Weele, 2009)

The above structures are two extremes on one continuum of how the purchasing function of an organisation can be structured. In addition to these pure archetypes, the purchasing function can be organised with elements taken from both of structures. In defining this structure, Van Weele is inconsistent in the terminology used between editions. In this thesis, the definition follows that of Van Weele (2014), i.e. where this mixed structure is referred to as a hybrid structure. In practice, many implementations are of this structure type. Because the concept is innately combinatorial, this is not surprising. In particular, (Van Weele, 2009) stresses the voluntary character of the purchase coordination. Three different variants are identified as i) voluntary coordination, ii) lead buyership, and iii) lead design concept. Voluntary coordination (i) entails that a large amount of information is exchanged between the purchasing departments of the organisation. Corporate-level purchasing agreements are established with suppliers based on the demands of the largest users. However, the individual business unit is not forced to follow these agreements, but is free to establish its own contracts if necessary. In lead buyership (ii), the business unit who has the largest purchasing volume is made responsible for securing a purchasing agreement with a supplier. This business unit collects information from other business units and negotiates an agreement which all business units in the company will refer to when placing subsequent orders. Lastly, in the lead design concept (iii), the business units responsible for designing the product are made responsible for sourcing the materials needed. If other business units are interested in using the same materials, these units can utilise the pre-existing contracts with suppliers.

One specific type of hybrid structure is what (Van Weele, 2014) calls the *Line/staff organization*. In this structure, the centralized unit is not responsible for officiating the actual purchasing processes. Instead, the central unit coordinates the various decentralised business units and their respective purchasing functions. This could, for example, include promoting and facilitating communication between business units, as well as increasing the awareness individual business units have about other units in the organisation. In addition, the central purchasing unit is responsible for establishing guidelines and procedures for how purchasing should be conducted in the organisation, as well as educating the individual business units about these aspects. This central unit can also provide an auditing function to be used by management on request. Because of the highly specialised nature of the central purchasing unit, the hybrid structure is usually found in very large organisations.

The choice of which structure to implement is, as has been mentioned, dependent on the characteristics of both the organisation and the context in which the organisation operates. There is no single purchasing structure which is appropriate for all situations; instead, the purchasing structure needs to be adapted to the context of the organisation (Glock & Hochrein, 2011). Furthermore, the choice of purchasing structure is often continually evolving, and will change depending on the instantaneous factors which are affecting the organisation (Van Weele, 2014). Van Weele (2014) has identified a number of factors which influence the choice of purchasing structure for an organisation. These factors are briefly explained in Table 1.

Table 1 factors influencing the purchasing structure, adapted from Van Weele (2014)

Factor	Description
Commonality of requirements	Factor of how common the requirements are between units. Centralisation is more beneficial with more similarities.
Geographical location	Large distances, both in geographic and cultural senses, make coordination and collaboration more difficult, i.e. centralisation is less suitable.
Supply market structure	Regards the balance of power between the organisation and its suppliers. If the supplier has high negotiation power, pooling purchasing requirements becomes more attractive.
Savings potential	Some products are affected by purchasing volume. Buying larger quantities of such products, i.e. by aggregating the organisation's demand, can lead to a reduced price
Expertise required	Purchasing some products and services requires substantial expertise from the personnel involved. In these situations, a centralised structure can be beneficial.
Price fluctuations	If the product is subject to large price fluctuations, a centralised purchasing structure is more attractive
Customer demands	Some customers dictate products that should be used. In such situations, a decentralised structure is more attractive, as local departments can respond to demands more quickly. Furthermore, any centralised dictations will be made obsolete by the customer demands.

### 2.2.3 Relationships

An important part of purchasing is the notion of relationships between the actors in the purchasing relationship. Traditionally, the relationships between purchaser and provider of a service or a product treated the purchasing process as merely transactional: the main goal was to reduce the power position of the opposite party, while gaining as much direct benefit from the transaction as possible (Jonsson & Mattsson, 2011). In other words, such relationships were competitive and adversarial in nature, where the actors considered each other to be opponents in a fixed-sum game; if one actor gained something, the other must lose the reciprocal quantity. Because of this balance of power between both actors, it was also not recommended to become too dependent on one supplier or buyer, as the power balance would shift unfavourably in such situations (Gadde & Håkansson, 2001). However, in the past decades, there has been more attention to treating the opposite party in a purchasing process as a potential partner, where a relationship could be developed for mutual gains (Jonsson & Mattsson, 2011). In a more long-term and stable relationship, the opportunity for mutual adaptation over time is a possibility; in a short-term, transactional relationship, such adaptation would be high risk, as there is the looming threat of the relationship being broken by the other party. Such mutual adaptation can make the interaction between the parties less resource-intensive, i.e. the efficiency of the purchasing process increases; in other words, the total cost of purchasing is reduced (Jonsson & Mattsson, 2011). Developing the relationship further is also more suitable if the service or product being procured is complex in nature, as the increased complexity can be managed better through a partnership (Van Weele, 2014).

Although the notion of relationships might seem advantageous compared to the arms-length counterpart, there are drawbacks to this strategy. For one thing, relationships take resources to develop and maintain (Gadde & Håkansson, 2001). As such, the decision of relationship development is one of balancing expected benefits – for instance in cost reductions – against the costs of maintaining and developing the relationship (Gadde & Håkansson, 2001). In addition to pure cost benefits, there is also opportunities of developing the quality level of the service or product which is received (Bergman & Klefsjö, 2008). Furthermore, developing a relationship increases the risk level of the organisation, as the dependence on one actor ties the performance of the organisation to how reliable the purchasing partner is (Gadde & Håkansson, 2001). Therefore, having a relationship approach is not suitable for all products and services that an organisation needs to purchase, but is only suitable in some contexts; or, as expressed by Bensaou (1999):

*No one type of relationship, not even the strategic partnership, is inherently superior to the others.*

Relationships are developed in stages, and cannot be instantly created; as such establishing a relationship between two actors requires continuity in the relationship (Gadde & Håkansson, 2001; Van Weele, 2014). During the development of relationships, ties between the two organisations start to form (Jonsson & Mattsson, 2011). These ties can manifest themselves as relationships between employees of the different organisation, technical adaptations (such as IT), judicial contracts and more (Jonsson & Mattsson, 2011). These ties make it more difficult to break the relationship: the ties can be seen as investments in the relationship, which would be lost if the relationship was disbanded.

There are interesting effects when these theories are applied to the context of eldercare. The focal relationship in this instance is that between the private eldercare provider and the local government. In public procurement, the scope of the relationship is highly controlled through the contract and the legal implications of the purchasing process (Camén, 2010; Lian & Laing, 2004). On the one hand, these legal regulations limit the possibility of having contracts of substantial length with one supplier, whereas the no-discrimination principle entails that a previous private provider cannot be awarded any consideration based on past experience of running the care home which is the object of the procurement process. But, on the other hand, because of the difficulty in breaking a contract after it has come into effect – absent of any gross negligence on the part of the provider – there is an argument to be made of reducing the contract time to increase the flexibility in changing providers. As such, the legal and process ramifications of public procurement are not conducive for creating long-term relationships (Telgen et al., 2007). However, because the focus of public procurement now has become more aligned towards procuring complex services, instead of products, the need to establish a relationship still exists (Abramson et al., 2003). Furthermore, the outcome of a contract is not decided based on the contract itself, but instead by the people and the relationships which are involved in the operationalisation of the contract (Abramson et al., 2003).

### 3 Methodology

The purpose of this thesis is to *contribute to knowledge creation and dissemination concerning how public procurement processes and quality criteria can be leveraged to influence quality outcomes of care home services*. The purpose is divided into three separate research topics, namely: (i) Explore which quality-based criteria in procurement specifications can affect satisfaction levels amongst the elderly living in care homes, (ii) Categorise the purchasing organisation of municipalities procuring eldercare in Sweden, and analysing what effects, if any, this structure has for the possibility to conduct procurement processes of care home services, and (iii) Investigate the characteristics of the relationship between municipalities and providers in Swedish eldercare, and how these characteristics relate to service quality. All of these topics have been treated with the same general approach: a) develop a theoretical framework; b) collect data about the current situation; and c) analyse the topic, by applying the theoretical framework to the collected data. However, due to the special characteristics of each research area, different methodological approaches has been taken. However, before this methodological discussion is undertaken, the research project is viewed from an ontological and epistemological perspective.

The ontological basis for this thesis is complex, for many reasons. Firstly, the multiple levels of the thesis' design will have inter-variations in how they can be approached. As an example, while quality criteria in health care services can be considered to be subjective and depends on the context, i.e. having a relativistic nature, factors such as the way purchasing is structured in an organisation is easier to determine. Following the discussion in Easterby-Smith et al. (2012), this thesis will take the internal realistic approach, i.e. that there is an objective truth for each topic, but that the factual evidence of this truth is circumstantial in nature. This standpoint implies an epistemological positivism (Easterby-Smith et al., 2012). However, due to the heterogeneity of the research design, different levels might include elements of constructionism.

Concerning methodology, the influence of the precluding discussion is eclipsing: almost inevitably, a mixed-mode research design is implied. As previously, this is due to the heterogeneity of the elements which are included in the design. As such, the methodology of this research topic is by necessity a mixed-mode type, where both quantitative and qualitative methodologies are utilised when appropriate. The purpose of this design is to adjust the research methodology to the characteristics of each level of analysis.

#### 3.1 Development of research method over time

In the initial phase of the work with this thesis, the empirical data was to be collected purely through the multi-case study. However, during the process of selecting suitable cases for the study, a large amount of quantitative data was accrued. The collection of this data was work-intensive. Because of this, the authors started to formulate a plan to utilise this data as a part of the study. When the interviews of the multi-case study started, many of the interviewees discussed similar themes. To test the impact of these themes on the quality outcome, a decision was made to categorise a selection of procurement specification documents. The themes discussed by the interviewees formed the basis for how this quantitative evaluation model was created. A timeline of this development is shown in Table 2.

*Table 2 Overview of methodological development during 2015 and 2016*

Topics	September	October	November	December	January	February
Literature overview						
Data collection from quality registries						
Interviews						
Development of Quantitative model						
Quantitative assessment						
Analysis						

### 3.2 Multi-case design

Eight cases were selected for the multi-case analysis. The selection criteria for these cases were based on a characterisation of how successful the tender process had been, the method of which will be explained in this paragraph. The aim this characterisation was to create a data set which could be used to showcase both successful and less successful procurement processes. The selection process started by searching the database of public procurement processes conducted in Sweden, called Visma Opic. An assumption was made that new procurement processes take time to come into effect, which is why only procurement processes conducted before 2013 were selected, with the exception of one case where the contract had been awarded to the same provider again. The database in Visma Opic enabled access to the documents relevant to the procurement process; thus, any criteria that were specified for the provider to fulfil were available through these texts. These documents were compared to the quality outcome of the health care service. The quality outcome was determined through analysis of databases and registers of care quality. The main source of such quality data was the resident survey. The part of this survey relating to the residents' satisfaction is a questionnaire which the elderly or their relatives fill in, which aims to find how satisfied they are with the received care. The criteria used for selecting cases was the factor for overall satisfaction, as this was believed to provide the best overall indicator of quality. The eight cases were selected by comparing the average outcome of all care homes in a municipality with the outcome of each individual private provider: this is the characterisation of how successful the procurement process had been. In this way, a number of outliers could be identified, i.e. eldercare homes that were significantly better or worse than the municipality average. Those care homes that are on the right-hand side of the red line are performing above the municipality average, and those on the left-hand side are performing below the municipality average (see Figure 2). This method was chosen because an assumption was made that influence of the individual characteristics of the municipality itself, such as tax levels or political affiliation in the region, would be minimized. The data for the residents' satisfaction was collected through the national quality registers of Kolada (for the municipal average) and Äldreguiden (for the individual private eldercare homes). Through Äldreguiden, only the most recent survey results are available, so the comparison is made for the results of 2014.



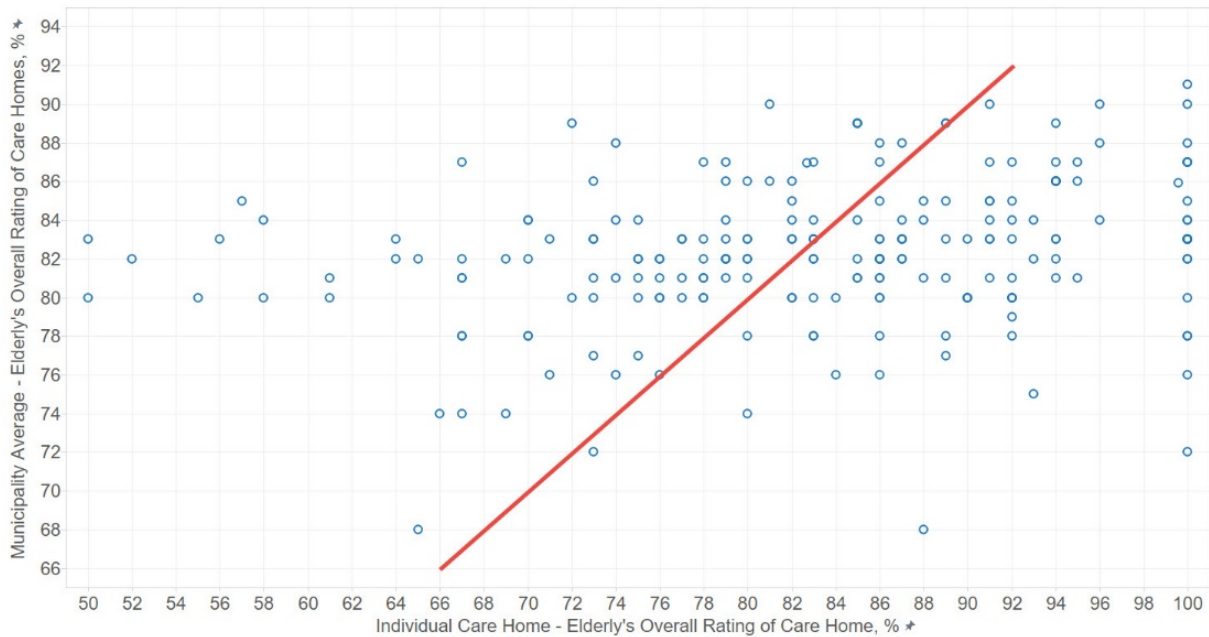


Figure 2 Scatter plot used for the case selection

The data for each case was collected through interviews. In each individual case, interviews were scheduled with the responsible person for procurement from the municipality, as well as the local manager at the private care homes. The local managers were either the present local manager at the care home, or someone that had that role previously. In this way, two perspectives were included in the same procurement process. This allowed comparisons to be made between what the municipal and private provider representatives saw as good and bad procedural artefacts.

During the course of the interview process, some interviews had to be cancelled. While all of the municipal interviews were able to be conducted, three of the local managers decided to withdraw from the study, which leaves the data collection for these cases incomplete. In the results, these cases have been indicated. Furthermore, due to the decision of selecting procurement processes which were conducted before 2013 for the study, some of the local managers and municipal representatives interviewed had not worked directly with the procurement chosen for the study. However, a decision was made that this does not necessarily lead to an imperfect data collection, as it is the operationalisation aspects of the procurement which this study aims to analyse. The interviews which were conducted, and on which dates, are presented in Table 3; interviews which were cancelled are marked with N/A.

Table 3 List of interviews conducted in the multi-case study

#	Case alias	Performance	Provider alias	Interview Municipality	Interview provider
1	Winterfell	High	House of Stark	2015-11-23	2015-11-25
2	Sunspear	High	House of Stark	2015-11-27	2015-11-27
3	Highgarden	High	House of Lannister	2015-12-16	N/A
4	Pyke	High	House of Lannister	2015-12-04	2015-12-10
5	King's Landing	Low	House of Lannister	2015-11-24	N/A
6	Harrenhal	Low	House of Stark	2015-12-03	2015-12-11
7	The Eyrie	Low	House of Stark	2015-12-09	N/A
8	Castle Black	Low	House of Targaryen	2015-12-08	2015-11-25

The interviews which were conducted were semi-structured in nature, with a general template being created during the pre-case framework creation. The semi-structured approach allows similar information to be collected from each respondent, while allowing some flexibility depending on the situation being studied (Bryman & Bell, 2015). The interview template was updated during the data-

collection process when deemed necessary as new findings were gathered. No complementary information was requested from the respondents after the interviews were conducted, even though this option was available.

The analysis of the multi-case study was made by first structuring the collected data according questions' topics in the interview template. Thereafter, an inductive analysis was made to find similarities between the cases, which is presented as part of the analysis of the paper. Furthermore, multi-case study findings were used as an input for the quantitative model.

### 3.3 Quantitative analysis

During the case selection process, a large number of data points were collected from Kolada and Äldreguiden. This data included many quality indicators and care homes which were not directly included in the initial study. During the process of conducting interviews for the multi-case study, a decision was made to utilise this data in a complementary quantitative study, where the quality outcome of a procurement process would be compared to the procurement documentation. In this way, the findings which emerged from the multi-case analysis could be tested on a larger population.

A total of 210 cases were identified to be relevant to be included in the study. The criteria for inclusion were that the procurement had been conducted before 2013, and that the care home is operated by a private provider. Furthermore, procurement processes which were conducted according to LOV were excluded from the study since the procurement processes are conducted in a different way. From the initial set, documentation was found for 95 of these cases (See Appendix 1). It is possible that further investigation would have led to more documents being discovered, as all procurement processes should generally be available through Visma Opic. The authors suspect that this could be related to the difference of how care homes procured through LOV differs from the ones in LOU. They are not procured in the same way, but the private care homes are nonetheless visible in the public databases. However, the 95 cases were determined to be a large enough sample size, so the difference was therefore eliminated from the study.

The structure of this quantitative analysis involved creating a model for evaluating the procurement documents. This evaluation model consists of a number of factors that were judged to be important during the interview process, and what previous research has found to be important. Each of these factors were assigned a value between one and three, based on an assessment of the procurement documents (see Appendix 2). The assessment of these factors were formalised through an evaluation matrix, which included 101 indicators (see Appendix 3). This was done to increase the consistency and reliability of the evaluation, and also to be able to assess whether or not specific criteria can impact satisfaction.

As both authors were involved in the evaluation process, an initial calibration was made to increase the reliability of the evaluation. This calibration was done by selecting two cases which were evaluated by both authors. In this way, any differences between the authors grading could be minimized. The outcome of this calibration attempt was that there were no significant differences in the evaluation between the authors. Some minor differences were found in the evaluation matrix, but these did not translate to any significant variations when assigning a value for each factor.

As previously stated, the data for this analysis was collected through the national registries of Kolada and Äldreguiden, while the procurement documentation was collected through Visma Opic. In addition to these registries, additional data points were collected during the process of analysing the procurement documentation, such as final price level, type of procurement process, size of the object and more.

As response variables to test all criteria, two different variables were used. The response variable *Difference Care Home and Municipality Average – Elderly's Overall Rating* denote the difference between the individual care home and the municipality average in terms of Elderlies' overall satisfaction with the care homes. This response variable was used to account for regional difference. Socio-economic difference are known to impact satisfaction (Figueras et al., 2005), and using the difference between these two measurements provide a rough account for that. The other response variable *Care Home Rating – Elderly's Overall Rating* denote what the individual care homes' rating is in Äldreguiden.

To test for statistical significance, two different methods were utilized due to methodological difficulties in mixing nominal and continuous variables (Hair et al., 2010); Pearson's correlation and One-way ANOVA. Pearson's correlation test search for linear correlation and measure the strength of association between to variables and the ANOVA test measure differences in means between groups with nominal

values (i.e. groups that can only assume a limited amount of values such as for example 1,2 and 3). The weakness with Pearson's correlation test is that there is an underlying assumption that the data originates from a normal distribution. The weakness with the one-way ANOVA test is that it is designed to be used when you have nominal groups with only two values, as to why Bonferroni corrections were added in the case when three nominal groups were tested. Bonferroni corrections counteract problems with multiple comparisons. By using multiple methods, the authors hope they can compensate for weaknesses in the statistical tests and triangulate any likely effect. The most interesting results from the initial ANOVA tests were also regrouped from three to two nominal groups to increase the reliability of the results.

### 3.4 Discussion of research methodology

As defined by Bryman & Bell (2015), the three most important criteria for evaluating management research are: reliability, replication, and validity. Each of these criteria will be discussed in the context of this thesis in the following sections.

#### 3.4.1 Reliability

The reliability is an assessment of how repeatable the results of this study are (Bryman & Bell, 2015). Reliability can be divided into internal and external reliability, where internal reliability concerns consistency in interpretation within the research team, and external reliability the corresponding aspect for external researchers (Bryman & Bell, 2015).

In terms of the internal reliability, the authors have taken care to discuss the findings and analysis with each other as the work with the thesis progressed. No major differences in how to interpret the data were found between the authors, and any initial changes in interpretation were discussed in order to reach a mutual conclusion. The authors also took care to calibrate the evaluation scores between the authors. This was done by both authors reading and evaluating two procurement specifications separately, including both the evaluation matrix and the evaluation model. After this, a comparison between the assessments of each author was made. The result of this comparison was that the majority of the criteria in the evaluation matrix were similar for both procurement specifications, and – more importantly – there were differences in the evaluation scores. After this initial calibration, one author conducted the bulk of the evaluations, so that the variation could be reduced further. Through this procedure, the authors believe that the internal reliability of the thesis is sufficient.

The authors have tried to increase the external reliability of the thesis by including information about how the research was conducted. For the multi-case study, the interview templates and categorisations have been made available, and a summary of the findings are presented in the Results chapter of this thesis. The multi-case study findings were used to construct an evaluation model for procurement specifications. This model is available in Appendix 2 and consists of a guide for scoring the procurement specification document. In addition to this model, an evaluation matrix was used to capture additional information about each procurement included in the study. This matrix shows which details were sought after in the evaluation. The evaluation matrix can be seen in Appendix 3. Through the disclosure of these aspects, the authors have made the effort to present all relevant data that went into the analysis.

Going further with the external reliability, it is worth considering the effect that the background of the authors has had on the results of this research topic. Even though much care has been taken to eliminate bias from the outcomes of the empirical findings and to document the methodological decisions made, no precaution can fully exclude all such influence. Therefore, the beliefs and prior knowledge of the authors have indubitably shaped this thesis, as well as the conclusions that were drawn.

#### 3.4.2 Replication

According to Bryman & Bell (2015), replication is – which can be seen in the previous discussion – closely related to reliability. In the authors' interpretation of Bryman & Bell (2015), the determining factor for replication is how much effort which is required to repeat the results of the study, whereas reliability is an aspect which concerns the results themselves: whether different researcher would agree on the findings based on the analysis of the same data set.

The authors of this study has strived to make the research methodology as transparent as possible, to allow replications of the results. The development of the research methodology over time has been clarified. This was done to give the reader a better understanding of the research model and how it was constructed. However, a direct replication of the multi-case study would be difficult to conduct, as all interviewees, municipalities and care home names have been made anonymous. This decision was

made to protect the sources' integrity. None of the interviewees made explicit demands that the data should be anonymised; however, the authors believe that the decision increased the willingness of the study participants to share their full views. The effects of this decision is that any replication is made more difficult. However, to counteract this, the authors made transcripts of all interviews, in which an effort was made to convey the responses as comprehensively as possible. These transcripts can be made available upon request.

### 3.4.3 Validity

The validity of the research concerns how valid the conclusions of a research study are (Bryman & Bell, 2015). The validity of this thesis will be discussed based the measurement validity, internal validity and external validity.

#### Measurement validity

Measurement validity concerns whether a measurement that is used in a qualitative analysis shows what it is intended to show (Bryman & Bell, 2015). In essence, measurement validity concerns how dependable the underlying measurement used in the analysis are.

The quantitative analysis in this thesis was made in two parts: the evaluation model, where a grading was assigned to each included procurement specification, and the evaluation matrix, where relevant specific aspects were recorded. In addition, other data, such as price levels and number of residents, was collected. As the results of the quantitative data shows, it is somewhat difficult to see the effects of each aspect that were included in the qualitative study. The main drawback of the method in which the assessment model was created is believed to be that the model was created to find further support for the findings in the multi-case study. During the process of evaluating the selected procurement specifications, doubts about the strength of the chosen indicators started to arise. The discussion of this factor is further expanded on in the analysis.

#### Internal validity

Internal validity concerns an analysis into the relationship between variables, and whether there are any dependent or independent variables in the data set (Bryman & Bell, 2015).

As the delimitations state, this thesis did not encompass a detailed statistical analysis of interactions between the selected variables. In the analysis chapter, the aspect of internal validity is continually addressed, where the authors highlight possible interactions to the reader. These possible interactions should be interpreted as cautionary remarks based on an assessment by the researchers and not interactions which are statistically proven.

#### External validity

The aspect of external validity deals with the generalisability of the study results to other context (Bryman & Bell, 2015). In addition, it concerns if the study results are applicable to the population as a whole (Bryman & Bell, 2015).

The choice of using a mixed mode research design for the thesis was made to increase the external validity of the findings. As has been stated, the decision to include a quantitative element to the study was made during the interview phases of the multi-case study. The authors made several findings during this part of the research, which were considered important. However, the validity of the multi-case study alone was not considered strong enough to draw confident conclusions based on these theories. From this starting point, the quantitative model was developed to test the theories at a larger scale. In addition, the findings of this thesis were compared to those of similar studies, and a discussion about differences and similarities was conducted. Therefore, the authors believe the external validity of the research results to be satisfactory.

## 4 Results

In this chapter, the empirical findings from both the quantitative multi-case study and the quantitative study will be presented.

### 4.1 Multi-case study results

For each of the eight cases, the municipal characteristics will be presented. After this, the results from the interviews with the municipality and the private provider will be reported. As mentioned in the methodology chapter, the findings from the multi-case study are structured according to the headings used for the interview questionnaire. All names of locations, persons and care homes have been redacted to protect the sources anonymity. The information from the municipality and the local manager is introduced jointly, where information from the manager of the care home is designated as *the local manager states/expresses/etc.*, and the information for the municipality is designated as *the municipality states/expresses/etc.* The first case has been expanded upon in more detail, to get the reader to understand the process in more details. In subsequent cases, the presentation will be more brief and mainly concerning findings which are important to the study. A list of the included cases, with some added detail, is visible in Table 4.

Table 4 List of cases in the multi-case study, with some details

Case #	Municipality located in	Type of municipality	Year of Procurement	Contract into effect	Municipality Avg. Rating %	Care Home Rating %	$\Delta$ Rating %
1	South	City	2009	2010-02-01	84%	96%	12%
2	South-East	Suburb for the major cities	2008	2009-04-01	79%	92%	13%
3	South	City	2011	2012-02-01	84%	94%	10%
4	Far south	Suburb for the major cities	2013	2014-01-07	76%	87%	11%
5	Far south	Suburb for the major cities	2012	2013-03-01	83%	64%	-19%
6	Mid	City	2011	2012-09-01	80%	61%	-19%
7	South-West	Commuting municipality	2007	2009-01-01	88%	74%	-14%
8	South-West	Municipality in dense region	2012	2013-09-01	89%	72%	-17%

The categorisation of the results has been performed using an inductive approach, meaning that the authors have analysed the transcribed interview material and identified common themes based on the theoretical framework. This categorisation has in turn been the main input for the quantitative study as presented in 4.2.

#### 4.1.1 Case 1: Winterfell

Winterfell is located in a municipality in the southern part of Sweden. The procurement process was conducted in 2009 and the new contract came into effect 2010-02-01. By the time that the contract came into effect the care home was newly built and had thus had no previous actors operating the care home. The contract was awarded to the provider House of Stark. Statistics Sweden classify the municipality as a city.

#### Views on Winterfell

There were issues when Winterfell's contract period started. There were many shifts in management at the start, which caused unrest in the organisation. In this period, the municipality gave much attention to trying to rectify the situation, where focus was put on: improving documentation, improving the routines around fasting times during the night, and improving the environment around meals. These areas have improved and are done sufficiently well today. There was also a period of Lex Sarah-notifications, which caused some politicians to want to discontinue the contract. However, the interviewee believed that – although the fact that there were notifications is bad – it gave the private provider the opportunity to improve. Today, there is little concern about the quality at Winterfell. The local management has corrected many of the previous issues. The local manager for Winterfell expressed that the facilities of Winterfell are good, and that the surroundings are pleasant.

#### Definition of quality

According to the municipal interviewee, on the most basic level, quality is determined by what is required from laws and regulation, among others the different versions of SOSFS, routines around Lex Sarah etc. In addition to this, the experience of the individual care taker is important to consider. Quality is therefore determined by the combination of the medical situation and how the caretakers perceive the situation. This view is mirrored by the local manager, who believes that they are complementary to each other:

*Neither are more important – both are needed. If the caretakers have excellent care, but are bored and under-stimulated, it is not quality.*

In addition to this, the local manager expressed the importance of creating a good atmosphere for the caretakers, where they can feel like they have a purpose in their daily lives.

The municipality strives towards providing the best care possible. The municipality has set targets for achieving a sufficient level of quality on a political level. These targets include: limits of night fasting length, targets of good nutritional environment and hygiene, targets concerning personal care plans, providing the elderly the ability to be outside, and achieving a continuity in care. In addition, there has been a focus on increasing the independence, health and participation of the caretakers in eldercare. Quality targets are also included in the internal budget as a way to drive certain areas of quality. Previously, there have been about 50 different targets represented in the budget. However, this number was reduced, as the large number of different targets made analysis and management difficult.

### Organisation's quality management

When it comes to the quality management system used internally, the municipality expressed that this system is in development and not fully implemented. The municipality uses the principle of a balanced scorecard as a basis for their quality management, but is transitioning towards lean management; however, this transition process is slow.

The municipality believes that the implementation of quality management systems among the larger private providers of eldercare services is "very good". In some areas, such as the deviation handling process, the private providers' performance was admired by the municipality. However, the quality management system's maturity depends on the size of the private provider, where smaller providers have very basic systems in place. The municipality expressed the view that the municipality could learn much from how the private providers have developed their quality management systems.

The municipality expressed some drivers for good quality in eldercare. Firstly, it is important to think about quality in all parts of the organisation: from the management level to the staff level. It is therefore important for everyone in the organisation to understand their impact on the quality outcome. Secondly, it is important to collect information from the elderly's relatives. This allows them to be included in the care and also reduces confusion. Thirdly, it is important to have a good local manager in place at the care home. The local manager needs to have an intimate understanding of how the care home operates. Finally, deviations can be a good source for identifying areas to improve. Therefore, deviations such as a Lex Sarah notice should not be viewed purely as bad, but instead as a chance to improve the care home to reduce the overall risk in the daily operation.

The local manager identified a number of areas which are driver of quality. Firstly, deviations are a good source for finding areas for improvement. Therefore, even though thought deviations are unwanted, they provide information about how to develop the organisation. Secondly, the personnel are imperative for high quality. It is therefore important to be deliberate when recruiting, and think about the group dynamic and personal goals of the person in question. For the existing personnel, education and coaching should be priorities. It is also important to create a good work atmosphere, where the employees "are happy and have fun, and where they are satisfied". Lastly, the local manager stressed the importance of having a clear goal which is communicated in the organisation.

The House of Stark has an internal quality management system in place. This system includes an IT reporting tool, which provides detailed reports about the care home's performance. The care home receives "clear guidelines" about which areas to improve, and what the expected quality outcomes are; however, there is little direct assistance from the organisation. These guidelines include conducting one development project "which provides value", each year.

### Structure of procurement process

The decision of whether to procure eldercare services or not is taken by the committee in the

municipality. Similarly, when the contract for an existing privately operated care home expires, the decision to renew the contract is also made by the committee. Some years ago, there was a political decision that all new care homes that were built in the municipality were to be operated by private providers. In addition to all newly-built care homes, it was decided to convert existing care homes from municipal to private operation. As such, there are many privately operated care homes in the municipality at the time of writing.

The procurement specification is developed by a working committee, consisting of a cross-functional team. This team comprises one person from the municipal administration office [the interviewee], one MAS, one economist, one person with knowledge of personnel-related issues, and a contact person from the municipal procurement office. This cross-functional team drives the procurement process and participates in offer presentations, reference visits, and evaluation of the different offers. There have been some instances where external organisations are invited to bring feedback in the process of preparing the procurement specification. The form to use in the procurement, e.g. if the procurement should be awarded based on price or quality, is a decision for the presidium, consisting of the committee manager and the chairman and vice chairman of the municipality. The decision of which private provider to award the contract to is made by the manager of the committee, but with support from rest of the committee if the decision is difficult.

The local manager expressed that they are not involved in creating the procurement specification, or any other part of the procurement process. However, they would be interested in being a part of this process, if such an opportunity was to present itself.

The municipality has been conducting procurement of care homes for the elderly for a long time, and has developed their processes accordingly. A selection of the developments which have been made and knowledge which has been gathered is presented here:

- It is good to have a continuous learning and development of the procurement process over time. The participants always strive to make the next procurement process the best one yet. A good source for how to develop over time is to look at the offers which are received, and compare that to the specification. Also, any questions received from the private providers during the procurement process highlight areas which were not clear enough.
- The procurement specification is very important, as it forms the basis of how the work will be structured during the contract period. It is also important that the procurement specification allows for and stimulates development over time.
- If the award criteria are based only on price, the contents of the procurement specification become more important. In these instances, the procurement specification will become the upper limit of the quality received; there is little incentive for the private provider to do anything outside that which is specified, as they are not rewarded for this. Furthermore, award criteria based on price requires the procurement specification to contain more detailed information about the object in question, as the private providers will have to calculate their price point based on this information. In a fixed-price procurement, everything related to price is already included in the assigned sum.
- Conversely, in a quality-based procurement process, it is not enough for the providers to fulfil the specified quality level, but they have to provide additional value to be awarded the contract. The provider needs to be able to describe how they work and how they will be able to provide this extra value. Private providers which are good at this will often have staff with more knowledge about the company's proclamations later on.
- There is a trend to put more and more responsibility on the private providers, where the support in terms of municipal services, such as rehabilitation, and personnel is minimised. Having all personnel within the same organisation is seen as beneficial.
- Initially, the manager of the care homes operated under municipal regime was included in the group which evaluated the private offers. This was later changed, as there was a possible conflict of interest, as the manager would compete directly with the private provider awarded the contract.
- The award decision is difficult when there are many offers which are similar in strength. The award group are training continuously to get more consistent in how they reason around the award process and how they can formalise these decisions to be able to justify them later.
- It is more difficult to evaluate private providers which have not operated in the municipality before, as there is no prior experience to draw upon. For private providers which have been

awarded a contract before, there is more information about how these providers operate and a prior relationship in place.

### Quality criteria used in the procurement process

When the municipality started to procure care homes, they based the procurement specifications on their knowledge of how the care homes operated under a municipality regime. Now, this has changed, as they have realised that there needs to be more flexibility to allow different forms of operation and that there can be different ways to achieve the same goals. An example of such a requirement, which has now been discontinued, was specifications of what the organisational structure should be.

The municipality has chosen not to specify any required minimum staff-levels for the private provider care homes. Instead, they expect that the private providers will adjust the staffing level according to the operational needs in the organisation. However, the private providers need to acquire a permit from IVO in order to operate the care home. IVO requires a minimum staff level, and also specifies how the staff should be distributed over the day. The municipality feels that this process is limiting their ability to decide how they provide care homes. This restrictive approach to achieving quality is also seen as somewhat outdated. It also distorts the competition between private and municipal operation, as there are no similar requirements for care homes under municipal regime. SKL are currently campaigning to remove the minimum staffing levels from the requirements in the permits.

According to the local manager of the care home, it is impossible to capture the non-medical quality aspects through quality criteria:

*You cannot develop quality criteria for this. There have to be personnel at the care home who want to help other people. You cannot achieve that through an agreement*

### Follow-up procedures

There is a new department in the municipality tasked with following the performance of the private providers. Previously, this function was placed in the same organisational part responsible for the operating the care homes under municipal regime. This new organisation was put in place to reduce the risk of conflicts of interest, as the private and public care homes are competing against each other.

From the municipal side, monitoring the performance of the private providers is done through various means. Firstly, there is an extensive annual control, which is stipulated in the procurement specification and is a requirement. Secondly, the private providers are expected to report to national quality registries. This gives the municipality the opportunity to focus their attention on providers performing below average. Lastly, there is the day-to-day contact. This happens when, for example, a deviation is registered by the private provider. The extent of this contact is determined by the performance of the provider. This means that providers performing well receive little attention: "if we do not hear from them, it is usually a good sign".

The aim for the control of the care homes is to stimulate quality improvement. The way the control is conducted is developed continuously in order to receive the most comprehensive picture of how well the care home is doing. However, in general, the variables which are controlled are specified in the procurement specification. These include: controlling that the documentation is sufficient; conducting surveys to get the views of the caretakers; controlling individual care plans, although with little focus on their content; control of staffing levels in the organisation.

As previously stated, there is an internal control of the care homes in the House of Stark. The local manager stated that the internal control and the municipal follow-up differs in what is looked at, where the municipal follow-up focuses on medical aspects of the care, whereas the internal control tries to capture the atmosphere of the care home. According to the local manager, the internal control is stricter than the municipal counterpart. Finally, the local manager expressed concerns that the task of reporting to all the different actors and registries requires a substantial amount of resources and also that there are instances of double reporting, i.e. reporting the same information to multiple actors.

The interviewee from the municipality expressed that there is a large difference in how the performance of private and public care homes are followed in the municipality. The organisation is much more active in controlling the performance of the private providers, as well as taking action when deviations occur in privately operated care homes. The municipal interviewee reflected that the quality outcomes of the privately operated care homes exceeded those of care homes in municipal regime, and theorised that



an explanation to this is the extra scrutiny the private providers have received in the auditing process. This difference had also been perceived by the local manager, who believed that there were double standards. Another explanation for the difference in quality outcome, was identified to be the existence of a contract, which can be used as a powerful tool to influence the private providers. The contract can be discontinued directly, or the municipality can decide not to renew the contract, if the private provider fails to perform to expectation. This source of power does not exist in relation to the publicly operated care homes. Finally, the way of auditing performance in care home has developed in the last decade and become more sophisticated, where much has been learned from having to follow the performance of the private providers. The differences of how private and public care homes are managed in the auditing process are diminishing, but the relationship is still unequal in nature.

### Collaboration and relationships

The municipality strives to have a good relationship with their providers. Having an open line of communication, where there are low barriers to contacting the municipality, can help in many instances and make collaboration between the private provider and other government services work better. The municipality will provide help to the private provider if needed. A factor to create this relationship is to have clear routes of communication. The municipal interviewee's role in the organisation is to act as an entry-point for the private providers operating in the municipality, which reduces confusion. It is also important for the municipality to have knowledge about how the private provider is organised and which roles are involved in the management on both the local and regional level. The local manager stated that the relationship with the municipality worked well, and that they saw the municipality as a customer as well as a partner, where they could exchange information and worked together to improve the care provided.

There are no networks or forum for collaboration between the privately and publicly operated care homes. However, this is something which would probably be received positively if introduced, according to the interviewee. There are some forums for collaboration between the publicly operated care homes already in place. According to the local manager, there is the possibility for private personnel to participate in training which is held by the municipality.

There is no formal collaboration between different municipalities or regions concerning the procurement or auditing of eldercare. However, there are some informal networks in place, such as interpersonal contacts, as well as the forum provided by SKL. There has been an attempt to create a more formal network around the auditing process in the nearby region, but the municipality believed that their process was more advanced than the other participants; as such, they had little to learn from that collaboration.

The question of private providers in welfare was identified to be a contentious issue by the municipal interviewee. This had caused problems in the organisation previously:

*You could have any opinion you want privately about private providers of welfare services (...), but if you work [as a civil servant], you have to do your job.*

This might have resulted in extra scrutiny of the private providers, according to the interviewee. However, most of this tension is now resolved.

#### 4.1.2 Case 2: Sunspear

Sunspear is located in a municipality in the far south-eastern part of Sweden. The procurement process was conducted in 2008 and the new contract came into effect 2009-04-01. Before the procurement process took place the care home was operated by House of Stark, and the contract was awarded to them once again. Statistics Sweden classifies the municipality as suburb municipality of the major cities.

#### Views on Sunspear

The municipality was happy with the performance of Sunspear, and have renewed the contract as far as possible. The same procurement specification was also used for another care home, but the results there were not as satisfactory. However, the municipality claimed that Sunspear is: "not good all days", but has "made a journey of development". The municipality emphasised the good leadership and work culture of Sunspear.

The local manager has worked at both of the care homes which were part of the procurement process, and was moved to the less successful care home by the House of Stark, as an effort to improve the

quality there. The local manager continuously compared Sunspear favourably to the other care home throughout the interview, although stated that Sunspear was not a perfect care home. One explanation of this difference was the positive culture among the personnel at Sunspear, and that the other care home "has the wrong value system".

*At Sunspear, the personnel said: "It is so fun to work with my colleagues and to spend time with my resident". There were spontaneous things, like dancing and sharing a coffee and such things.*

## Definition of quality

The municipality stated that laws and regulation is a point of departure when defining quality in eldercare, but that it is the residents' experiences which are the essence. In the personal aspect, it was identified as important that the elderly feel that they are seen, and that they have a personal value and a sense of connection to a community. The municipality also stressed the importance to view the care home as a home and not as a workplace. Quality is then, expressed in another way:

*Quality is when the elderly are satisfied and there are no deviations*

The local manager stated that quality in eldercare is very subjective and difficult to abstract to numbers. However, the central aspect was satisfaction: of the residents, of the relative, of the employees, of the municipality as a customer. If all these parties are happy, it is a good indicator of quality.

The municipality also expressed that the elderly's definition of quality was set lower than the municipal targets, and that this might be a generational question, as the generation which is currently present at the care homes are more grateful for the care received in general, and therefore tend to be less critical of it.

The municipality identified local leadership, organisational culture, attitudes and values to be important drivers of quality in eldercare. Of these, extra emphasis was put on the importance of the local leadership. These factors are difficult to address, but they have a large impact:

*Sunspear was built a long time ago, and the residents were originally from the long-term care unit. (...) Although there were personnel who came to the new care home from the long-term unit, the difference for the residents was enormous when they entered a healthy environment: the health of the residents improved a lot.*

The local manager stressed the importance of having work satisfaction among the personnel. The local manager stated that it is important to have the personnel be engaged in their work. This can be done through delegation, and letting them "grow through having responsibility". The group dynamic. Recruiting the right personnel was also identified as a key factor, which the manager expressed thusly:

*There needs to be quality in the house (sic.), and not only in the hands; because it is not only the number of hands which count, but the quality of the hands.*

## Organisation's quality management

The municipality described their management system as "under development". The current system mainly concerns the external auditing process. There is also a process of creating a document which will act as the quality management system for all parts of the care sector in the municipality. The municipality stated that they generally have higher demands on the quality management systems of the private providers. As an example, the municipal care homes do not have an implemented management system, which was explained by the small scale of publicly operated care units in the municipality. This was stated by the municipality as: "They feel like they do not have the time or resources to work with developing their system".

In the medical area, the municipality uses the STRATSYS-system for managing and control. The individual care units enter their internal controls and data in this system, which is then aggregated on the municipal level. However, this system is currently not implemented fully.

The municipality expresses that some providers have a static view of their management system, and

that they are not working actively with their system: "it is more desk product". It was also found that the larger providers often have more advanced systems, but that they can be reluctant to change or adapt those systems to the local requirements.

The local manager stated that the House of Stark have continuous and exhaustive follow-up of the economic and operational state of the care home. Reports of deviations and special events are reported in an IT reporting system, which provides an overview of the care home's performance in real time. In addition, the quality management system is said to follow SOSFS 2011:9, although all parts were not implemented.

The local manager expressed the importance of striving towards improving continuously. Not being afraid to make errors, and willingness to try new things were some aspects of this principle. Changes need not be large in scope, but could be minor tweaks. Additionally, deviations or special events were considered to be carriers of information and that "things will happen all the time when people are working with people". The local manager stated that this approach has similarities with *lean management*, although the method used at the care home was less formalised in structure. Other areas which were identified as important by the local manager were: having up-to-date routines, which are used in the daily operation; helping personnel to see the impact of their actions on the operation; learning from each other and across departments.

### Structure of their procurement process

The municipality uses exclusively quality-based procurement. The local manager considered this to be a better approach than price-based procurement, and that: "I think it is idiotic to use price" because insignificant difference can decide the outcome.

The municipality strives toward having the same roles involved in both the preparatory work for the procurement specification. They believe this to be advantageous, as both areas are interrelated. For example, some aspects of the procurement specification have been removed, as there was no clear way to audit the providers later. The local manager was involved in creating an offer for another care home, and mirrored the sentiment that it is beneficial to be part of both the procurement process and the operational parts of the contract.

One important factor which was identified by both the municipality and the local manager was the contract length, and that longer contracts are preferable. The municipality has tried to keep their contract periods longer than average and allow for longer renewal periods as a reflection of this.

*We have come to a realisation of the importance of a long-term approach in eldercare*

The local manager participated in the renewed procurement process for Sunspær when the contract period ended. The manager stated that there was a lot of work, and that it was an exhausting process to be part of. There was a large team involved from the private provider, legal support, economic functions and more.

### Quality criteria in the procurement process

The municipality has introduced a new evaluation in the procurement specification, where the providers will have to provide documentation, in the form of a personal care plan, for a fictive resident. This is done to capture how the organisation works with the person-centric parts of care, and to assess their routines and processes beforehand. It is also used as a tool to assess how the organisation collaborates with external actors. This was explained by the local manager as: "a difficult but good criteria".

The municipality also attempted to include monetary incentives in the procurement specification, which were based on certain criteria, such as "good care" or "meaningfulness". However, this has not been included in the contract, as such criteria are difficult to construct. Instead, there are competitions of "Delight and joy", where the care homes submit contributions of how to stimulate these areas. The winners then get funds to implement these projects.

The municipality is active in updating the contracts after the contract period has started. This is done through direct amendments to the contract, but also by using the municipal governing documents, as the providers are contractually obligated to follow these guidelines.

The municipality expressed a difficulty in creating quality criteria. The criteria should be used to show a difference between providers, enable areas to follow-up on, ensure a base-line of care quality, while

not being so stringent as to limit flexibility. Also, the local manager stated that some criteria are resource intensive, which might force the provider to reduce spending on other areas. Additionally, the municipality identified that it is not the procurement specification which drives quality. This is expressed in the following two quotes:

*You could do almost anything in evaluating the offers. But it is the follow-up routines which are the most important in driving improvements.*

*If you want quality, you have to go for it/put effort into it. It is not enough to only conduct a procurement process and then not do any follow up!*

## Follow-up procedures

The municipality works with observations as a major tool when they follow the performance of the providers. Previously, the municipality followed individual caretakers through their day-to-day lives, and cross-referenced this with available documentation. Another method which has been discontinued is direct interviews with the residents. These activities were discontinued because they were resource intensive, and because the organisation was changed. The municipality does, however, conduct group interviews with the personnel to see if their perspective corresponds to the version conveyed by the management.

The municipality is also detailed in its controls of journals, where they both investigate that the required elements are present, but also that the journals are written from the perspective of the individual. This is done as a way to assess how far the organisation has come in people-centred care. The personal aspects of care are otherwise also followed through the national resident surveys. The municipality is also controlling the personal care plans of the residents, including the content. All these sources, together with the general day-to-day experiences, gives an indirect view of the personal aspects of quality in the care homes.

The municipality stressed the importance of treating the publicly and privately operated care homes equally in the auditing process. This is done to remove the difference for the resident and to ensure that the care is equal regardless of which care home the elderly gets assigned. Having the same follow-up elements also makes comparisons between care homes easier. However, the local manager claimed that audits from the municipality are different every time and that this makes comparison between two temporal instances difficult.

During the interview with the municipality, a message from an online chat between the personnel and a local manager was shown. In this segment of the interview, it was stated that the local manager had said: "I have not been able to sleep because of the report you sent us", but that the manager "felt better when [the manager] got waffles" the next morning. This was interpreted by the municipality to be a friendly exchange.

## Collaborations and relationships

The MAS establishes guidelines and routines for the medical aspects of care, based on new and existing research and ways of working. These are then implemented in the care homes in the municipality by the local managers. The progress is then followed through regular meetings with medical personnel and the management. There is also a larger control once per year regarding these areas. Different roles within the municipal organisation have various forums and meetings with the providers, so the communication could be seen as continuous.

The municipality stresses the importance of collaboration in eldercare. The relationship should not be adversarial. They claim that they have a good interpersonal relationship with the local managers. They do not see any obstacles to establish new areas of collaboration. The local manager also states that the relationship with the municipality has been working well, and that there is "a low threshold" to contact each other. However, there could be difficulties when the personnel changed. Furthermore, the local manager described one case where collaboration was considered impossible, because the municipality could not form special relationships with private companies. In general, the local manager wanted to have more collaboration with the municipal organisation, such as publicly operated care homes and the care services.

The size of the municipality was identified as a contributing factor for creating relationships with the suppliers from both the municipality and the local manager. As stated by the municipality:

*We have a tight collaboration, which is possible because we have many people involved and we only have four care homes in total.*

The House of Stark was not awarded the next contract on Sunspear. The local manager expressed their reactions as such:

*It was incomprehensible to us that we lost [Sunspear]. And the fact that we lost it because of a paper document that someone else did better, (...) where the decision is subjective. (...) It is politics. We had [both care homes] before, and when someone insinuates that "you can't expect to get both contracts again", then you don't know if you are competing on equal terms.*

The municipality has not participated in any cross-municipality collaboration projects around public procurement. Although, there have been some discussions and training through SKL. However, the local procurement office provides support regarding the formal demands on the process and legal questions. Furthermore, the personal networks of the involved personnel are sometimes utilised.

#### 4.1.3 Case 3: Highgarden

Highgarden is located in a municipality in the southern part of Sweden. The procurement process was conducted in 2011 and the new contract came into effect 2012-02-01. As a result of the procurement process the new provider House of Lannister took over the operations. Statistics Sweden classify the municipality as city.

*In this case result, only the views of the municipality will be presented, as the private provider declined to participate. The duration of the interview was also shorter than the other case interviews.*

#### Views on Highgarden

No detailed information was collected. There had been little informal contact with the local manager, and there has recently been a change of management at the care home. The new manager is not known to the municipality.

#### Definition of quality

The municipality defines the base of quality to be following what is specified in laws and regulations. However, it is the perspective of the resident which is the deciding factor. The municipality assesses if a care home has sufficient care quality based on the results of the follow-up and that it passes the limits therein specified.

Regarding quality from the perspective of the resident, the interviewee expressed that the purpose of using quality criteria was to:

*[To achieve] a good quality for the customer. That the customer has a life worth living. Of course it is this. What this means is difficult to say. Of course we want good quality. Even if there is the notion of a reasonable standard of living, I believe that we are requiring something more than that.*

#### Organisation's quality management

The municipality requires that the private providers use their system for reporting deviations. Furthermore, the municipality demands that the providers report in some quality registers, such as: Senior Alert, BPSD, and Palliativa Registret. The reporting in these systems is somewhat lacking, but a review of this will be done in the near future. The municipality does not enforce specific routines, but lets the providers develop their own, given that they adhere to the laws and regulations in place.

#### Structure of their procurement process

The team that controls the procurement process includes: MAS; MAR; the Operational Controller; the Chief of Staff, i.e. HR-officer; the Economic Controller; a person responsible for safety and facilities; and the Nutritional Officer. There is also a new collaboration with the central purchasing department in the municipality, who aids in formulating the procurement specification and the contract. In some instances, a judicial competence is consulted.

## Quality criteria in the procurement process

An important criteria was identified to be the leadership at the care home. The interviewee stated that:

*I see, through the whole process, if there is a skilled and competent leader in place.*

In the event of a change in management, the municipality does not have any influence for care homes procured through LOU. However, for care homes which are procured through LOV, the municipality has specified that the committee has the right to be notified and should accept a new local manager. This specification is something that the interviewee would like to have for care homes procured through LOU as well. Although, the interviewee reflected that these demands needs to be reasonable and maintain a professional relationship. As stated by the interviewee:

*I do not want a new person to just appear, that "oops, she vanished and now we have a new one". This can't happen. I have to know this beforehand.*

The interviewee claimed that all criteria which are included are equally important in the procurement, and that: "it also depends on the current situation: sometimes we have had difficulties for the elderly to spend time outside". In general, the municipality has been conservative in defining routines and sharp demands, as: "the overall regulations which are in place go a long way". Providing details of how to perform certain task was considered harmful by the interviewee, stating:

*Absolutely no detailed control. That will not turn out well. This is the essence of it: they have to feel that they are running their own organisation*

The municipality does not have any requirements on staffing levels in the care homes. Instead, "the care homes should have the personnel required to do the job". The reasoning behind this decision is that the differences between care homes is too large when it comes to the facilities, the residents and the personnel.

## Follow-up procedures

The municipality does audits every other year for care homes, and every other year for home services, intermittently. The auditing process is extensive in scope, and encompasses both the social part and the medical part of the given care. The data for this audit is collected through interviews with "all categories at the care home", including: local manager, nurses, occupational therapists, physiotherapists and care personnel. In these interviews, a standardised interview document is used. There have been attempts to interview the residents at the care homes, but these interviews "have not resulted in much". Instead, the national surveys of resident perception are used. In addition, the ability to participate is controlled, as well as that there exists resident boards or nutritional boards. The municipality also controls the engagement of the personnel, albeit this control is somewhat limited:

*We have a clear guideline that the personnel should report deviations. So we work a bit with that. But otherwise I can't say that we are doing that much, other than that we have it as a point on our agenda and that they should describe how they work with that area.*

The municipality requires an internal control to be made by the private providers. This control is mainly focused on the economic situation. However, there is a plan to include more care-oriented aspects in the future. Although, the municipality cannot currently require the private actors to provide this information. Instead, they will request that the results of the existing internal controls are shared with the municipality. This is done to reduce the scope of the biennial follow-up.

The follow-up procedures are based on the quality management system and SOSFS 2011:9, and includes controls of: internal controls; risk analysis; collaboration with other actors; documented routines; other documentation; individual care plans; journals; and more. The quality management system of the private provider is also controlled.

The interviewee stated that there are differences in how different actors are audited. The follow-up procedures are more extensive for companies operating under the LOV framework, compared to care homes under LOU. The performance of the care homes under municipal regime is not followed in the

same detail as the performance of the private providers: "we have not had time to concentrate on the in-house parts".

### Collaborations and relationships

In addition to the biennial reviews, the municipality has recurring formal and informal meetings. The interviewee plans formal separate meetings biannually with each provider. In these meetings, the private providers can discuss their views and complaints. The municipality stresses the importance of a close and direct informal contact with the private providers. The extent of this type of contact depends mostly on the needs of the local manager. The interviewee perceived the relationship to be positive and characterised by openness.

The interviewee did not believe that there should be projects together with the private providers and the municipality. However, the interviewee could not identify any obstacles to have any such projects. The reason given for not conducting such project was:

*You have to respect that they are their own company. We are ultimately responsible for the care, but they need to have the freedom to run their company according to their ideas.*

#### 4.1.4 Case 4: Pyke

Pyke is located in a municipality in the southernmost part of Sweden. The procurement process was conducted in 2013 and the new contract came into effect 2014-01-07. Before the procurement process took place the care home was operated by the House of Lannister, and the contract was awarded to them once again. Statistics Sweden classify the municipality as suburb municipality of the major cities.

#### Views on Pyke

The "individual time" is something which is not working so well at Pyke. The municipality claimed that this is not supported enough in the contract. They will have meetings with the regional manager, as well as the local manager, to work on a solution to the problem.

The municipality stated that the local surroundings of Pyke are very pleasant, and that they believe that the facilities are appreciated by both the residents and the personnel. However, the local manager claimed that the care home was too large, and suggested that it was split into two parts.

Otherwise, the care homes were described as "stable", with "stable personnel" and "a stable local manager". The local manager also claimed to be satisfied with the personnel at the care home. Pyke also has an inspirational "live life" role in the care home, that is responsible for organising trips and activities; this was identified as having a positive effect.

#### Definition of quality

The municipality defined quality as based on the experiences of the residents. They added that quality is also that the provider lives up to the demands that are put on them; these demands do not necessarily have to be included in the procurement specification, because they are set in law and regulations. A requirement of quality is also that "customers, users and residents are satisfied". Another important aspect was that there needs to be an effective and efficient use of resources, as the operations are financed by taxes.

The municipality stressed the importance of a good reception and treatment of the residents by the personnel.

The private provider has defined a number of "success factors" to achieve quality, which include: being reliable, being trustworthy, maintaining good communication, being service minded, being empathic, and being aware of the environment.

#### Organisation's quality management

The municipality has restructured the social and care services under one unit. In this unit, the following roles work together to improve quality: the MAS, the quality manager of health care, the quality manager of family care, a system developer and the vice department manager for quality.

Resident boards, activity boards, food boards etc. were identified by the municipality as important parts of quality management. These boards allow for the residents' voice to be included in the development of the care home. However, there are some difficulties in getting the residents to join in these groups,

although there are always some representatives who are interested.

The municipality states that SOSFS 2011:9 should be implemented by the providers. This has also formed the basis for the internal quality management system used by the municipality. The quality management system was described by the local manager as: "well integrated in our organisation". The local manager further stated that the organisation is certified under ISO 9001:2008. There is a central quality manager and quality coordinator at the House of Lannister, as well as a local quality manager at each care home. The local manager expressed appreciation of the quality management system:

*I like these quality management systems. They help for getting order and structure. (...) It allows you to put your energy towards other things: giving the residents good care, educating the personnel and making them engaged in their work.*

Deviations were identified by the municipality as a good source for finding areas to improve upon. This view was mirrored by the local manager. Pyke has a deviation board which meets once per month to discuss deviations in the last period.

### Structure of their procurement process

The procurement specification is prepared by a cross-functional team consisting of: MAS; quality manager of social services; and a team leader from the government authority. Judicial support is provided as needed. The team also requests input from a local organisation of retired citizens.

When the procurement specification is ready, it is sent to potential private providers for review, where they can provide feedback before the procurement process has started. This procedure has only been tried for the last procurement process conducted by the municipality.

### Quality criteria in the procurement process

The municipality has included a criteria that the care homes should perform at least average or more in the annual survey of resident satisfaction. They admit that these measurements are rough approximations, but that they are useful to get the total picture.

The providers are to provide a staffing schedule for the care home which is controlled by the municipality later. These schedules include number of staff and competence represented in the daily operations. This information is weighted heavily in awarding the contract. In the latest procurement process conducted by the municipality, a minimum staff level is specified in the contract. The contract is then awarded to the provider that specifies the highest staff level in their quotation.

According to the municipality, the private providers have notified them that the staffing requirements are a bit too rigid. The municipality has therefore said to the private providers that they are allowed to change staffing structure, but that they have to justify that in a report to the municipality, where they make it clear how the change will be positive for the residents. The local manager expressed the demands from the municipality as such:

*It feels like the climate has changed during the last years, but I don't know why. They became so strict, and there is almost no room for us to do something in our own way. They even control the schedule, and we have to report the exact times we take our break. In this case, I think they are involved in the wrong area, as we have to be able to steer things based on the present demands.*

The municipality stated that it is difficult to have criteria related to the engagement of the personnel. However, it could be stimulated through demands on competence development and other indirect criteria. Having a good local manager was also identified as a key factor. The local manager stated that engagement among the personnel could be stimulated by giving them areas of responsibility.

The municipality is considering implementing monetary incentives for the private providers, based on the performance of the care homes. However, there is no definitive model for how this will be structure and which criteria to use. The interviewees stated that the customer satisfaction should be the main focus.

The local manager was satisfied with the criteria used by the municipality, and that: "[If I were



representing the municipality], I would use the same criteria as they use today". Furthermore, the local manager said that it is important to balance the demands and relate the demands to the compensation: too much emphasis in certain areas reduces available funds for other parts. Additionally, when defining criteria, it is important to consider what the residents want from the service, and not what the municipality believes would be good based on their own situation: different generations will have different views. The local manager also stated that the demands had increased over time, which had almost eliminated any profit margins, and that:

*Initially, the demands were more focused on quality. However, now more emphasis is put on other types of demands, which I think is really sad.*

The local manager had experience working in municipalities of different size, and stated that:

*The smaller municipalities are involved in steering on a very detailed level. Sometimes it is almost absurd. The contract is also very controlling when they are auditing. You can check: if they state that there should be flowers on the table, we have to have flowers on the table.*

### Follow-up procedures

The municipality has an individual follow-up, which is conducted by the care service administrators. This control happens continuously. These controls also include controlling the individual care plans and that their contents are up-to-date and updated in collaboration with the individual resident.

The municipality controls the staffing situation of the care homes: that the correct amount of employees are working and that the staff has the right competence. These controls are conducted three times per year without prior warning. The care homes are also to deliver a report about the care home to the committee, including staffing and deviations during the active period.

The municipality conducts comprehensive follow-ups, where activity reports are analysed and interviews with management and staff are made. This review is conducted once per year.

The local manager claimed that there is some inexperience of performance auditing from municipalities in general, and that they need to calibrate their efforts to an appropriate level. The local manager stated that they already had a comprehensive auditing system in their company, which is integrated in their quality management system, and that it is good that the municipality is catching up to their internal standard.

### Collaborations and relationships

The municipality does not participate in any networks or projects related directly to procurement. However, knowledge is shared in the network of neighbouring municipalities. There are also many educational programmes regarding procurement which the municipal personnel could be sent to.

The municipality has a plan to start a quality improvement project where the providers will be invited together with the management of care services in the municipality. Collaborative quality improvement efforts are also stipulated in the contract. Previously, the care home providers were invited to development meetings, where the municipality could convey new information and discussions could be had. These are to be replaced with "development groups", where the region managers of the private care providers can meet with the management of care services in the municipality.

Each care home has an assigned political sponsor, which comes from the political organisation in the municipality. These sponsors are invited to participate to in the operation of the care home, such as meeting the residents and partaking in development. This project depended much on the personal interest and involvement of the politician. Therefore, it will be restructured in the future to make it more homogeneous across all care homes. Involving politicians in the day-to-day operation of the care home was seen as positive by both the municipality and the local manager.

In relation to the private providers, the municipality stated that they are well aware of how the private care homes are operated, and that they have a good relationship. They see the private providers as an extension of the municipality, and stated that:

*We have a lot of dialogue. They are not living a separate life; we are integrated with each other.*

The local manager stated that the collaboration had reduced somewhat, and that the organisations are more separated today, but that there were no obstacles to expanding the collaboration. The local manager explained the trend of reduced collaboration as such:

*There was more collaboration initially. It was much tighter. But that is because the municipality has started to find their role. They should only be following our performance. But then we have a mutual responsibility for achieving a good result.*

#### 4.1.5 Case 5: King's Landing

King's Landing is located in a municipality in the far southern part of Sweden. The procurement process was conducted in 2012 and the new contract came into effect 2013-03-01. Before the procurement process took place the care home was already operated by another private provider, but as a result of the procurement process the new provider House of Lannister took over the operations. Statistics Sweden classify the municipality as suburb municipality of the major cities.

*In this case result, only the views of the municipality will be presented, as the private provider declined to participate.*

#### Views on King's Landing

During the interview, the municipality's view of King's Landing was not explicitly discussed, but they did not however express any negative sentiments regarding their views of King's Landing.

#### Definition of quality

As a response to what they [the municipality] considers to be quality in care homes the quality they stated has two aspects. The first aspect deals with the most basic level such as fulfilment of laws and regulations, and the second with the satisfaction of the residents. The municipality does however seem to value the satisfaction of the residents more than fulfilment of laws and regulations;

*I can live with the fact that you might stretch a law or that you're missing to fulfil something, as long as the resident are satisfied, that's more important.  
(...) It doesn't matter how you comply with laws, if the residents aren't satisfied: then it's not quality*

According to the interviewee the local politicians have had quality as a prioritised political goal and that they should achieve more quality for each of the tax payer funded krona.

#### Organisation's quality management

The municipality has a quality management system based on The National Board of Health and Welfare's SOSFS 2011:9 guidelines. They recently reconstructed the previous quality management system because "It felt like it became a paper product – but not much more". Since the reconstruction, they currently perform individual competence development plans for everyone in the organisations and are also doing ad-hoc process mappings. They are however, according to the interviewee, "currently doing a more systematically general process mapping". The interviewee thinks that it has been beneficial to work with private providers since they have progressed further than the municipality in terms of quality management and have had the opportunity to learn from them. As an organisational support to implement the quality management systems the municipality uses an IT-based management system.

Most of the initiatives have been as a response to governmentally initiated programmes of quality improvement according to the interviewee, adding that they also have got much better during the last couple of years. They are also incentivised by The National Board of Health and Welfare's resident surveys since they compare how they perform in relation to other municipalities.

Historically they have not done many quality improvement initiatives, but they also recently implemented a new way of model of managing quality improvement initiatives where they have stricter performance requirements and also require the providers to estimate time and resource requirements and also be able to show implementation success.

#### Structure of their procurement process

The municipalities public procurement follows the general case and are preceded by a political decision.

They have one project leader, in this case our interviewee, who manages the project. Other competencies that are involved in different capacities are a development strategist for the administrative issues, the quality strategist that deals with the topics of follow-up procedures, MAS that is responsible for the quality of the care, representatives from the administrative authority, and also some more peripheral competencies such as IT personnel and technical expertise regarding the facilities. Regarding competence for purchasing, the interviewee from the municipality stated that:

*I have realised that that we, in such a small municipality, can't build our own expertise that won't be used for another seven years until the next procurement process. We have to bring in external competence every time we are procuring something of this size.*

In the second step the previous tendering documents are reviewed and learnings from the latest year's collaboration with the providers and other municipalities are incorporated. In this stage, other municipalities tendering documents are also reviewed to see what practices they use that can be adopted. After completing this stage, the tendering documents are released for the providers to bid against.

The greatest learning since they started procuring 2005 according to the interviewee is that they now try to view the tendering documents from the perspective of the providers, and have also asked them explicitly what they found difficult during that last couple of year's procurements. A change they have done is to put more of the responsibility regarding the implementation phase on the provider themselves, to avoid confusion regarding responsibilities.

Future improvements to be done are, according to the interviewee, to use smaller objects in the tendering process. The latest one concerned three care homes and all of the home care, something the interviewee perceived difficult to handle in a tendering situation. The interviewee also states that they want to find a way of changing their compensation systems to also include bonuses, but that after discussions they came to the conclusion that it is difficult to find a reliable performance indicator to use.

### Quality criteria in the procurement process

The interviewee believes that the most important thing to achieve when formulating the quality requirement in the tendering documents is that they are crisp and clear, so that there will be no confusion as to what they expect to achieve. Historically they have been very detailed in their requirements but say that they try to "give more leeway to the providers now, and use more general measurements". The interviewee does however believe that you should formulate the requirement to ensure a minimum baseline in some key areas such as staffing and competence requirements.

The interviewee considers a good system for handling notifications of deviations the most important thing since it constitutes a basis for learning opportunities.

### Follow-up procedures

The municipality currently uses a wide array of techniques in order to check the quality among the providers. They do a big annual follow-up where they sift through all the reports containing notifications about deviations, interview residents' relatives and the provider's employees, conduct surveys among the residents and look at their systems for handling notifications of deviations. In the case that any fault is discovered in the provider's organisation or their way of organising the care, they require an action plan for how to resolve the issue. Our interviewee thinks that it is working out well, but does however express that it could be done "in a more systematic way".

### Collaborations and relationships

According to the interviewee, the municipality relies heavily on the systems around notifications of deviations and tries to achieve an atmosphere of trust;

*It's the on-going notifications of deviations that is the most important. To increase the usage of the systems we try to de-dramatize it, that you're not a villain just because you've done something wrong*

The interviewee compares their way of viewing how to handle notifications of deviations with lean management in the sense that "it's rare that you can't derive a problem to something more systematically in the organisation".

The interviewee says that whenever governmental funding concerning quality improvement initiatives are available they apply for them, but also express that it has been hard to get the private providers on board, and that they would like a closer collaboration with them. The interviewee believe that it is the responsibility of the municipality to provide clear directions regarding responsibility and to set goals for the providers to work against.

The municipality collaborates with other municipalities in the surrounding region and shares knowledge and experiences. In addition, they also have an established relationship with the county council regarding regional development initiatives.

#### 4.1.6 Case 6: Harrenhal

Harrenhal is located in a municipality in the southern part of Sweden. The procurement process was conducted in 2011 and the new contract came into effect 2012-02-01. Before the procurement process took place the care home was already operated by another private provider, but as a result of the procurement process the new provider House of Stark took over the operations. Statistics Sweden classify the municipality as city.

##### Views on Harrenhal

The municipality states that the cooperation with Harrenhal works well and that they are satisfied with what they deliver:

*We've had a good cooperation with Harrenhal. What's been troublesome is that there's been a high turnover of managers. We do not however have any critique against the managers, but they've changed often and there's a new manager there now. But other than that the cooperation with House of Stark has worked well.*

##### Definition of quality

In stating their view on quality, the municipality mainly elaborates on the perspective of the individual and quality within given constraints:

*Quality is from the perspective of the resident. You should satisfy their needs and wishes. But at the same time: if you have a purchasing organisation that's responsible for one billion krona, you have to put it in relation to what's a decent standard of living and what there is resources available for. If there's a conflict between the end and the means, it's the means that decide.*

The local manger reason along the same lines, but elaborates more on the purpose:

*If I have good quality, I have good economy. It goes hand in hand... Quality means satisfied residents, relatives and customers (The municipality, authors' note). (...) You put a lot of emphasis on the residents' empowerment and participation. (...) My driving force is to produce a superb eldercare.*

##### Organisation's quality management

In describing their internal quality management system, the interviewee states that one of the most important tools they have is the individual care plan, and that they use ÅBIC (Elderly's needs in focus) as a way of organising the care around the resident. The local manager also thinks that the individual care plan is the most important instrument when organising the care: "the individual care plan is good since it shows clearly for us how we should work and what our targets are".

In their quality management they reason similarly to other municipalities in the sense that notifications of deviations form the basis on how the organise their quality improvement work. It is also the notifications of deviations that forms the basis for specific areas that they focus development efforts on, something both the interviewee at the municipality and the local manager confirms. The municipality thinks that quality registers are good and they require their providers to register themselves in national

quality registers such as Senior Alert, BPST and The National Board of Health and Welfare's resident surveys. These form one kind of performance measurement which they use to evaluate the providers. They have also on one occasion used the results from the resident surveys to steer governmental funding to the providers. The private provider agrees with the notion that the resident surveys are a good instrument to keep track of the residents' satisfaction. However, in general the municipality tries to use governmental funding to develop the personnel. The interviewee also says that in terms of quality management systems "we now have internal systems for quality improvement".

The main issue the municipality is grappling with is the management of their large amount of providers:

*We have sixty different contracts concerning care homes, and maybe twenty providers for home care. We need to find a system that makes it easy to manage. (...) We are missing some simple indicators on how well the care home is working.*

The local manager described their quality management system in more detail. The local manager says that they have a lot of defined processes and routines they continuously work at improving, and the interviewee thinks that the structure and planning is good for the organisation. Similar to other providers, each of the personnel also has an area of responsibility in the organisation, but not specific targets in their personal development plan. The local managers say that "I don't really know how I create participation amongst the personnel. It's just a word I'm passionate about: participation". Practices the local manager uses are delegation, target setting and following up on progress. The provider recently started up a project where they aim to start working in a more evidence-based way, but the local manager thinks that it is difficult to assess what evidence really means:

*We started a project about working in an evidence-based way, but it's hard, there's not a lot of evidence around...Evidence is what we ourselves have learnt and what we get through articles for example.*

In order to assess their quality, the provider uses the internal performance management system which gives you an average every month. They also interview the residents and the different departments interview each other.

### Structure of their procurement process

According to the interviewee, the municipality has a long experience of procuring. The interviewee started working in procurement in 2000. The process always starts with a political decision; it is either a decision to outsource care homes that are currently operated by the local authorities or it is regarding whether or not to do a new tendering process for a currently outsourced care home. For newly built care homes, a possible tendering process is always preceded by a needs analysis.

Once a decision has been taken, a project group is formed with competencies consisting of the MAS, representatives from the administrative care authority (which the interviewee works at), and competencies from the central procurement unit. Together with MAS they formulate the quality requirements concerning the care. The central procurement unit handles the judicial aspects and gives recommendations before they release the document for the providers to bid for.

A difficulty that the municipality has been dealing with in the procurement process is striking a balance between building in flexibility to the contracts in order to achieve something new, whilst tending to specify more and more each year. According to the interviewee, this has the detrimental effect that the providers' operations look more and more alike. A reason the interviewee states is the compensation models and the inherent difficulties in defining a service. They tend to use variable price in the procurement process since:

*Using a fixed price requires you to defend the price in a different way, we have the whole burden of proof if we use a fixed price...You must be able to guarantee that the funding is enough for the operations. Otherwise the providers can come with critique and say that: 'for this price you won't get a decent quality, because the municipality hasn't given us enough funding'*

Using specified quality criteria is thus a way of making the providers more accountable for the care being delivered, but has the effect that it stalls innovation.

The learning process in procurement is that organic knowledge is gathered from past experiences. The municipality is also part of an informal network with two other municipalities that regularly meet and discuss procurement, requirements and the results they get from methods and practices. Since the municipality is larger in size, the interviewee also says that they have internal networks in the organisations with colleagues from other departments which meet and share experiences. The municipality also takes part in purchasing discussions through SKL. In addition to those two networks, the interviewee is part of a county-level network that deals with procurement issues and also regularly asks the providers at the market place for feedback.

### Quality criteria in the procurement process

The main reason for having quality requirements in the tendering process is twofold; it is both to ensure a minimum baseline, but also to develop the organisations. The municipal interviewee put emphasis on aspects relating to the local managers, such as educational level, that they are required to be stationed at the care home and they need to have operational experience of delivering care. The reason according to the interviewee is that:

*We can have given quality requirements, but if we don't have an engaged and good local manager it doesn't matter that much. It's the single most important quality factor.*

The municipal interviewee states that a good quality management system is "an absolute must". The municipality does not think it is a decisive factor in determining quality, but rather that it creates prerequisites for a good quality. Another reason is that they think it is a way of reassuring themselves that the providers have thought through their organisation and operations. The most important aspect is how the providers handle their notifications of deviations and how they work actively towards avoiding mistakes in the future. The local manager at the provider also views the quality management system as beneficial for the organisation in their quality improvement and confirms the notion of how important handling the notifications of deviations.

Other requirements that are important relates to information and participation from the personnel, that communication is clear and that the personnel are involved in the development of the organisation. The municipal interviewee believes that "it's not only about having personnel, it's also about having the right personnel". They had competency requirements previously but says that they need to be enforced with caution:

*We once demanded a specific type of education for the nurses. One provider then hired a nurse without that education and we threatened them with a fine. But in this case we had to back-off. The new nurse actually contributed with a higher staff-to-patient ratio than we required, and if we would fine them, they would have removed the nurse to avoid the fine, which would have made it counter-productive.*

The municipal interviewee says that they believe in giving the providers more freedom, but that there is often a conflict that politicians want to make the requirements and tendering documents more detailed. They use sanctions, but keep them low since they believe that bad will is a stronger management mechanism. The local manager stated that one of the most difficult things could be to know what the municipality actually expects them to deliver:

*It's unclear what they mean by 'working with motivation'. I would like that clarified. If they would like me to provide an explanation about something I would like to know how.*

Requirements they seek to develop in the future relate to innovation and development, but says they are inherently difficult to evaluate and the work that exists so far on in that field has only been tried out on smaller objects such as day care centres.

### Follow-up procedures

An initial follow-up is always done after six weeks whenever a new provider has started up their operations, after that is done on an annual basis. In the follow-up they divide the responsibility between their quality and evaluation office and MAS. MAS looks at the actual care and all the notifications of

deviations and the quality and evaluation office looks at contractual compliance to see that the provider is actually delivering everything that they have promised. MAS mainly sift through documentation whilst the quality and evaluation office conducts interviews and gathers other kinds of information. In deciding upon how to distribute the internal resources for follow-up they state that "we normally divide time and attention between 1/3 scheduled follow-ups, 1/3 on demand and 1/3 on places which are too quiet".

They also put emphasis on the quality management system during the follow up and state that "the most important thing is that it's used". Similar as to finding a simple way of managing the performance of the providers, the municipality is seeking to develop methods which are not heavy on administration.

Overall, the local manager perceives the municipality's follow-up as good and thinks that they should do it. The local manager does however think that the internal follow-up is tougher and says that it is "something beyond this world...it's 140 different questions and you need to pass 95 percent of them".

### Collaborations and relationships

The interviewee states that with healthy working relationships it is important that both parties can be open about what is not working in the organisations. The interviewee believes it is important since:

*The important thing for us when receiving opinions and complaints is how the providers handle them, rather than that they occurred in the first place.*

To support relationship development and management they have scheduled formal meetings with the providers regularly. They have little direct contact with the local managers, but rather handle the main contact through the regional manager at the providers. They meet and discuss issues and good areas with the regional manager 4-6 times per year, out of which the local managers attend two of those occasions. They try to involve the local managers as much as they can, but find it difficult to have enough resources to develop the necessary relationships with them. In some cases, where they have common projects running, they might meet more often personally with the local manager.

The local manager says that the main contact and collaborations are internally with the regional manager and through the monthly regional meeting where local care managers in the region meet to discuss different matters. The main contact is with the administrative authority which decides upon which elderly should stay at their care home, and the local manager does not see any reason to keep in touch with the local authorities purchasing function.

The municipality has a municipality-wide care board which consists of the local managers from both the private providers and the public providers. It functions as a sounding board to discuss broader issues in both delivering care and how different requirements from the municipality affect their possibilities of delivering good care. Other on-going collaborations and relationships for the local authorities are the previously mentioned procurement networks.

#### 4.1.7 Case 7: The Eyrie

The Eyrie is located in a municipality in the south-western part of Sweden. The procurement process was conducted in 2007 and the new contract came into effect 2009-01-01. Before the procurement process took place the care home was already operated by a small local provider, but as a result of the procurement process the new provider House of Stark took over the operations. Statistics Sweden classify the municipality as a commuting municipality.

*In this case result, only the views of the municipality will be presented, as the private provider declined to participate.*

#### Views on The Eyrie

During the interview, the municipality's view of The Eyrie was not explicitly discussed, but they did however not express any negative sentiments regarding their views on The Eyrie.

#### Definition of quality

The local authorities express their view on quality in rather deterministic ways: they elaborate some on the perspective of quality in a broader way but mainly refer to legislation:

*The basis are the laws and regulations. You can of course develop questions based on that, but the basic processes: it's the laws and regulations that control that. (...) The quality is already controlled in the law. Then we have guidelines and general advice which we rest upon as a*

*complement to the law. (...) We make quality requirements that ensure good care.*

## Organisation's quality management

Previously the organisation has not had any quality management system in place, but they say that "we finally have an internal quality management system in place: StratSys (an IT-based management system, Authors' note). In describing how the quality management system works, they put emphasis on the notifications of deviations. The interviewee says that is important to have transparency regarding how the providers deal with mistakes, deviations and complaints since it is a basis for making improvement:

*We look at how they work with notifications of deviations, with errors and flaws, with Lex Sarah and Lex Mariah. (...) We don't tell them how to do things, but we want proof of how they work with it.*

They acknowledge the importance of an individual care plan and also have follow-up procedures connected to it. They do not focus on it however since they think that legislation exists already that regulates the use of them at the care homes.

They do not have any explicit performance measurements and says that they do not use The National Board of Health and Welfare's resident surveys when evaluating their providers, but rather only use it as a benchmark to see how they compare to other municipalities. The resident surveys are however a basis for their *Best Care Home* award and they publish information regarding the providers on their homepage, but only regarding services offered and not performance related information. They do however believe that quality registers can be beneficial and think that Senior Alert and the BPSD register is good.

## Structure of their procurement process

Similar to other municipalities, every procurement process is preceded by a political decision. The original reason as to why they started outsourcing is, according to the interviewees, that the politicians wanted a diversity of providers within the municipality. The first step in the process is to form a project team out of different competencies. Previously the municipality had a project leader from the department for care services, a quality developer, MAS and one employee from the central procurement unit. They formulated the requirements and then sent it to the politicians for approval, and then initiated the procurement process.

They have however reorganised the process and now the tendering documents are not sent to the politicians for approval, but rather the politicians only give directives as to what should be achieved and prioritised before the procurement process starts. The main responsibility for conducting the procurement process is also shifted to the central procurement unit. The competencies are the same, but now they only formulate the requirements. They do not involve any external actor for feedback regarding the requirements in the tendering documents.

The evaluation process of the providers' bids has been the same during the last ten years. It consists of written bids and vetting the providers through interviews with 'HOW'-questions where they get to describe the way they perform different care services and secure the quality of different areas. The interviewee believes this gives a pretty accurate picture of how good the providers are and what they can perform. They say that they have rejected proposals before reaching the stage of interviews, but that the interviews have never led to any proposal being rejected.

In terms of developing quality criteria and the procurement process they say that they mainly learn from experience and through looking at other municipalities' tendering documents. They have no structured method for learning and improving the procurement process, but do not see the need for it since they think it is good already:

*It was me and [the other interviewee] who invented this model with interviewing the providers. (...) We interview the providers for four hours and bombard them with HOW-questions, that way we get a good picture of what they're offering. (...) We've had some ideas on how to weight quality and such things, to price different parameters and get a corresponding price deduction. I presented it for the previous manager and that person*



*said that ' it will be too expensive; just do as you've always done'. (...) We've done good business on our procurements since we got a lot for our money.*

According to the interviewees, the central procurement unit in the municipality is part of a knowledge sharing network, but they themselves are not. They say the main area of improvement in the future is to be more active in the planning phase when they are constructing the care homes, and that they need to work more with engaging the civil society and incorporated technology into the care homes.

### Quality criteria in the procurement process

Specific quality criteria that are important according to the municipality are mainly four things: staff-to-patient ratio, food and nutrition, the providers' balance sheet, and a good system for handling notifications of deviations. Staffing and staff-to-patient ratio is a recurring theme during the interview, they do however acknowledge the fact it is not only the staff-to-patient ratio that can affect the quality, but also competencies and mind-set:

*It could be many hands, but bad quality. It can be that way. But you can't remove many hands and still provide a good care. (...) We think the number of hands determines quality to some extent. We remember the Carema Scandal. We followed it a lot and there it was a lot of discussion about staff-to-patient ratio. Some local managers have expressed gratitude that we have had requirements regarding staff-to-patient ratio because then they didn't have to argue with their bosses about that.*

Regarding food and nutrition, the interviewees believe that it is an important aspect of good care and that it is therefore important to influence. The handling of notifications of deviations is important since they say that "we get development through demanding that they have a quality management system. (...) We require them to use SOSFS 2011:9. It states that they should improve, develop and systemise things". Forums for residents to voice themselves are also considered important and they want to see resident and relative boards. The reason behind the importance of requiring the providers to have a solid balance sheet is that one of their providers once went bankrupt, and it caused big disruptions on the operational work at the care home.

Concurrent with other municipalities' statements, they also believe that overall it is important to have requirements that are clear and transparent. They specifically mention that a clear division of responsibility regarding material inventories at the care home facilities needs to exist, since they have experienced disputes around that in the past. They claim that they want to give the providers some flexibility in the operations, but also say that they tend to have more and more specific requirements for each procurement process.

### Follow-up procedures

The first follow-up is conducted six months after any new provider has started their operations, and after that it is done on an annual basis. They mainly look at the individual care plans, staff-to-patient ratio, documentation and work schedules. In addition to that, they say that they are monitoring everything that is in the written contract and that the provider has promised to deliver.

The municipality thinks that it is important to have engaged personnel and are also following-up on factors regarding personnel. This is mainly competence development, and they say that they have not seen a provider that does not engage in competence development.

The follow-up procedures for how the care is organised around the resident is connected to looking to see that routines for formulating the individual care plan together with the resident exist and that everyone has a contact person, since "a contact person can ensure that the individuals' needs are taken into account". They say that they also look for "meaningful daily life and activities". In case of discovering flaws in the providers' operations and the care being delivered, they require a concrete action plan is presented.

They say the follow up process is very difficult, as "many times you only get a fragmented picture". Only once has follow up led to them cancelling a contract, but in this instance they said they received indications early on from relatives coming straight to them saying that there were problems at the particular care home.

## Collaborations and relationships

Overall, the municipality has not strived towards closer collaboration and has contractually given the providers a total responsibility for all of the operations. The type of collaboration that exists is mainly between the municipality's care service administrators, who decide which elderly should live at The Eyrie, and the local manager. The purchasing unit only meet sporadically for the annual follow-up, during the annual meeting with all the local managers or ad-hoc when issues surface.

They say that they used to have a forum where both private and public care home managers met and discussed issues and development, but that they do not anymore since the care home managers said it was not necessary. They are however considering reinstating the forum since the local managers have expressed that they miss the forum and the opportunity to sit down and discuss problems together with their peers. In addition to the previous forum, they offer four training opportunities regarding different aspects of care improvement for the private providers each year.

The interviewees at the municipality express that they have trust in the relationship between them and the providers, but also express negative views:

*We have a mutual trust in each other, and I think it reflects in how we do our contracts and formulate ourselves. (...) I think we have a good cooperation. You can call each other and ask questions. I feel there's no hierarchy. (...) A great danger with procuring on both price and quality is that the providers dump personnel. (...) It's inspiring to have them [the private providers] in the municipality.*

However, the municipality do not believe that the local managers have any intentions of dumping personnel; instead, the suspicion is directed towards the senior executives among the providers.

### 4.1.8 Case 8: Castle Black

Castle Black is located in a city in the south-western part of Sweden. The procurement process was conducted in 2012 and the new contract came into effect 2013-09-01. Before the procurement process took place the care home was operated by the municipality itself, and as a result of the procurement process the new provider House of Targaryen took over the operations. Statistics Sweden classify the municipality as a municipality in a densely populated area.

#### Views on Castle Black

As a response to the question if they are satisfied with the services provided at Castle Black the interviewees replied:

*Today I would say "Yes", but it's been a journey with them...House of Targaryen took over a department which had experienced a high turnover in managers. (...) They've had seven different managers during the last seven years. (...) The personnel did not have a sense of security and were not stable, so you had to work a lot with them. (...) Facility-wise, it was not the best place either, but they've done the best of the situation and it works today.*

The private provider confirms this view and states that "it's been a journey with Castle Black". The municipality does however add that they have a new political situation in the municipality, and that nowadays "half of the politicians do not want private providers in their municipality".

#### Definition of quality

The interviewees express similar views as other municipalities concerning defining quality:

*Quality means that the residents – as we call it – get what they've applied for, what's been promised, and that they get it in a way that's satisfying. (...) But it's also about the contractual aspects, that they get what's been promised in the contract.*

The municipality also believe quality is about fulfilling laws and regulations and always keeping a minimum baseline of quality in your operations. The private provider expresses and defines quality in a

similar way, and emphasises both the aspect of compliance with laws and regulations and that the resident receives good care.

## Organisation's quality management

The municipality has recently gone through a reorganisation and now has a newly founded quality board which deals explicitly with quality issues. The reason, as they state it, is due to the fact that they had not realised what it meant to manage and work with private providers and needed better organisational prerequisites in order to do so. The new department will handle the operational contacts with the providers and manage them more closely. At the same time, the question about an own quality management system became actualised and they implemented their own version based on The National Board of Health and Welfare's SOSFS 2011:9 guidelines. They do not however think that it is fully implemented as it says that "we still have a long way to go". The main reason behind the implementation was to gain transparency, and gain a tool that is usable to manage the providers. To support the process, they have also acquired an IT-based management system.

The private provider gives a more detailed account of how the quality management system functions and what parts account for it. They say that they define processes and guidelines for everything they do, and that they have concrete targets and quality measures that they should strive towards achieving. The local manager then has a monthly follow-up with the regional board at the provider to check progress and discuss current issues. Concerning quality management that involves the employees, they have education in basic values, employee surveys, competence development plans, feedback sessions where they discuss progress and thoughts about how the organisation can be developed and each one of the personnel has their own area of responsibility. To guide the quality of work, they have monthly quality meetings and a quality counsellor that works with these questions. House of Targaryen are also ISO-certified and use the same IT-based management system as the municipality.

In their quality management work, the municipality are incentivised by The National Board of Health and Welfare's resident surveys, since they compare how they perform in relation to other municipalities. They do however express that they want to use them more as a tool for quality management. The private provider also emphasises the resident surveys, but as a more concrete performance measurement to tell how good your operations are. They say that their main incentive to work with quality is that "if we don't achieve a good quality, we'll not exist anymore".

The main and most important aspect of their quality management is the handling of the notifications of deviations and they say that "it's important to learn, to know that the residents get what they need and that the personnel are doing what they should". The private provider confirms this as an important tool to improve, and says that they are "working with 'the wheel' (The PDCA cycle, authors' note)" to do so.

A while back the municipality implemented an "activity fund", where providers can apply for funding in order to do more activities at the care homes. They perceive that it has had a positive impact on the quality of care being delivered and that "it has generated a lot of creativity". The private provider has a similar fund internally in their company, a research and development fund, where they can apply for funding in order to develop new concepts or methods.

## Structure of their procurement process

The municipality uses a straight-forward process when doing the procurement, very similar to the rest of the municipalities in the sense that the first step is to form a project team which consists of various competencies. The competencies involved are a project leader, MAS, MAR, nutritional controller, HR, finance and representatives from the administrative authority. The quality criteria are formulated through internal discussions and political will.

The administrative aspects are handled by the municipalities public procurement unit and provider selection is done through evaluating the inquiry documents from the providers and also interviewing the short-listed providers.

Learning and developing the processes are mainly done through assessing previous tendering processes and knowledge that has been picked up during the work with private providers. The municipality also looks at other municipalities' tendering documents, but the process is randomised, and in addition they have asked other providers for feedback. Contact with other municipalities in the tendering process is sporadic and they are not part of any formal network.

Learnings the municipality has incorporated during the last few years is to restrict the number of pages that the providers' bids can be to get more crisp, clear and concise answers. Another development

during the last couple of years is the project management function. Previously they did not have an explicit project manager but rather it was a loosely defined collaborative process where each specialist was responsible for their area, and a summary was produced in the end which became the tendering documents. Now the municipality uses a coordinating project manager who is responsible for that process.

Difficulties in the process for the municipality have been the fact that managers have not been involved, and it has been difficult for the project team to convince the managers about the logic and necessity behind certain criteria.

### Quality criteria in the procurement process

As a response to the question regarding requirements that affect the quality the municipality mentioned a few. They believe that a good quality management system is essential, not as the deciding factor on quality but as a necessary prerequisite for quality improvement. They have also come to the realisation that they have used too many criteria, both in terms of quantity but also in terms of criteria that you cannot follow-up on or control. They now try to start with the end in mind, and restrict the requirements to only include what they actually can control and follow-up on. They believe that the most important thing is to focus on the residents and making sure the personnel understand that they are there to serve the residents.

They generally believe that too many requirements are bad, and that you should try to leave some leeway for the providers to be flexible, but they believe that it is good to have some baseline quality criteria regarding – for example – activities and some defined roles that are good to have in the organisation.

In contrast, the views of the private provider as to what constitutes good requirements differs: they do not think that detailed specifications are good at all. They think that what the requirement's focus should be the processes, since it is those which are the decisive factor for quality outcomes. Another practice the provider believes is fair is to have clear specifications, for example regarding staffing, and then let the providers compete on who can deliver the best quality according to those specifications.

### Follow-up procedures

The municipality has a big annual follow-up and uses similar techniques of follow-up as other municipalities: a sample of randomly selected individual care plans, how the food is composed, how the residents perceive the personnel, availability to spend time outside, knowledge regarding the quality management system and routines, and how deviations are reported and managed. In the case that any fault is discovered in the provider's organisation or way of organising the care, they require an action plan for how to resolve the issue. They also conduct surveys of their own in addition to the resident surveys from The National Board of Health and Welfare.

Our interviewees say that they have gotten more proficient in their follow-up procedures and that previously "they did not have a proper follow-up". Another recent change in the follow-up procedures that the municipality has done is to also incorporate the promises the providers made in their initial bids, since it constitutes the basis for the contracts. Previously, they only follow-up aspects they themselves had required, and not additional aspects that the providers promised.

### Collaborations and relationships

They say that they only occasionally have informal contact with the providers, but they do have formal meetings arranged with the manager of the care home four times per year. Overall their perception is that they have mutual trust and transparency in the relationship and that there are no barriers towards future or closer collaboration.

They have no collaboration with other municipalities more than sporadic and non-formal contact. They say some cooperation exists on a county level, as public bodies on a county level sometimes invite them to formal education and training sessions.

## 4.2 Quantitative study results

In this section, all the results will be presented and the criteria that are significant predictors for how the elderly will rate the care home will be presented in more depth with graphs and figures. For descriptive statistics regarding all significant indicators in quantitative study, see Appendix 4.

This section is divided into three different chapters: the five main criteria (4.2.1), individual assessment

criteria (4.2.2) and contextual variables (4.2.3). The five main criteria are cornerstones (i.e. The Six Cornerstones of Quality Improvement), incentives, cooperation and relationships, trust and flexibility, and personnel. These criteria have been chosen through an inductive method based on the findings from the eight case studies and literature from the theoretical framework. These are the criteria which form the main point of departure in the analysis section. They are broad and encompass multiple criteria and often also multiple dimensions, such as the six cornerstones of quality improvement.

The individual assessment criteria are more specific and detailed, and each individual assessment criteria belong to one of the five main criteria. These criteria function as an input to get a detailed understanding of what specific criteria and requirements might have affected the result of any of the five main criteria. In themselves, they are not subject to any detailed analysis or elaboration, but rather act as supporting mechanisms to the five main criteria.

The contextual variables capture aspects that are not easily included in the five main criteria or individual assessment criteria. The contextual variables include aspects such as procurement type, municipal population size, type of provider, price etc. They are included to control for variables that might have affected the results, but that, to a very little degree, or not at all, can be accounted for by purchasers in a procurement process.

In all the three section (4.2.1, 4.2.2 and 4.2.3) only one response variables will be shown graphically. The reason for this decision is that visualising both variables does not add to the understanding for the reader, but only serves to decrease readability, since the visual appearance are identical for both response variables.

#### 4.2.1 Quantitative results from five main criteria

Presented in Table 5 are the results from the five main criteria: *Cornerstones, Incentives, Cooperation, Trust and Flexibility* and *Personnel*.

Table 5 Statistical test and results concerning five main criteria in quantitative analysis

Criteria	Type of test				Care Home vs Municipality				Care Home Rating			
		#1	#2	#3	Sig.	Sig. Level	Effect	St. Dev.	Sig.	Sig. Level	Effect	St. Dev.
Cornerstones	Pearson, 2-tailed	25	29	41	0,003	99%	8,6%	11,1%	0,022	95%	6,6%	11,2%
Cornerstones Re-calibrated	ANOVA	54	41	0	0,005	99%	6,7%	10,1%	0,028	95%	5,2%	9,8%
Personnel Re-calibrated	ANOVA	52	43	0	0,01	99%	-6,1%	11,9%	0,042	95%	-4,8%	12,3%
Cornerstones Re-calibrated	Pearson, 2-tailed	54	41	0	0,005	99%	6,7%	11,1%	0,028	95%	5,2%	11,2%
Personnel Re-calibrated	Pearson, 2-tailed	52	43	0	0,01	99%	-6,1%	11,2%	0,042	95%	-4,8%	11,3%
Cornerstones	ANOVA	25	29	41	0,01	95%	8,4%	10,1%	0,081	Not sig.	NONE	-
Personnel	Pearson, 2-tailed	14	38	43	0,016	95%	-8%	11,3%	0,058	Not sig.	NONE	-
Personnel	ANOVA	14	38	43	0,036	95%	-6,8%	11,9%	0,126	Not sig.	NONE	-
Cooperation	Pearson, 2-tailed	25	29	41	0,201	Not sig.	NONE	-	0,248	Not sig.	NONE	-
Cooperation	ANOVA	25	29	41	0,295	Not sig.	NONE	-	0,073	Not sig.	NONE	-
Trust & Flexibility	ANOVA	30	36	29	0,423	Not sig.	NONE	-	0,429	Not sig.	NONE	-
Incentives	ANOVA	35	47	13	0,482	Not sig.	NONE	-	0,446	Not sig.	NONE	-
Trust & Flexibility	Pearson, 2-tailed	30	36	29	0,506	Not sig.	NONE	-	0,751	Not sig.	NONE	-
Incentives	Pearson, 2-tailed	35	47	13	0,594	Not sig.	NONE	-	0,42	Not sig.	NONE	-
Interaction CornerstonesXPersonnel	Pearson, 2-tailed	21	64	10	0,795	Not sig.	NONE	-	0,892	Not sig.	NONE	-
Interaction CornerstonesXPersonnel	ANOVA	21	64	10	0,958	Not sig.	NONE	-	0,991	Not sig.	NONE	-
Interaction CornerstonesXPersonnel	Linear Regression	21	64	10	-	Not sig.	NONE	-	-	Not sig.	NONE	-

Two types of statistical test were performed to increase the reliability of the results in this section: One-Way ANOVA and Pearson 2-tailed correlation tests. As previously discussed in section 3.3, the reason two different test were chosen is the inherent difficulty to statistically assess variables that consist of three nominal values (i.e. the rating in the quantitative study ranges between 1-3). These three nominal values are labelled as #1, #2 and #3 in Table 5, and the value in the column represents the sample size of how many procurements that were graded with a specific nominal value. The two response variables used are *Difference Care Home and Municipality Average – Elderly’s Overall Rating* and *Care Home Rating – Elderly’s Overall Rating*. The latter one is the actual overall rating that the care home have in the national quality registry *Åldregruppen*. The former denote the difference between the individual care home and the municipality average from the same quality registry.

*Sigma* refers to the actual value of the significance coefficient from the statistical test in question. *Sigma level* is at what significance level that the test was statistically significant. *Not sig.* denotes that the statistical test did not achieve a significance level of at least 95%. *Effect* is the linear effect seen between the highest and the lowest value (i.e. between #1 and #3 or between #1 and #2), and how much one could expect to increase the satisfaction level if improvements were made within, for example, the

criteria of cornerstones. Effects denoted as *NONE* means that no effect could be seen for at least a 95% significance level. *St. Dev.* is the standard deviations of the results, measured for the whole sample size, and not for a specific nominal value.

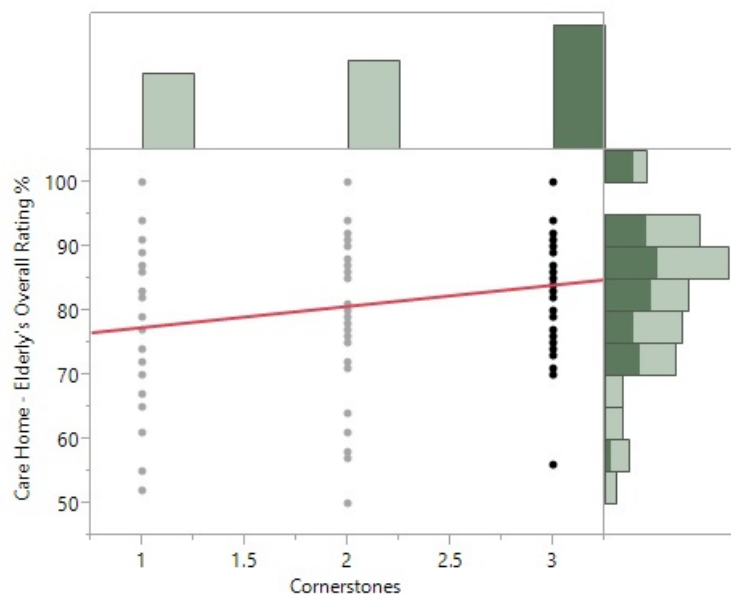
Cornerstones recalibrated and personnel recalibrated are the initial values from cornerstones and personnel were the nominal values have been regrouped according to Table 6.

*Table 6 Regrouping of three nominal variables into two nominal variables*

Criteria	Old Value Nominal Variable	New Value Nominal Variable
Cornerstones	1	1
Cornerstones	2	1
Cornerstones	3	2
Personnel	1	1
Personnel	2	1
Personnel	3	2

The reason for this regrouping is to test the two significant variables of cornerstones and personnel with only two groups of nominal values, something that is more coherent with how the One-Way ANOVA test was designed (Hair et al., 2010).

In Figure 3 and Figure 4, illustrations of the two significant criteria of *Cornerstones* and *Personnel* and their impact on the response variables *Difference Care Home and Municipality Average – Elderly’s Overall Rating* and *Care Home Rating – Elderly’s Overall Rating*. The bar charts on top of each graph represents the sample size for each nominal value (i.e. the number of #1, #2 and #3 from Table 5). The histogram on the right side represent the distribution of the response variable results, and how the nominal variable results are distributed when the criteria is graded as #3.



*Figure 3 Impact of the nominal value #3 of Cornerstones on response variable*

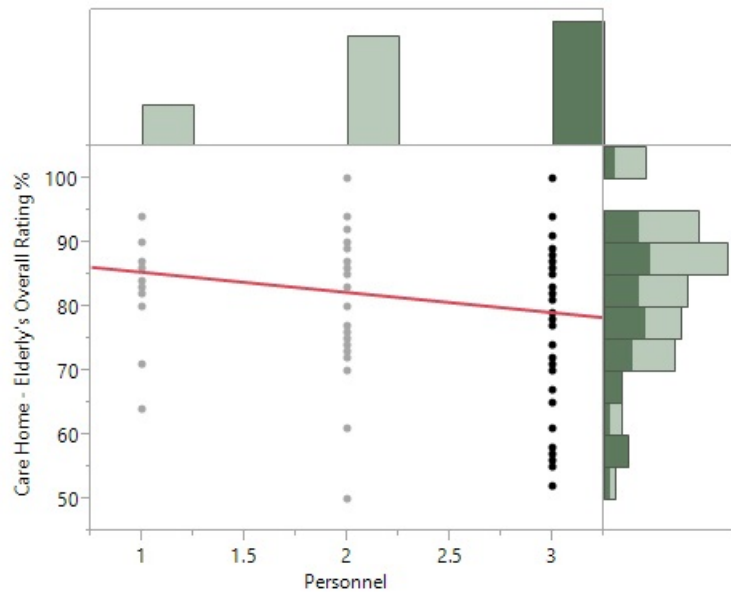


Figure 4 Impact of the nominal value #3 of Personnel on response variable

As mentioned previously, in order to increase the reliability of the ANOVA-results the two main criteria of *Cornerstones* and *Personnel* were regrouped from three to two nominal variables per group according to Table 6. Above are two selected graphs, with one response variable presented. Regardless of response variable and grouping of cornerstones and personnel, the visual outlook is the same, as to why only two graphs were selected for visualisation. In order to check for interaction effects between the two criteria of *Cornerstones* and *Personnel* a Two-tailed Pearson-test, an One-Way ANOVA test and a regression test were performed to find any interaction. However, no signification interactions could be found in either of the three tests as can be seen in Table 5. Figure 5 and Figure 6 illustrate how nominal variables in *Cornerstones* and *Personnel* interact. Figure 5 shows how the criteria *Personnel* were graded when *Cornerstones* were graded as 1. Figure 6 shows how *Personnel* were graded when *Cornerstones* were graded as 2.

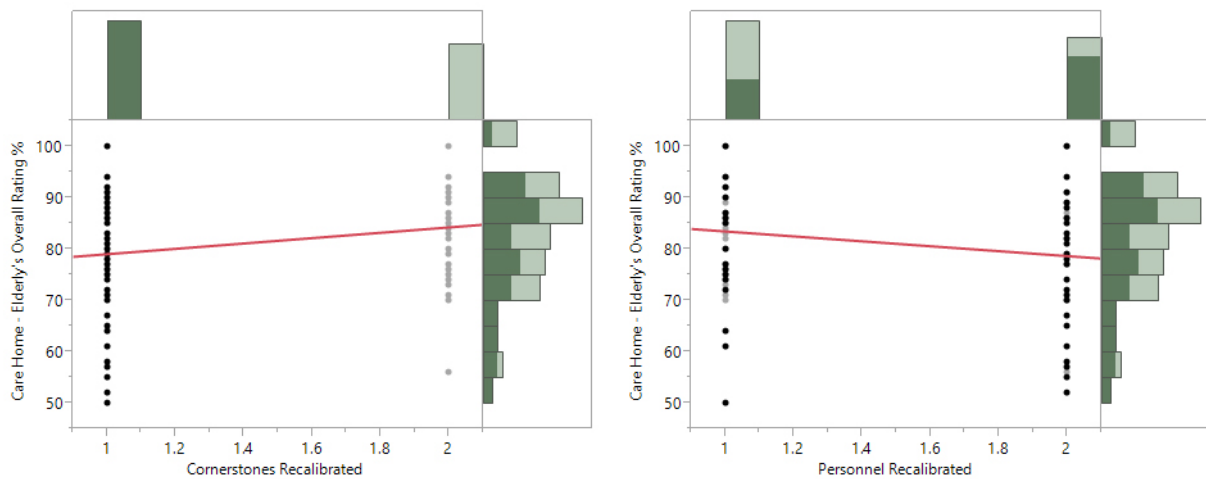


Figure 5 How nominal variable #1 in *Cornerstones* corresponds to nominal value #1 and #2 in the two groups of *Personnel* concerning response variable *Care Home – Elderly's Overall Rating*

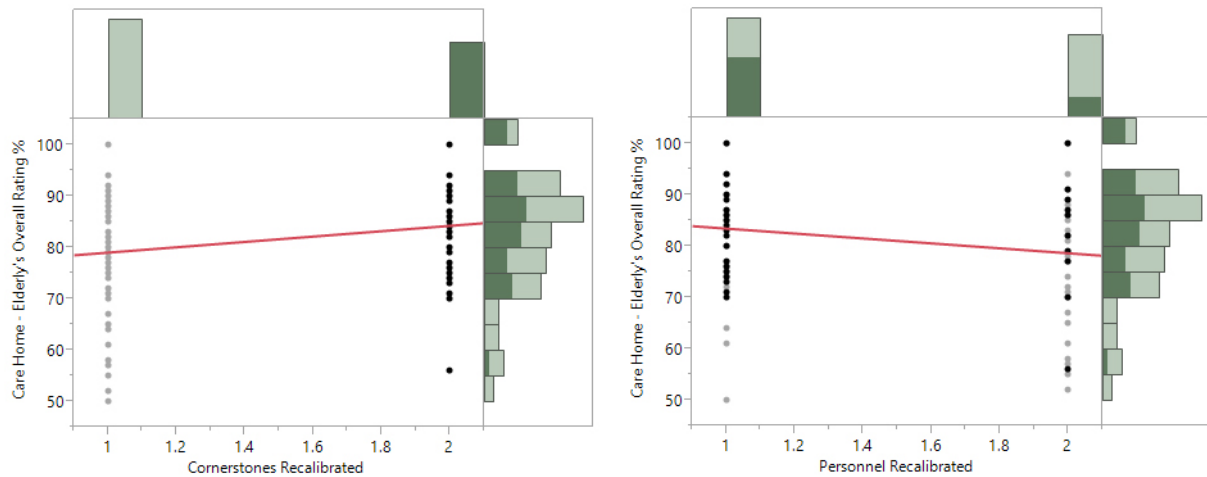


Figure 6 How nominal variable 2 in Cornerstones corresponds to number of nominal values in the two groups of Personnel concerning response variable Care Home – Elderly's Overall Rating

#### 4.2.2 Quantitative results from individual assessment criteria

During the quantitative study an evaluation matrix (see Appendix 3) with 91 individual criteria was used in order to make the assessment process more consistent. Each of these 91 individual criteria were tested for correlation with the response variables of *Difference Care Home and Municipality Average – Elderly's Overall Rating* and *Care Home – Elderly's Overall Rating* and the significant results are presented in Table 7.

Table 7 Individual criteria with significant results on response variables

Category	Criteria	Type of test	#0	#1	Care Home vs Municipality				Care Home Rating			
					Sig.	Sig. Level	Effect	St. Dev.	Sig.	Sig. Level	Effect	St. Dev.
Personnel	Staffing are evaluation criteria in procurement	ANOVA	38	57	0,001	99%	7,7%	10,5%	0,003	99%	7%	10,3%
Personnel	Continuity requirements	ANOVA	31	64	0,002	99%	7,8%	10,1%	0,001	99%	8,4%	9,6%
Personnel	Education requirements	ANOVA	15	80	0,004	99%	9,2%	11,0%	0,02	99%	7,5%	11%
Personnel	PER: Minimum level of staff to patient ratio	ANOVA	44	51	0,005	99%	6,5%	9,2%	0,002	99%	7,3%	8,8%
Focus on the Customer	Strong individual focus in all, or near all, categories	ANOVA	48	47	0,006	99%	6,5%	9,9%	0,046	95%	4,7%	9,7%
Base Decisions on Facts	ESS nutritional requirements	ANOVA	57	38	0,017	95%	5,8%	9,8%	0,026	95%	5,3%	9,2%
Committed Leadership	Local leader stationed at care home	ANOVA	38	57	0,021	95%	5,5%	10,6%	0,024	95%	5,4%	10,3%
Incentives	Fines	ANOVA	36	59	0,025	95%	5,5%	10,9%	0,012	95%	6,1%	10,8%
Collaboration and Relationships	Joint guidelines from MAS	ANOVA	33	62	0,035	95%	5,3%	10,8%	0,017	95%	5,9%	10,5%
Improve Continuously	Focus on quality development	ANOVA	75	20	0,04	95%	6%	6%	0,04	95%	5,9%	6,6%
Improve Continuously	Problem solving without delay (<10 days)	ANOVA	72	23	0,046	95%	5,5%	10,4%	0,025	95%	6,2%	9,4%
Collaboration and Relationships	Joint MAS	ANOVA	36	59	0,054	Not sig.	NONE	-	0,036	95%	5,1%	10,6%
Collaboration and Relationships	Regular reporting (min 2 times/year)	ANOVA	48	47	0,073	Not sig.	NONE	-	0,034	95%	5%	11,1%
Committed Leadership	University degree local leader	ANOVA	24	71	0,008	99%	7,1%	11,3%	0,121	Not sig.	NONE	-
Base Decisions on Facts	Night time fasting max. 11h	ANOVA	30	65	0,047	95%	5,1%	11,2%	0,158	Not sig.	NONE	-

Since each of the criteria is assigned to an overarching idea or concept, it is important to understand what that idea or concept is. Therefore, this information that is represented under the column *Category* in Table 7. Each of the 91 individual criteria can be attributed to one of the five main criteria as presented in 4.2.1. In Table 7, #0 and #1 refers to the sample size. #0 meaning that the assessed procurement did not have that criteria, and #1 meaning that they did have that criteria.

Interesting criteria and their impact on the response variable of *Difference Care Home and Municipality Average – Elderly's Overall Rating* is illustrated in below in Figure 15, 16 and 17.



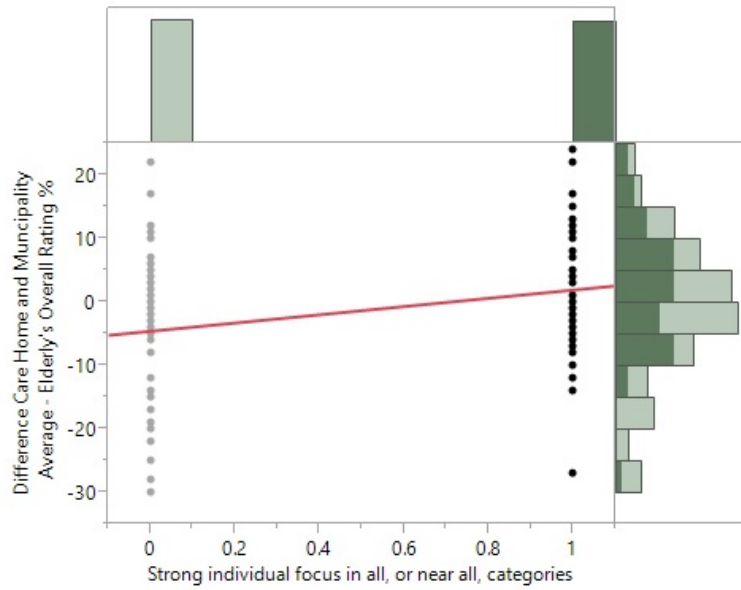


Figure 7 Impact of a strong individual focus in requirements in tendering documents on the response variable Difference Care Home and Municipality Average – Elderly's Overall Rating

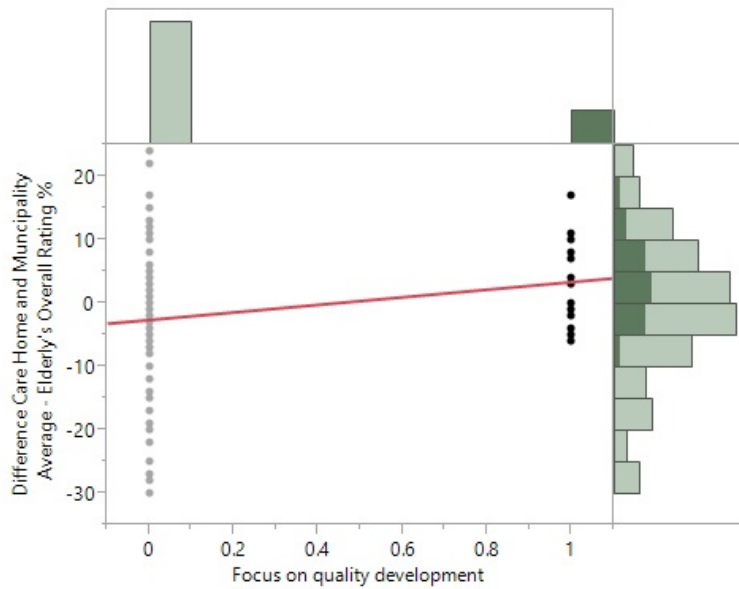


Figure 8 Impact of a Focus on quality development in requirements in tendering documents on the response variable Difference Care Home and Municipality Average – Elderly's Overall Rating

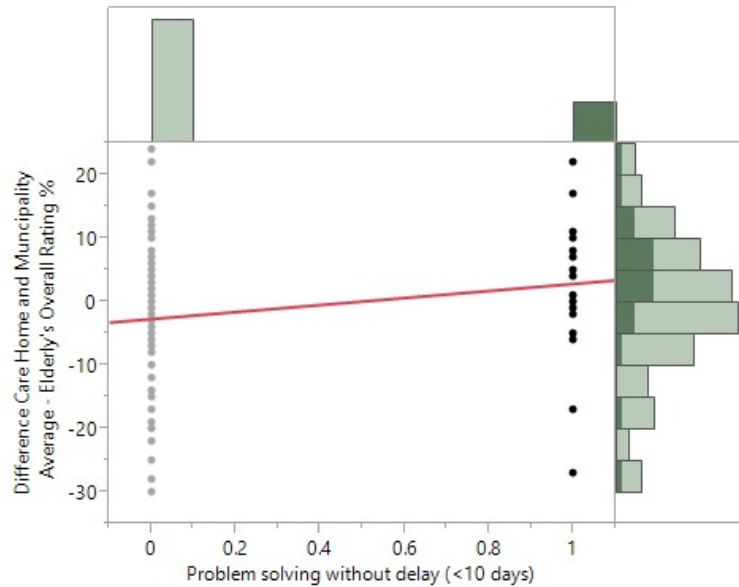


Figure 9 Impact of a Problem solving without delay (<10 days) in requirements in tendering documents on the response variable Difference Care Home and Municipality Average – Elderly's Overall Rating

#### 4.2.3 Quantitative results from contextual variables

A number of contextual factors were tested as well and are presented below in Table 8.

Table 8 Contextual factors effect on response variables

Criteria	Type of test	N	#1	#2	Care Home vs Municipality			Care Home Rating				
					Sig.	Sig. Level	Effect	St. Dev.	Sig.	Sig. Level	Effect	St. Dev.
Idea-driven (#1) or For-Profit (#2) provider	ANOVA	95	30	65	0,001	99%	-8%	10,9%	0,007	99%	-6,8%	10,8%
Provider compensation per day and person	Pearson, 2-tailed	72			0,002	99%	2.53%/100 krona	11,2%	0,003	99%	2.5%/100 krona	11,3%
Fixed (#1) or Variable (#2) price in procurement	ANOVA	95	48	47	0,003	99%	-6.80%	12,8%	0,001	99%	-7.60%	12,6%
#Residents at care home	Pearson, 2-tailed	95			0,009	99%	-1.33%/10 residents	11,6%	0,008	99%	-1.34%/10 residents	11,5%
Total population municipality	Pearson, 2-tailed	95			0,056	Not sig.	NONE	-	0,012	95%	-0.53%/10000 population	11,51%
Use of evaluation matrix: YES (#1) / NO (#2)	ANOVA	95	72	23	0,058	Not sig.	NONE	-	0,054	Not sig.	NONE	-
EMA (#1) or LP procurement (#2)	ANOVA	95	81	14	0,146	Not sig.	NONE	-	0,156	Not sig.	NONE	-
Fixed (#1) or Variable (#2) price in contract	ANOVA	95	70	25	0,192	Not sig.	NONE	-	0,136	Not sig.	NONE	-
Private (#1) or Public (#2) before tendering process	ANOVA	95	44	45	0,7	Not sig.	NONE	-	0,766	Not sig.	NONE	-
Population Density [Population/km <sup>2</sup> ]	Pearson, 2-tailed	95			0,744	Not sig.	NONE	-	0,719	Not sig.	NONE	-
Contract time	Pearson, 2-tailed	95			0,931	Not sig.	NONE	-	0,553	Not sig.	NONE	-
Staff to patient ratio daytime	Pearson, 2-tailed	92			0,993	Not sig.	NONE	-	0,878	Not sig.	NONE	-

In Table 8, the N column refers to the sample size and #1 and #2 to the sample size for those criteria that are not continuous, but rather have nominal values of either Yes or No.

To gain more insight regarding the how the variables related to each other, new correlation studies were conducted, as seen in Table 9 and Table 10. In these two tables, provider compensation is the same variable as *Price per night and person* in Table 8.

Table 9 The relationship between provider compensation and idea-driver and for-profit providers, and fixed or variable price in procurement specification.

Criteria	Type of test	N	#1	#2	Provider compensation				
					Sig.	Sig. Level	Mean #1	Mean #2	Effect #1 -> #2
Idea-driven (#1) or For-Profit (#2) provider	Pearson, 2-tailed	86	26	60	0,01	99%	1423 SEK	1234 SEK	-189 SEK
Idea-driven (#1) or For-Profit (#2) provider	ANOVA	86	26	60	0,01	99%	1423 SEK	1234 SEK	-189 SEK
Care Home Rating For-Profit provider	Pearson, 2-tailed	60			0,17	Not sig.			
Care Home Rating Idea-driven provider	Pearson, 2-tailed	26			0,9	Not sig.			
Fixed (#1) or Variable (#2) price in procurement	Pearson, 2-tailed	86	48	38	0,01	99%	1378 SEK	1180 SEK	-199 SEK
Fixed (#1) or Variable (#2) price in procurement	ANOVA	86	48	38	0,01	99%	1378 SEK	1180 SEK	-199 SEK

Table 10 The relationship between cornerstone grading and provider compensation

Criteria	Type of test	N	Cornerstone grading			Provider compensation		
			#1	#2	#3	Sig.	Sig. Level	Effect/Cornerstones level
Cornerstones	Pearson, 2-tailed	86	25	24	37	0,01	99%	+112 SEK/level
Cornerstones	ANOVA	86	25	24	37	0,05	95%	+113 SEK/level
Cornerstones Recalibrated	Pearson, 2-tailed	86	49	37		0,01	99%	+214 SEK/level
Cornerstones Recalibrated	ANOVA	86	49	37		0,9	Not sig.	+214 SEK/level

Interesting criteria and its impact on both response variables, *Difference Care Home and Municipality Average – Elderly’s Overall Rating* and *Care Home – Elderly’s Overall Rating* is illustrated in below in Figures 19-22.

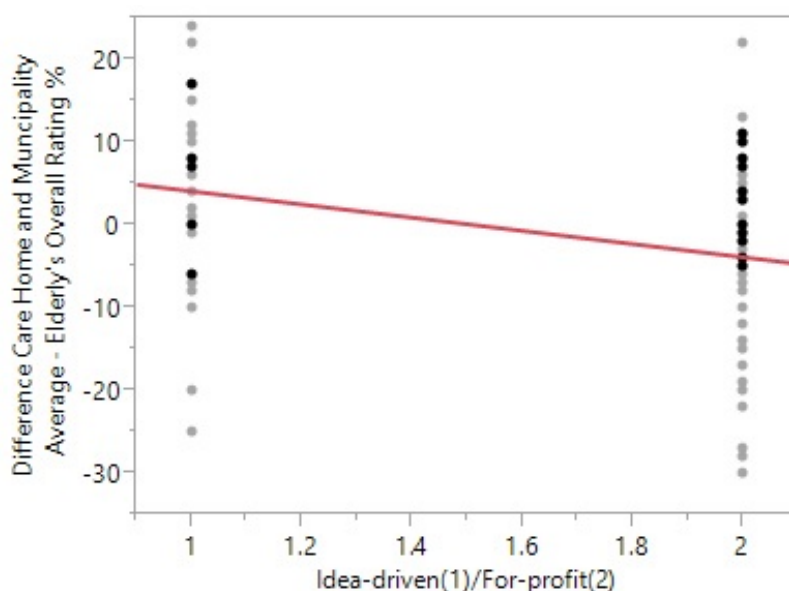


Figure 10 Impact of provider type on response variable

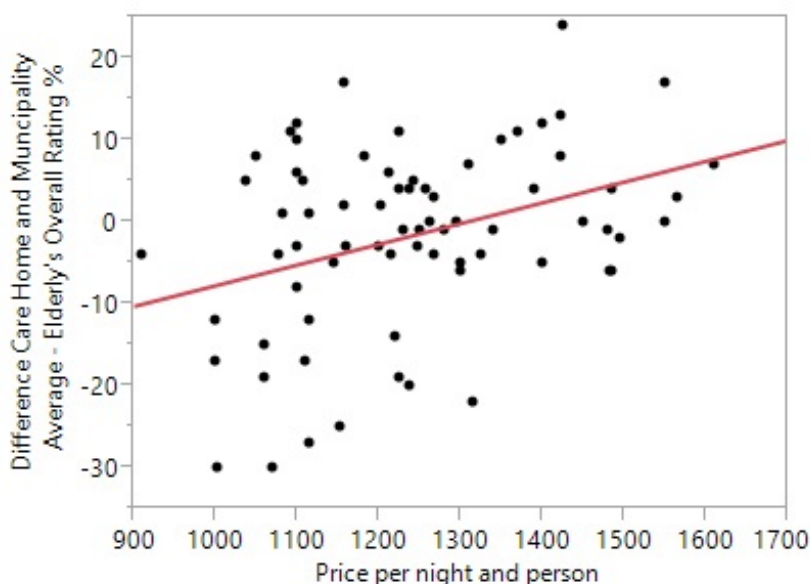


Figure 11 Impact of price per night and person on both response variables

In Figure 11, price per night is measured in Swedish krona. In some procurements, the actual fixed compensation to the providers has been used. In other instances, where the municipalities used a differentiated compensation model based on care need, it has been assumed that the current residents care needs are a representative normal for the residents. And thus the compensation has been calculated as an average of those currently residing at the care home at the time of the procurement.

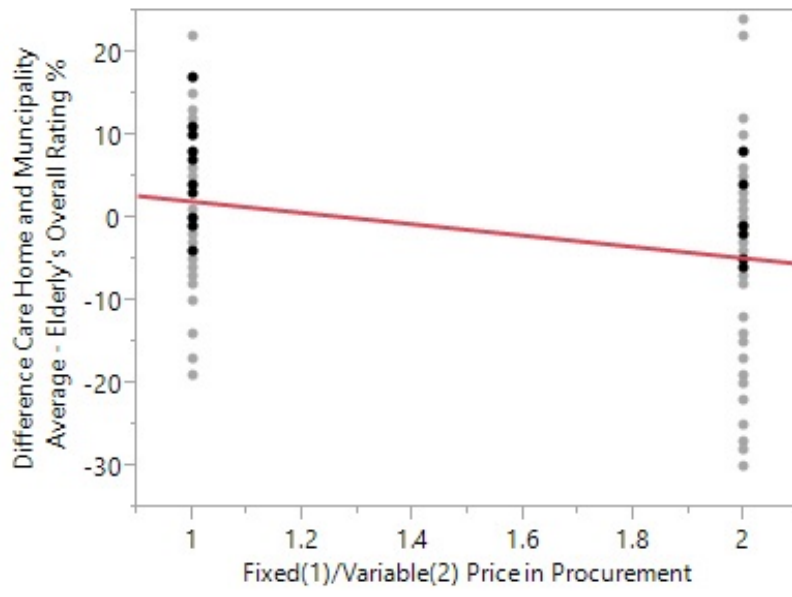


Figure 12 Impact of a using fixed or variable price in procurement on both response variables

## 5 Analysis

The analysis will dissect and discuss the most interesting findings from the result section. The analysis is divided in two different sub sections, 5.1 dealing with the main quantitative findings regarding quality criteria in procurement specifications and 5.2 is dealing with the purchasing organisation itself. The multi-case study results are not separated under a distinct analysis chapter, but are interleaved into the general analysis when appropriate.

In the all of the main sections and sub sections in chapter 5, whenever referring to the response variables, it is the two main response variables of *Difference Care Home and Municipality Average – Elderly's Overall Rating* and *Care Home Rating – Elderly's Overall Rating* that is being referred to. It is these two variables that have been used to measure the results. Whenever mentioning the individual assessment criteria, it is the 91 individual assessment criteria from section 4.2.2 Quantitative results from individual assessment criteria that are referred to (see Table 7 on page 46, and Appendix 4 for more details).

### 5.1 The impact of the five main criteria

The first main section of the analysis, 5.1, is structured around the five main criteria of *Cornerstones, Personnel, Incentives, Cooperation and Relationships*, and *Trust and Flexibility*. Whenever referring to the five main criteria, it is these five criteria that are referred to. The first sub-section 5.1.1 analyses the two criteria that were found to have the most statistically significant impact on the response variables. The following sub-section 5.1.2 addresses the aspect of variation in the results. The third sub subsection 5.1.3 analyses in more concrete terms which of the 91 individual assessment criteria which might have impacted the results of the five main variables. The fourth sub section 5.1.4 analyses the potential impact of the contextual variables, and how they affect the interpretation of the findings from the five main criteria.

#### 5.1.1 Impact of cornerstones and personnel

In analysing the results of the quantitative data, one must be careful with the interpretation. In total, over 100 variables were tested and the risk of spurious correlations is high. Some of the results do however show promise and fairly reliable correlations from which interesting conclusions can be drawn.

The most promising result is the finding that how thoroughly the municipalities have operated in the dimensions of the six cornerstones when formulating the requirements in their tendering documents does seem to impact on the elderlies' overall satisfaction with the particular care home. The effect varies between an increased satisfaction level of 5.2 - 8.4 percentage points, depending on type of statistical test, whether three or two nominal variables were used, and which type of response variable one looks at (see Table 5 on page 43). The main difficulty in interpreting the results and being able to draw a solid conclusion regarding the impact of cornerstones on elderlies' satisfaction is related to the high standard deviation, typically around ten percentage points, in the results. Regardless of which type of statistical test is performed, or how many nominal variables are used, the standard deviation is around ten percentage points (see Table 5 on page 43).

The ANOVA test using three nominal variables showed no statistically significant effect on the response variable of care home rating, but a significant effect on the response variable which measures the difference between the municipality average and the individual care home. A possible explanation is the fact that the previous research has shown that satisfaction levels are affected by contextual factors such as socio-economic background and whether or not the elderly are living in a rural or urban area (Figueras et al., 2005), and therefore by measuring how the care home is performing in relation to the municipality average, regional differences are being accounted for. A glance at the municipalities included in the multi-case study (as seen in Table 4 on page 19) also confirms this view, since the two municipalities that have the highest municipal average also are located in more remote areas.

A complicating factor in the analysis is the fact that personnel showed an inverse correlation with cornerstones, making it difficult at first glance to distinguish what actually has an impact, see Figure 13.

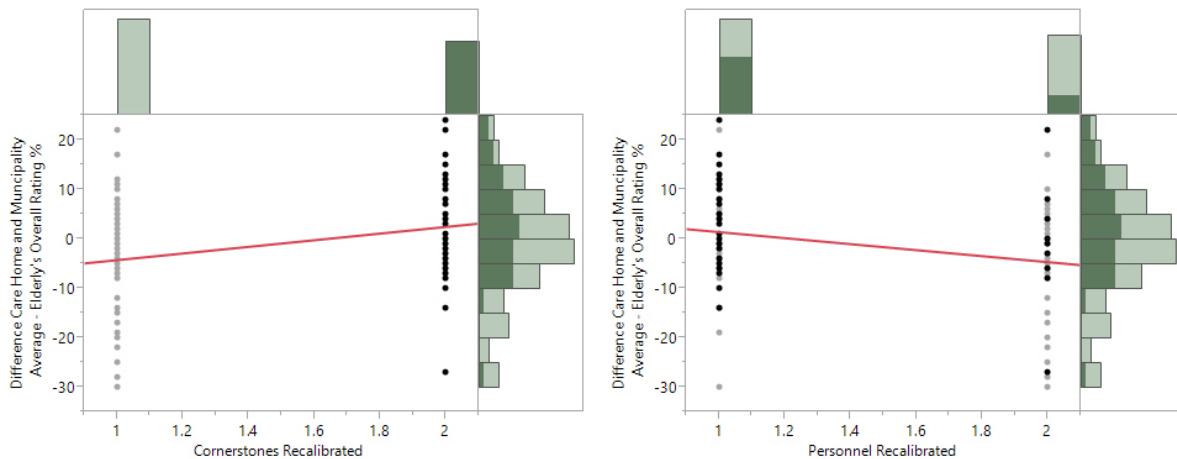


Figure 13 How personnel have been graded when cornerstones have been graded as high (nominal value 2).

Looking at previous research, a positive relationship exists between nurse staffing and health outcomes in various care units (Aiken et al., 2002; Blegen et al., 1998; Sasichay-Akkadechanunt et al., 2003), and also a positive relationship regarding overall staffing and health outcomes in care homes (Bostick et al., 2006; Hickey et al., 2005). The studies that have been done do however use health outcomes as response variables, and not overall satisfaction. Little research exists regarding the impact of staff-to-patient ratio on the perceived satisfaction level as is used in this study. Looking at the actual reported data from the care homes in *Åldreguiden* regarding their staff-to-patient ratio, no significant relationship exists between actual staff-to-patient ratio and satisfaction level (see Table 8 p.48 and Figure 25).

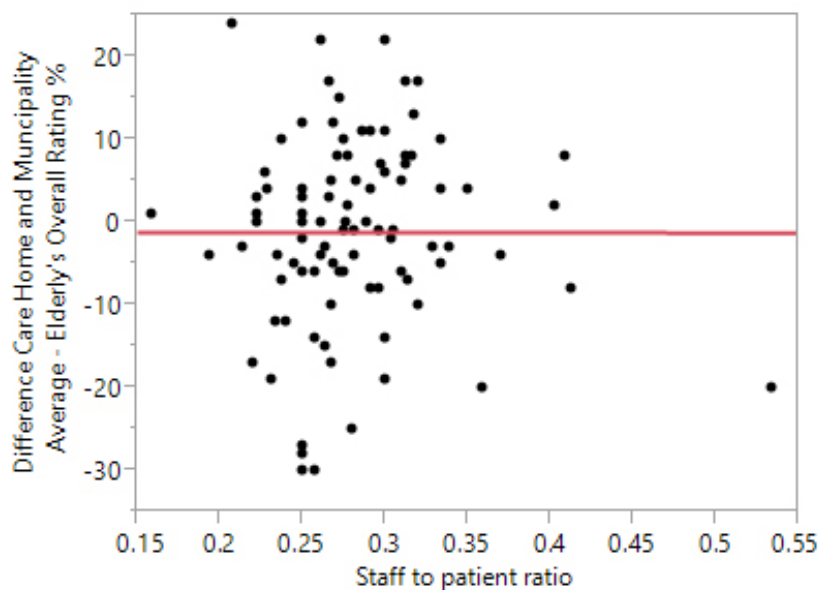


Figure 14 The relationship between care home staffing and satisfaction level

In statistical terms, the probability is less than one percent that the staff-to-patient ratio has any effect on the elderly's satisfaction level. However, this should not lead one to conclude that the staff-to-patient ratio does not have an impact on the satisfaction level. Positive health outcomes are associated with meeting guidelines regarding staff-to-patient ratios, but there seems to be a diminishing return at some point (Bostick et al., 2006; Hickey et al., 2005). Little research exists on how the staff-to-patient ratio impacts satisfaction, perhaps because it has not been a prioritised area or because there are methodological difficulties inherent to such research, since satisfaction is defined and measured in such different ways between different countries. Uncertainties exist regarding the validity of the satisfaction measurement, since it is common for relatives to fill in the resident surveys in Sweden (Socialstyrelsen, 2015). Kazemi & Kajonius (2015) found a positive impact of staff-to-patient ratio on satisfaction using the same response variables as this study, but their study did not distinguish between private and public providers. In yet another study using the same response variables as this study, a case-based study of

two identical care homes, one operated by a public provider and the other one operated by a private provider, found that a lower staff-to-patient ratio did not affect the satisfaction level of the elderly (Eklund et al., 2014). In the study, the two case companies used different staffing models, where the private provider staffed based on demand, and the public provider staffed based on the personnel's preferences regarding work hours. Thus, the public provider had excessive capacity during most of the day, whilst the private provider was able to better match capacity with demand. In the eight case studies conducted in this thesis, most municipalities admitted that private providers in general are better at staffing and can get better results out of a lower staff-to-patient ratio, something the local managers with experience from both public and private care confirmed. Stolt et al. (2011) also found that public providers tend to focus more on structural aspects such as the personnel. It might therefore be reasonable to believe that the results of Kazemi & Kajonius (2015) are skewed by the fact that 80 percent of the care homes are operated by public providers (Bergman & Jordahl, 2014), where the lack of matching capacity with demand means that a higher staff-to-patient ratio might mean higher satisfaction. The majority of the municipalities in the case studies believe that a connection exists between staff-to-patient ratio and satisfaction of the elderly and according to the results in Table 7 on page 46, the four criteria that showed the strongest significant relationship with satisfaction are the four criteria related to the personnel. It could be the case that the procurements led to a staff-to-patient ratio that reached some sort of minimum viable staff-to-patient ratio, and that education requirements had a positive impact on the response variables. Many also only had the requirement that "the personnel should be qualified enough to perform their duties" whilst others had tangible targets concerning the share of the personnel that should have a specific kind of education. Looking at the actual access the elderly have to qualified personnel (as seen in Table 7 and Figure 15), the level of significance is 0.935, meaning that the probability that education level played any part is less than seven percent.

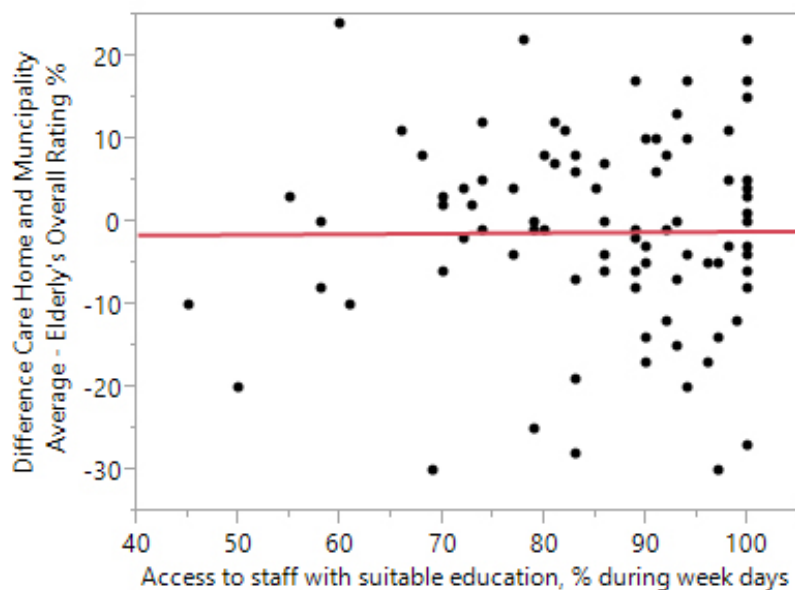


Figure 15 The relationship access to staff with suitable education and satisfaction level

The assessment is in this case done a bit incoherently in this study, so the criteria should be interpreted with caution. Therefore, in this thesis the authors do not believe that aspects relating to the personnel have affected the response variables in any way, and neither that any of the four individual assessment criteria concerning personnel (see Table 7 on page 46) that show statistically significant impact on the response variables have a causal relationship with the response variables. A likely explanation is that this is a result of the qualitative assessment that has been done by the authors. Scoring 1 on the personnel scale means more requirements and less flexibility regarding staff-to-patient ratio. However, looking at how the grading process has been conducted in the assessment matrix in appendix 2, you can see that the focus has been more about ensuring that personnel with the right level of education are in place, along with highlighting that, as a municipality, one will not allow levels of staff-to-patient ratio that are too low. It is therefore more reasonable to believe that stricter requirements regarding the personnel are just a reflection of the level of awareness the municipality has regarding the impact the right type of personnel can have on the care being delivered, rather than being a requirement that has an actual impact on the response variables.

Looking further at the results of the multi-case study relating to personnel, another aspect which was found is the influence minimum staff-to-patient levels have on the relationship between the municipality and the private provider. Two differing views are presented in the multi-case study results, highlighting this aspect. Firstly, an interesting example is case 4: Pyke, where the municipality has included staff-to-patient ratios as a part of the award criteria. The private provider expressed that the municipality's demands have "become so strict", in terms of staffing and compensation levels, that their ability to adjust their processes is severely limited. A contrasting example of this view is from case 7: The Eyrrie, where the municipality stated that staff-to-patient ration, in their view, was a good driver of quality and that "you can't remove many hands and still provide a good care". Furthermore, the municipality stated that the local managers of the care homes expressed some appreciation of the limitations, as the pressure – exerted by the higher-level management – to reduce costs by optimising staffing levels was reduced. As is apparent from the preceding examples, municipalities wanting to include a minimum staffing level in their procurement criteria or follow-up criteria should be cautious in how they choose to implement this limit. Municipalities should be mindful that there is no clear statistical justification that a minimum staffing level drives quality, that the operational flexibility of the provider becomes reduced with this criteria, and that the criteria influences the relationship between the municipality and the private provider.

### 5.1.2 Understanding the standard deviation of cornerstones

The next difficulty in assessing the impact of cornerstones on the response variables is to understand why the standard deviation is as large as it is, regardless of using two or three nominal variables of cornerstones (see Table 5 on page 43). Here, previous research using the same response variables provides a good explanation. In using the same response variables to measure satisfaction as in this study, Kajonius & Kazemi (2015) found that the main impact on the response variables comes from process variables related to the relationship and interaction between the personnel and the resident. Only a small percentage can be attributed to what Donabedian (1983) calls structural resources. In another study, Kajonius et al. (2016) argues that the effect of organisational form is no more than maximum five percentage points. Our thesis indicates that the effect might be slightly larger. But the study only looks at organisational form indirectly, and instead focusing on what kind of requirements are included in the public procurement process. However, formulating the relationship and interaction between the personnel and the resident as a requirement in a public procurement situation is next to impossible; the authors have never heard of someone that managed to procure a social relationship. Thus, the authors believe the large variation to be a reflection of the fact that procurement practices might not be the factor with the most decisive impact on the operation of the care home, and that the relationship and interaction between the personnel and the resident is the factor that causes this variation to occur. In a procurement situation, conditions can be arranged so as to provide prerequisites for quality to occur, but the relationship between the personnel and the resident can never be defined there. Additionally, contextual factors such as socio-economic background and place of residence are not accounted for in this study, other than to some degree in one of the response variables.

### 5.1.3 Impact of different individual assessment criteria on cornerstones and underlying explanations

Digging deeper to understand which underlying factors might have had an impact on the results concerning the cornerstones, three findings that Kajonius et al. (2016) found in an observational study of two comparable municipalities that differed in terms of satisfaction levels are interesting: (i) that the care is organised with the needs of the resident in mind, (ii) that recruitment and education is aimed towards bringing in independent and self-sufficient employees, and (iii) that, in case of issues surfacing, the resolving these issues always take precedent over existing rules and structures.

Looking at factor (i) and how care is organised with the needs of the resident in mind, the individual assessment criteria *Strong individual focus in all, or near all, categories* (see Table 7 on page 46) is analogous. In scoring highly on the individual assessment criteria, typical characteristics of the municipalities is that they have focused their requirements on first and foremost satisfying the needs of the residents. Often, these municipalities include specific requirements that the needs of the elderly should be prioritised above the wishes of the personnel. Examples of this are formulations such as "work scheduling of the personnel should not decide when the resident wake-up or go to bed" and "the resident should always be able to influence the food and nutrition". In many instances these municipalities have included controls in their follow-up procedures of whether individual care plans are up-to-date and that the elderly or the relatives have participated in formulating them. The authors believe that such examples show an eagerness to include the residents' perspective in the caregiving.



The scoring on this criteria was partly a meta-analysis of how the municipalities expressed their requirements: if they were focused on the residents, or if they were more of a reflection of the municipalities' project group that managed the procurement process. As an example of the latter, those who scored low or medium on individual focus in their procurement specification often had requirements which could, with some degree of certainty, be seen as being mainly specified with the project groups own preferences in mind. Examples such as: "the provider is not allowed to serve endangered fish", "the individual should be accepted in their sexuality and should have the right to choose if they want to be sexually active or not" and "the resident should have the opportunity to smell freshly-baked bread" are indicative of this. The authors are not arguing that these aspects are unimportant for the residents, but merely pointing out that when making these specific requirements, the idea must originate from somewhere.

Overall, the municipalities that were rated high in the *Strong individual focus in all, or near all, categories* operated in the values of the cornerstone *Focus on the customer*. This attitude can also be seen among those municipalities in the multi-case study that had good outcomes of their procurement processes (cases 1-4). These municipalities tended to view quality as something which should be judged by the residents, whilst the municipalities that had less successful outcomes from their procurement processes (cases 5-8) tended to emphasise laws and regulation as a point of departure for assessing quality. A pervasive user-based perspective that focuses on the needs of the resident thus seems to be an explanatory difference. However, a caveat to these results is that it is difficult to single out any absolute criteria or practice that contributed to the impact with certainty, especially since the study's design has been unable to control for how the municipalities included in the quantitative analysis did their follow-up and operational work.

Concerning the second finding of Kajonius et al. (2016) regarding recruitment and education of personnel, as we have elaborated in sections above, structural quality indicators such as staff-to-patient ratio and education does not seem to have any impact on the response variables. It is however hard to control for the effects of quality indicators relating to processes variables, such as information and how they elderly are treated. A possible, but not likely, explanation might be that all the care homes fulfil some sort of minimum viable staff-to-patient ratio and some sort of minimum viable education requirements. However, a more likely explanation is that requirements relating to the personnel did not have any effect. What should be noted is that this does not mean that the authors conclude that aspects relating to the personnel cannot be affected through purchasing, it simply does not look like the results can be explained by the method used in this thesis. Expanding further on the importance of staff, several respondents in the multi-case study highlighted the importance of the care homes' staff and the local managers as a driver for quality, and that it is not enough to focus on "the number of hands", but that "the quality of the hands" is equally important. Focusing on personnel and training should therefore not be disregarded, even though this thesis shows low prospects of influencing these aspects through purchasing.

A more relevant – and therefore interesting – finding is related to Kajonius et al. (2016)'s third finding, namely that issues that surface had priority over rules and structures in order to be resolved. The cornerstone of *Improve continuously* states there is always a way of improving the quality without using more resources, and that mistakes should be embraced as carriers of information to this aim. In the case studies where the municipalities succeeded in getting good results (cases 1-4), the municipal respondents expressed greater maturity in terms of how they talked about and used their quality management system. They described their processes in more detail, explained the purpose of why they used it and could also explain how it contributed in more depth. This finding is mirrored in the results from the quantitative study of the individual assessment criteria (see Table 7 on page 46). In *Focus on quality development* the municipalities often had inter-municipal collaborations regarding quality improvement, specifically demanded the providers to engage in quality improvement together with the municipality, drove their own quality improvement projects, and in one occasion even demanding that the providers should be actively striving towards spending resources on incorporating new technology into the care home services. The common theme for the municipalities that scored a high mark on *Problem solving without delay (<10 days)* was that they had internal routines to handle complaints and notifications of deviations. They had defined by who, how, and when problems should be resolved (i.e. at latest within ten days). The criteria *Regular reporting (min 2 times/year)* is in the category of *collaboration and relationships*, but might as well been categorised as improve continuously, since the regular reporting in most cases concerned notifications of deviations. The municipalities that had done procurements that did not succeed in gaining high satisfaction levels (cases 5-8) all gave answers along the lines of "it is not yet fully implemented" in terms of how their quality management system worked. One of the municipalities in the case studies (Case 7: The Eyrie) was gave the impression that the fact

that they had bought a new IT-system meant that they therefore had a functioning quality management system.

Previous research has come up with different results regarding the effectiveness of quality management systems in the care sector. Some studies argue that it has not had any effect (Øvretveit & Gustafson, 2003), while others argue that dramatic quality improvements have been seen (Berwick, 2001). An explanation, apart from differences in definitions, to the scattered results is the methodology of these studies. Øvretveit & Gustafson (2003) look at the overall effect quality management systems have had on the care sector and do not distinguish between different types of care units, whilst Berwick (2001) looks at the processes level, for example how to reduce errors in administering anaesthesia. Conventional wisdom from the field of quality improvement is that first, a baseline should be established, as a base from which to improve (Bergman & Klefsjö, 2008), i.e. you need to have defined and established processes that you can measure before you can improve. Additionally, as Andersson et al. (2014) noted in their evaluation of the care market in Sweden, eldercare is a much more homogenous product than other types of care. Daily life for a general practitioner at a care centre is much more varied in terms of what type of procedures are performed than the daily life for a care worker in a care home. A crucial difference as to why quality management systems might have positive impact in care homes lies in the frequency of the procedures (processes) performed. Of course, the individual care plan each resident has does differentiate the processes to some extent, but the basic care-giving processes are more or less the same and are repeated throughout most care homes and with most residents. Therefore, the characteristics of eldercare provide a more solid basis for conducting quality improvements compared to other types of care.

Previous studies have only looked at the effect of quality management systems on health outcomes and the more technical aspects such as actual care procedures, but there is reason to believe that these systems can be used for increasing the satisfaction level also. In the individual care plan, aspects of the social relationship between the resident and the personnel are defined, such as activities the residents prefer and what type of clothes they like to wear. The wishes might be subjective based on the resident, but the process changes it leads to will be an objective fact for the care worker and also becomes repeatable with a high frequency. All of the municipalities in the case studies considered the notifications of deviations to be the most important mechanism to drive quality improvements and this is also in line with previous research in the field of quality improvement: the possibility for standardisation is one of the key elements of quality improvement, since you can reduce the variation (Bergman & Klefsjö, 2008; Deming, 1994). The relatively homogeneous services in eldercare provide a good basis for both standardisation and therefore also quality management systems.

The findings in our case studies, and in the quantitative study thus indicate that satisfaction levels might be related to the implementation and usage of the quality management system. At its core, *Cornerstones* and the contextual criteria are processes that reflect the maturity level of the quality management system amongst the municipalities. The authors believe that an underlying explanation as to why *Cornerstones* have been seen to have an impact is this maturity level of the quality management system in the municipalities' organisations. Influencing quality outcomes is thus not only a matter of simply adding more service requirements for the provider: equally important is how well the municipality's own organisation functions.

#### 5.1.4 Incentives, cooperation & relationships, and trust & flexibility

In the quantitative assessment of the procurement documents, there were three of the five main criteria that did not show any correlation with the response variables. These three criteria are *incentives*, *cooperation & relationships*, and *trust & flexibility*. These factors will be discussed in the following chapter.

##### 5.1.4.1 *Incentives*

Perhaps surprisingly, there was no correlation between the factor *incentives* and the satisfaction of the elderly. However, this is mainly because the data gathering did not find any cases of incentives being used in the way that was envisaged. The authors had expected to find at least some instances among the selected procurement processes where positive incentives were implemented; however, no such cases were found. The incentive structures which were found mainly concerned negative incentives, such as fines for not following the contractual obligations. In the interviews in the multi-case study, there were some municipalities which discussed their ideas around implementing positive incentive structures. However, none of the municipalities had chosen to implement such a system. The main reason for this was indicated to be uncertainty regarding which underlying variable to use as the basis for such incentive structures, as they did not want the incentives to lead to adverse behaviours and

negative effects. Instead, some of the municipalities had included positive incentives, such as “delight and joy” competitions. Such attempts were perceived to carry a lower risk of inducing negative effects.

Another aspect of the *incentive* factor was inclusion of demands to report in quality registries, which was one of the individual assessment criteria in the qualitative study. The authors initially hypothesised that this variable could be impactful, as the results of these registers are made available to the public; as such, negative results would potentially reflect on the reputation of the provider in general and the specific care home in particular. However, as no significant correlation was found in this study, this theory was not supported. In some instances, notably in the case of Pyke, the results from the national survey of the residents' satisfaction were used as follow-up criteria by the municipality. However, there were no direct negative incentives connected with this criteria: failure to adhere to this demand would simply become a negative mark against the private provider, which in extension could affect the provider during the next procurement process. One possible explanation could be – which the authors noted when extracting data from the databases – that the format of the data available on the National Board of Health and Welfare's homepage is published in a format which is inaccessible to most people. Effort is required to search, extract and interpret the information in the database. Without prior knowledge of eldercare or the measurements, it is probably hard to make meaningful conclusions from the information provided in the database.

One of the individual assessment criteria which did show signs of correlation, albeit not strong, was the *Fines* criteria. However, the authors cannot explain this correlation through any other data or theoretical framework. Perhaps the effect could be explained through "a sense of duty" from the involved providers, but this is merely speculation. As such, the authors are unable to draw any clear conclusions from the correlation that was found on this criteria.

#### 5.1.4.2 *Cooperation & Relationships and Trust & Flexibility*

In both these instances, the authors have come to realise that the evaluation model (See Appendix 2) that was used in the quantitative data failed to capture the comprehensive meaning of the terms used. This could be one explanation for why these factors, which intuitively should be important, failed to show any correlation with the satisfaction in eldercare.

In the case of *cooperation and relationships*, the assessment criteria that were included in the evaluation model were mainly structural in nature. As such, there was no way to capture how the relationship was operationalised after the procurement contract was awarded. As is evident from the multi-case data, the relationship and cooperation between the care home and the municipality is an important factor. But the results of the case study also show that there is no easy way to ensure that the relationship works well in the procurement stage. The qualitative data did show a correlation between the individual assessment criteria related to the *MAS* factors of the evaluation matrix and satisfaction, but this effect is probably related to an additional control mechanism, more than a sign of a closer relationship with more cooperation. However, the element that was identified by multiple interviewees to be of immediate importance in establishing a relationship and getting a well-functioning care home was the local manager at the care home. As an indicator for this, there were several instances where poor performance was reportedly coupled with high turnover of local managers. However, a familiar issue arises once again with this factor: it is difficult or impossible to specify the local manager as a criteria in the procurement process. In the case of Highgarden, there was an idea to include a procedure to allow the municipality to approve any local manager before they could be appointed to the care home. However, as was identified by the municipality in case 3: Highgarden, there is also a balance to be struck between having an integrated relationship between the private providers and the municipalities, and allowing the private provider the freedom to run their own organisation. The authors have not found a criteria which could capture this factor during the course of this thesis, and must regretfully leave this area without a conclusive result.

For the criteria *trust and flexibility*, there is a similar problem with the created evaluation model as in the case of *cooperation and relationships*, in that the evaluated criteria fails to capture the comprehensive scope of the terms. Instead, this criteria tended to be a judgement of how detailed the municipality was in the procurement specification. The level of detail can be thought of as an indirect variable affecting the trust levels. For example, if the municipality has a high level of detail, they can be thought of as trying to restrict the freedom or flexibility of the private provider; therefore, it could be stated that the trust levels are lower. However, getting a low score in this variable does not necessarily lead to a low trust in the relationship after the contract has come into operation. Furthermore, as was the case regarding The Eyrie, it was found that municipalities were sometimes more detailed in their specification when they are inexperienced at procuring eldercare services. Therefore, a low score in trust and flexibility could simply be a reflection of such lack of experience and not necessarily a sign of a low level

of trust.

The qualitative study made an attempt to find aspects which could aid the private provider and municipalities to form relationships. However, no correlation was found for either of the two factors used in the evaluation. As has been discussed, this is most likely because the evaluation did not capture enough detail to be able to assess how the relationships between the actors operationalised. To make a more detailed qualitative study of this variable in relation to eldercare, a more comprehensive study over the implementation of the contract and the resulting relationship would have to be made. Such a study is out of scope of this thesis, and would require an inordinate amount of resources.

Although there is a lack of qualitative justification, having a close contact between the private providers and the municipality is important for eldercare services. This is supported by the findings in the multi-case study, where most municipalities and local managers expressed that they wanted a close relationship with their counterpart. For example, in Case 3: Highgarden, one of the main factors of success was identified to be the local manager which the municipality could have a working relationship with. However, the relationships which were analysed were not exclusively discussed in positive terms. The multi-case study highlighted some obstacles which exist to forming the relationship between the private provider and the municipality. An example of such obstacles is the possible existence of a double-standard in follow-up between private and public care homes, where the private providers are subjected to a higher degree of scrutiny than their public counterparts. This is closely related to another finding of the study: that there exists an internal resistance in the municipal organisation towards private providers. In the multi-case study, representatives from both the municipal and the private parties indicated that such resistance originates from how politicised the topic of private providers in care is in Sweden. However, the respondents also indicated that this resistance is decreasing over time. Thus, even though a strong relationship is described as important for a functioning collaboration between the municipality and the private provider, establishing such a relationship is not trivial, but require a conscientious effort from both parties.

To conclude, the eldercare service is complex enough, with many integrated processes, that a close relationship is an important driver for quality. One conclusion which could be drawn based on the results is that it is not possible to have criteria which guarantees that a strong relationship between the actors can be formed. However, even though the procurement specification cannot guarantee that such a relationship will be established, it can help set the stage for relationships to form. But, it is up to the two actors involved in the transaction to develop the relationship thereafter.

### 5.1.5 The impact of contextual variables and other findings

A major difficulty in having more than 100 individual variables to account for is, of course, to disentangle correlation relationships from causal relationships. In looking at the results from contextual variables, the results strike you as surprising. According to Table 8 (page 48), there are four variables that show a positive impact on the two response variables: (i) idea-driven rather than for-profit providers, (ii) higher provider compensation, (iii) fixed rather than variable price in the procurement process, and (iv) the number of residents living at the care home.

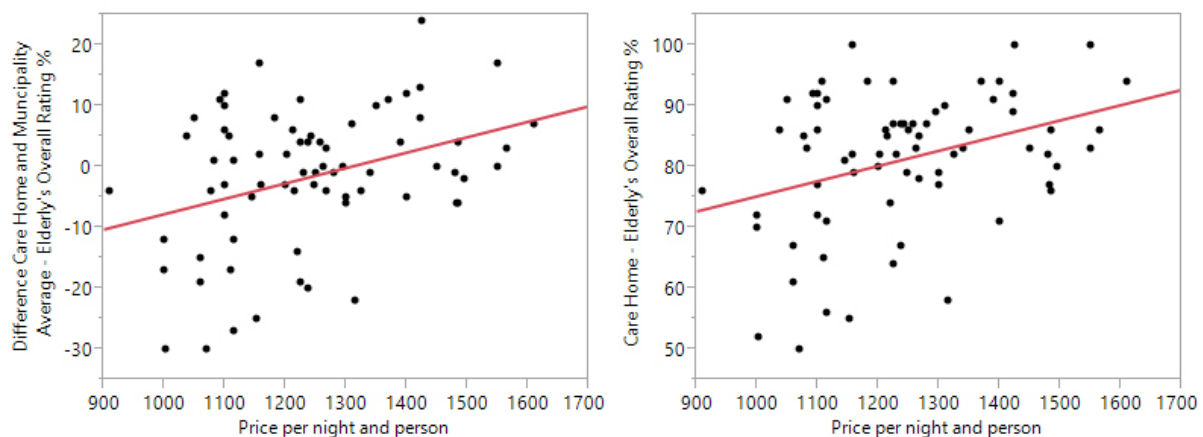


Figure 16 The impact of provider compensation (price per night and person) on response variables

In statistical terms, the likelihood that the correlation between price per night and satisfaction is false is less than one percent. On average, the effect is estimated to be an increase in satisfaction with 2.5 percentage points for every 100 SEK invested by the municipality (See Table 8 on page 48). Adding to

the complexity of the analysis, fixed price in the procurement process and idea-driven providers also seem to impact the response variables (see Table 9 on page 48).

Statistically, there is a negative correlation between provider compensation and for-profit providers, meaning that for profit-providers on average get compensated 189 SEK, or 13.3 percent, less than idea-driven providers per resident and per day. It might not strike one as a large amount of money, but, considering that the average number of residents at the care homes included in this thesis is 49, on an annual basis this sum accumulates to 3.4 Million SEK less compensation during a full year for for-profit providers. Also, on average, when the municipality asks the providers to bid (using variable price) rather than using a fixed price, the cost is 199 SEK less per resident and day, making a total annual saving of 3.55 Million SEK. Although, in separating idea-driven and for-profit providers, the correlation between care home rating and provider compensation does not persist statistically, albeit that the sample sizes also become much smaller. Looking at Figure 17 and Figure 18, one can see how the two different variables interact with elderlies' satisfaction and provider compensation.

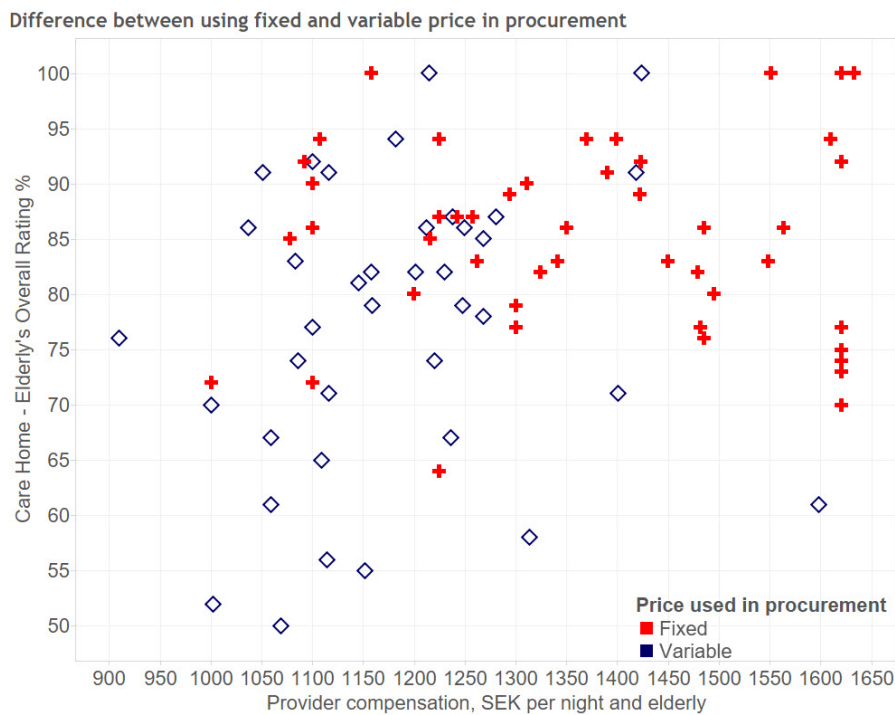


Figure 17 How fixed (red) and variable (green) price in procurement specification affect the provider compensation

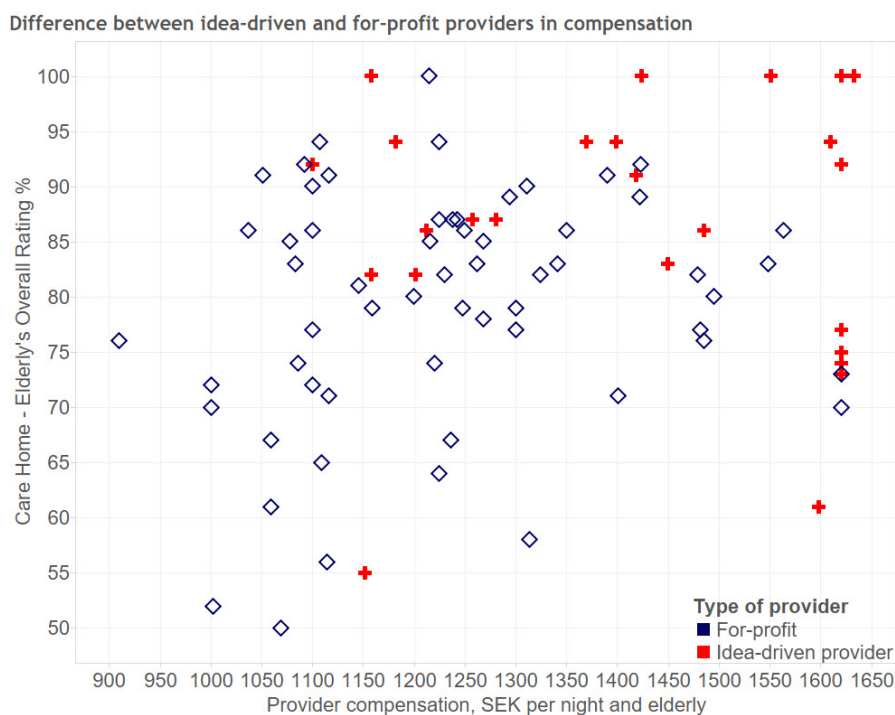


Figure 18 How idea-driven and for-profit providers relate to provider compensation

According to Figure 17, when the municipality uses a fixed price (meaning that they specify a fixed price and let the providers compete on quality) instead of a variable price (meaning that the providers compete on price), it can be seen that, on average, they spend more money and achieve a higher satisfaction. And according to Table 8 (page 48) and Table 9 (page 48), idea-driven providers both tend to achieve significantly better results than for-profit providers, but on average, they also get higher compensation, making it hard to strongly conclude that idea-driven providers perform better.

Another complicating factor is that there is a significant overlap between procurement processes conducted with the procurement type *Economically Most Advantageous* and using fixed price in the procurement. Out of the 48 procurements that were done with a fixed price, all of them were of the type *Economically Most Advantageous*, meaning that the municipalities stated a fixed price and let the providers bid with the quality they could offer. However, there does not seem to be a specific correlation between the procurement type of *Economically Most Advantageous* and satisfaction levels amongst the elderly, since no statistically significant relationship can be found when looking at the whole sample size (See Table 8 on page 52). This is also because not all of the *Economically Most Advantageous* procurements are conducted with a fixed price: many also use variable price. The reason that a statistically significant correlation disappears could be that whenever price as criteria is evaluated, it has been found to be the determining factor (Health Navigator, 2013). This is a view which is confirmed by the municipalities in the case interviews, which stated that procurement on price is both the easiest way to conduct a procurement process, and that it tends to be price that is the determining factor whenever it is involved, due to methodological difficulties in weighting quality against price. Quality is simply difficult to translate to monetary terms. Thus, the procurement processes of the type *Economically Most Advantageous* with a variable price, i.e. when the providers are allowed to bid a price, tends to become an indirect price competition; in reality making it a lowest-price procurement process. Thus, a likely conclusion might be that the fixed price keeps the compensation level up, and actually making it a competition regarding quality rather than price amongst the providers.

Then, of course, this also raises the question: does a relationship exist between provider compensation and how the procurement processes score on the cornerstone scale? According to the results in Table 10 (see page 49), compensation tends to increase around 112 SEK per level on the cornerstone scale.

A visual outlook also confirms that this might be the case, as illustrated in Figure 19.

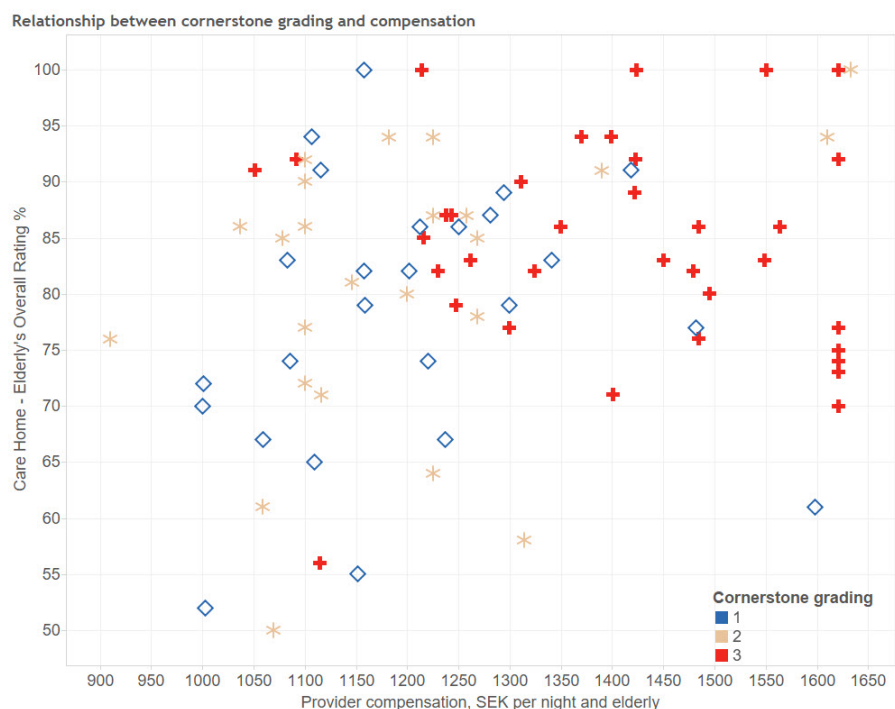


Figure 19 The relationship between cornerstone grading, elderlies' satisfaction and provider compensation

A weakness with the methodology used in this thesis, which makes interpreting the results on the potential impact of compensation more difficult, is that the authors have not accounted for the fact that the provider compensation covers different aspects. Such aspects which impact the compensation level, and that have not been accounted for, are food and nutrition, cost for physiotherapists and occupational therapists, consumables, local salary level, inflation adjustment, type of patients, and the fact that some of the compensations are static calculated averages for the municipalities that had differentiated compensations levels depending of the volume of care needed by the resident. In many cases, food and nutrition was included in the price, but not in all. How the municipalities treated consumables in the procurement specifications also varied, in some cases they were paid for by the municipalities, in some they were not. The majority of the care homes were located in the southern part of Sweden, but where it was located was also varied, and the local salary level depending on closeness to the major cities were not taken into account. The underlying data regarding compensation is thus not as noise-free as would be preferable, but the findings of this study is nonetheless enlightening.

In understanding whether or not provider compensation can be a contribution factor, previous research provides little guidance. Two studies that have been conducted using the same response variables have found no connection between cost and satisfaction (Andersson & Jordahl, 2011; Kajonius & Kazemi, 2015). The main difference however between this thesis and these two studies is that overall municipality budget has been used as an input in assessing the relationship between satisfaction and cost. Additionally, the distinction between private and public providers has not been done. In this thesis, the input variable is direct provider compensation instead of the overall municipal budget. The overall municipality budget also includes, for example, administrative and facility costs, whilst the direct provider compensation only covers the actual compensation for the care services delivered: in all the cases in the quantitative study, the municipalities owned and financed the facilities. Cost in this study is thus more directly related to the actual care services delivered than in previous studies. In one study conducted on two care homes, one publicly and one private operated, found that the publicly operated care home's cost was 26 percent more than the privately operated without achieving any better quality in terms of satisfaction (Eklund et al., 2014). Thus, by not separating public and private providers, it might be that previous studies could not find any impact of compensation because their data set was too varied. In this thesis, only private providers are included, making it hard to utilise the findings of Eklund et al. (2014). No studies were found where comparisons have been done regarding differences in efficiency and effectiveness between private providers in Sweden, and not between private idea-driven providers and private for-profit providers either. From the case interviews with the local managers, it is also hard to shed light on any general differences in operations between the providers.

However, the municipalities do state that, in general, all the big private providers tend to have good quality management systems and also express that it is hard to evaluate and distinguish differences between the providers' bids.

Another explanation might lie in the supply market structure for eldercare. Based on the quantitative study, the normal case when municipalities conduct a procurement process is to only regard the service delivery costs. The municipalities almost always own and finance the facilities themselves. For new providers to enter the market, there is virtually no entry barriers in terms of capital, only in terms of competence, making the supply market structure highly competitive and giving the municipalities a high negotiation power. The supply market shows strong elements of what Figueras et al. (2005) calls *proxy competition* and *contestability*. Proxy competition meaning that providers are benchmarked and required to change if they are underperforming. This is mainly done through the usage of municipal surveys or The National Board of Health and Welfare's resident survey. Contestability meaning that there are constantly threats of new entrants to the market, since capital barriers are kept low. In a review for the Swedish Government, Andersson et al. (2014) also found that it is the market for home care and the market for care homes that are most exposed to competition.

Some indications can also be seen that the market for eldercare are approaching marginal cost levels. Traditional empirical knowledge from economics says that a common way for venture capitalists to operate is to buy companies that are priced below market value, rationalise and make them more efficient through picking the most low-hanging fruits (gaining the easiest and most obvious efficiency gains first), and then sell them to more long-term owners. What can be noted in the market for care home provides in Sweden is that venture capitalists have started to step out, where – for example – Attendo Care, a major private care provider, have started to change ownership structure when they went public on the Swedish stock exchange last year (Färsjö, 2015). One of the local managers also complained about eroding margins for the providers, and one of the interviewees at the municipalities said that some providers have told them that they do not bid on care homes that have been public previously, since there are so many hidden costs that hit margins. Thus, it might be that the market overall has started to reach such efficiency levels and low margins. In combination, high competitive pressure, that increasing the funding to the providers actually can have a positive impact on the satisfaction because the money is being spent on things that matter such as more and better activities, and more quality time with personnel.

The discussion of supply market maturity is, of course, highly speculative on the authors' behalf, since the empirical evidence presented is – to put it mildly – limited. This aspect was not analysed in depth, but the authors perceived that, in many cases, a higher compensation also meant more overall responsibility. Drawing any precise conclusion as to the impact that providers' compensation can have on satisfaction levels is difficult with the data used in this thesis. Therefore, even though the aspect of compensation is interesting, the most probable explanation as to which factors impact satisfaction levels is still the influence of cornerstones. Investigating the phenomenon closer in the future would be an interesting project, the overall conclusion in this study must however be that a higher compensation, type of procurement and type of provider cannot be said to have a major impact on the results. The contextual criteria cannot be methodological disentangled from cornerstones in this thesis, but uncertainties in the data makes it hard to draw the conclusion that any of them have impacted on the response variables.

## 5.2 Purchasing organisation in public procurement of eldercare services

Another aspect on which this thesis aims to shed light is how the public purchasing structure can be categorised in the model developed by (Van Weele, 2014). This application is made to better understand the benefits and drawbacks of the system currently in place.

### 5.2.1 Defining the eldercare service

To start off the application of the model from Van Weele (2014), the procurement of eldercare will first be categorised according to the factors in Table 1, p.11, namely commonality of requirements (i), geographical location (ii), supply market structure (iii), savings potential (iv), expertise required (v), price fluctuations (vi) and customer demands (vii). Not all of these factors are active in the context of public procurement of care, and will not be further elaborated on. A brief justification for their omission is given in Table 11. The other factors will be expanded on below.



Table 11 Reason for emitting factors from further discussion

Factor	Reason for omission
Supply market structure	The private providers have little influence over the procurement specification and therefore little power. As such, the market structure has little effect over the purchasing decisions of the municipalities.
Savings potential	Price level is set by the municipality.
Price fluctuations	Price level is set by the municipality.

In terms of (i) commonality of requirements, the study has found that there are both many similarities but also differences between care homes in different – or even the same – municipality. One thing which is similar between all care homes is the basis for the medical and interpersonal aspects of care. Some of these are specified through the legal laws and regulations pertaining to eldercare. On the other hand, the direct needs of the residents are unique to the individual, which requires the care to be adapted based on the characteristics of each care home. This factor is further strengthened by the fact that some apartments are dedicated for persons with dementia. In addition, the facilities within which the eldercare unit is located in will play a large role in determining the characteristics for providing care in the individual care home. Lastly, each municipality has their own internal routines of how much of the responsibility is put on the operator of the care home: some municipalities require or offer the provider to use municipal services, such as physiotherapists and occupational therapists. In conclusion, it can be stated that there are both large similarities and large differences between the characteristics of eldercare between municipalities. This indicates that there is a potential for a centralised influence in some areas of the procurement specification, but that the local requirements must be taken into account as well.

Geographical location (ii) and customer demands (vii) are related in the context of eldercare, as the customers are the citizens of a geographically distinct municipality; as such, the culture will determine the expectations which are placed on eldercare. Socio-economic background of the citizenry are known to affect demand (Stronks et al., 2001) and perceived quality of care (Figueras et al., 2005). Therefore, decentralisation of the purchasing and management functions allows the care service to be adapted to these local characteristics in order to better respond to local demands (Figueras et al., 2005).

Finally, the expertise required (v) for procuring eldercare has been found to be substantial in the results of this study. Firstly, the legal requirements of the procurement process, as well as the eventual provided eldercare, means that judicial expertise is required in the municipalities. For the smaller municipalities, this competence is purchased as an additional service, whereas the larger municipalities can have internal legal personnel. Secondly, the process of creating the procurement specification requires experience. From the multi-case study, all interviewed municipalities expressed that they continually develop their procurement specification as they learn from past experiences. Lastly, the procurement process also affects and extends to the follow-up phase, where the municipality controls the performance of the private provider. How this auditing is performed is integrated heavily with how the procurement specification is constructed and is another area where the municipalities in the multi-case study expressed that they have developed over time.

### 5.2.2 Categorising the purchasing organisation in public procurement

During the multi-case study data collection, one of the areas of investigation was how the municipalities had organised their procurement process. The main finding from this data is that municipalities structure their purchasing in similar ways. First, there is a political decision to have private or public providers for a care home. This can either be a care home which is current operated by the municipalities themselves or one which is currently operated by a private provider, and the contract is about to expire. After this, most municipalities seem to involve a cross-functional team to create the procurement specification. Most municipalities also have some form of collaboration with neighbouring municipalities with different levels of formality. For example, in the case of Case 6: Harrenhal, a closer collaboration between three of the neighbouring municipalities has been established, which is used to explicitly discuss criteria used in their procurement specifications and how the auditing processes are conducted. Contrasting with this more formalised relationship is Case 5: King's Lading, where the managers on different levels discusses their day-to-day operations with persons from neighbouring municipalities with similar roles: these relationships are not explicitly related with purchasing, but will on occasion deal with such topics.

Another finding of importance, which is perhaps not surprising to have surface, is that the larger municipalities have more sophisticated and mature purchasing functions. This comes naturally from the fact that the larger municipalities have many more care homes for which they are responsible. This makes the procuring of eldercare services more of a continuous process in these municipalities, which justifies establishing an internal competence in these municipalities' organisations.

From this description of the characteristics of the purchasing organisations in the municipalities, the most immediate match in terms of the current purchasing organisation seems to be a decentralised structure. The reasoning for this is that each municipality is responsible for their own procurement processes, and develop their own procurement specifications. Thus, the municipalities carry the full responsibility for purchasing the services they require. However, the counterargument can be made that there are centralised aspects present in this context, as the provided care, as well as the procurement process, are heavily influenced through laws, regulations and guidelines which are set at the national level. Additionally, SKL and other organisations provide training and education for the municipalities which the personnel can partake in. However, these aspects do not influence the element of responsibility: the municipalities are the sole owners of the process in itself, and are responsible for the outcomes. The conclusion is therefore that the public purchasing organisation for eldercare is mostly decentralised.

The effects of the decentralised structure are that there are large differences between how the procurement process is conducted and which criteria are included in the procurement specification. This is positive in the sense that it allows the local organisation to decide how they want the eldercare to be manifested in the municipality. Furthermore, it is also in line with the Swedish model of local municipal authority as described in *Kommunallag (1991:900)*.

However, the negative aspects of this is that the high variation between different municipalities entails large differences in how eldercare is delivered. In the most extreme sense, this works against the principle of equal care for all citizens. Two aspects which have been found empirically in the multi-case study is the size of the municipality and for how long they have used private providers for delivering eldercare to their citizens. The larger municipalities have tended to have more internal expertise in terms of the purchasing of eldercare, which is allowed through their larger size. In the smaller municipalities, on the other hand, purchasing eldercare is a much rarer event, which makes their processes less formalised. This is highlighted in a discussion with a municipal respondent, who stated that the process of preparing the purchasing specification entailed searching the internet for other procurement specifications and using things which looked nice. This ties in to another factor which comes as a consequence of the decentralised structure, which is that each municipality is developing their own sets of best-practice methods. There is often collaboration between municipalities which are in close proximity, but the multi-case study stated that this is often informal in nature. The purchasing structure currently in use is therefore not supporting the quality cornerstones of continuous improvement and decisions based on facts. There are many changes, as all municipalities are developing their own procurement specifications, but there is no formalised process in which to determine if the changes constitute an improvement or not. Therefore, this area constitutes a venue for improvement.

The hybrid structures, as described by Van Weele (2014), could be a source for inspiration in developing the purchasing structure used in the context of public purchasing of eldercare. One form which is of interest in this context is the line/staff organisation, where a central unit is responsible for coordinating the separate divisional purchasing centres. In the context of purchasing eldercare, this central unit could be responsible for developing facilitating communication between municipalities which have similar circumstances. Furthermore, this central unit can develop general guidelines and procedures related directly to procurement of eldercare. This could, for example, entail developing standards for how procurement specifications are formulated, that could be used as a basis for the municipalities to expand upon as needed. Having such a standard would allow new knowledge to be pushed to all participating municipalities; in a way, this promotes best-practice methodologies to be used. Furthermore, the central unit could act as a support for municipalities that are less experienced. This could be done through the establishment of a form of consultancy, where consultants from the central unit collaborates with and aids the municipalities as needed.

## 6 Conclusions and recommendations

The purpose of this thesis is *to contribute to knowledge creation and dissemination concerning how public procurement processes and quality-based criteria can be leveraged to influence quality outcomes of care home services.*

In this section the most important conclusions from the thesis are highlighted. Eight case studies were conducted together with a qualitative study consisting of 95 different care homes. Five main criteria were investigated and 91 individual assessment criteria, along with twelve contextual variables. Each of the thesis' three research questions will be discussed in turn.

*i) Explore which quality-based criteria in procurement specifications can affect satisfaction levels amongst the elderly living in care homes.*

The overall conclusion of this thesis is that purchasing can affect the elderlies' satisfaction levels, albeit only with minor improvements. Evidence from this thesis points towards that municipalities that formulated their requirements around the six cornerstones of quality in procurement specification on average achieve an increase satisfaction level amongst the elderly in the range of 5.2 - 8.4 percentage points. Concrete requirements that seemed to underpin this evidence is a focus on quality improvements, problem solving without delay (<10 days) and regular reporting. The underlying explanation seems to be the presence of a well-structured and implemented quality management system in the municipalities' organisations that focuses on organising the care around the residents of the care homes, and routines and structures to handle notifications of deviations.

None of the other four main investigated criteria can be seen to affect the results in a procurement process, even though there are methodological difficulties concerning assessing them through analysis of the procurement specifications.

It is recommended that the municipalities strive towards increasing the usage amongst the personnel of their quality management system. They should structure their requirements according to the six cornerstones of quality and categorise them according to the structure-process-result model of Donabedian (1983), as illustrated in Table 12, p.66.

*ii) Categorise the purchasing organisation of municipalities procuring eldercare in Sweden, and analysing what effects, if any, this structure has for the possibility to conduct procurement processes of care home services.*

As has been discussed and shown in this thesis, the structure of public purchasing related to eldercare leads to a number of unfortunate drawbacks, such as the difficulty of sharing best-practice methods between municipalities, as well as the difference in outcomes. The authors propose the establishment of a centralised unit to remedy some of these problems. This unit would be responsible for establishing and updating a standard for the procurement specification used in the procurement of eldercare. This document should serve as a basis which the individual municipalities can expand on as needed. Having such a standard would result in a reduction of the immense effort required to develop the procurement specification. Furthermore, such a standard could also allow for best-practice knowledge to be implemented. A second responsibility of the central unit would be to facilitate communication and network creation between the municipalities. This could, as an example, be done through managing recurring meetings and training.

*iii) Investigate the characteristics of the relationship between municipalities and providers in Swedish eldercare, and how these characteristics relate to service quality*

The results of the multi-case study clearly show that the relationship between the private providers of eldercare services and the municipalities are perceived as important by the involved actors. Unfortunately, the quantitative study design did not permit any statistical foundation for this factor to be established, as it exclusively focused on aspects of procurement specifications, and not on the operationalisation of these procurement specifications. Generally, the multi-case study results show that most relationships are well-functioning, where smaller municipalities seem to have a closer relationship with their providers. Some obstacles to forming relationships have also been highlighted, such as the politicised nature of the topic of having private providers in care, with a perceived – and occasionally expressed – bias towards these providers.

Table 12 An example of the structure-process-result model in conjunction with Six Cornerstones

Cornerstones	Structure	Process	Result
Focus on the customer	<ul style="list-style-type: none"> <li>▪ Individual care plan</li> <li>▪ Resident board</li> </ul>	<ul style="list-style-type: none"> <li>▪ "Elderly and elderly's relatives must be included"</li> </ul>	<ul style="list-style-type: none"> <li>▪ 100% of the elderly should have an individual care plan at latest after 14 days</li> <li>▪ 100% of the elderlies' care plans should be revised at minimum once every six months</li> </ul>
Focus on processes	<ul style="list-style-type: none"> <li>▪ IT-system for documentation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Processes to revise and improve routines</li> <li>▪ Processes to introduce personnel to routines</li> </ul>	<ul style="list-style-type: none"> <li>▪ 100% of the personnel with permanent contracts should be aware of the main routines</li> <li>▪ 85% of the temporary personnel should be aware of the main routines</li> <li>▪ 50% should be able to describe how you do if you want to develop a routine</li> </ul>
Improve continuously	-	-	-
Base decisions of facts	-	-	-
Let everybody be committed	-	-	-
Committed Leadership	-	-	-

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## Appendix 1: List of cases in the qualitative study

Name of care home	Municipality	Last bidding day
Ginstgården	Alingsås	2010/03/05
Åshaga och Paviljongen	Ängelholm	2012/08/27
Solängen	Ängelholm	2007/10/23
Svenshögs äldreboende	Burlöv	2010/05/25
Rosengården	Enköping	2007/08/22
Kungsgården	Enköping	2009/11/30
Eskilshem	Eskilstuna	2011/11/22
Björkhaga	Falkenberg	2013/04/16
Furugården	Falkenberg	2013/04/16
Hjortsberg	Falkenberg	2013/04/16
Vinddraget 14	Gävle	2012/03/28
Sjätte Tvärgatan 26	Gävle	2009/10/01
Stigslunds äldreboende	Gävle	2009/10/01
Agaten	Göteborg, Centrum	2012/09/07
Fridkullagatan	Göteborg, Centrum	2010/06/30
Vasahemmet	Göteborg, Centrum	2012/09/07
Patrikshills äldreboende	Halmstad	2010/09/15
Ålandsgården	Härnösand	2010/06/11
Ugglan	Härnösand	2010/06/11
Tuehagen	Helsingborg	2007/10/10
Lussebacksgården	Helsingborg	2007/10/10
Murteglet	Helsingborg	2007/10/10
Ragnvallgården	Helsingborg	2007/10/10
Stattenahemmet	Helsingborg	2007/10/10
Vikhaga	Helsingborg	2011/10/17
Revalyckan	Helsingborg	2007/09/03
Kavlagårdens äldreboende	Jönköping	2011/04/04
Sveagatan	Karlstad	2008/04/04
Tapiren	Kristinehamn	2007/02/16
Kolla Äldreboende	Kungsbacka	2012/03/20
Lingården	Laholm	2008/06/16
Tangon	Laholm	2008/06/16
Riddarstensgården	Lerum	2008/04/28
Hedegården	Lerum	2012/08/26
BRUSHANENS vårdb. ÄO	Linköping	2011/11/09
ÄLERYDS sjukhem ÄO	Linköping	2010/04/02
DUVAN vårdb. ÄO	Linköping	2011/11/09
JÄRDALAVÅGENS vårdb. ÄO	Linköping	2011/11/09
VALLA PARK vårdb. ÄO	Linköping	2010/04/02
GAMMELGÅRDEN vårdb. ÄO	Linköping	2011/06/14
ÄNESTAD vårdb. ÄO	Linköping	2011/06/14
MÖJETORPS vårdb. ÄO	Linköping	2010/04/02

Vega	Lomma	2012/05/25
Jonasgården	Lomma	2012/05/25
Strandängsgatan	Lomma	2012/05/25
Nibblegården	Lomma	2009/09/16
Ärtan	Lomma	2009/09/16
Brogården äldreboende	Mölndal	2010/06/20
Konstantinopel	Mölndal	2010/02/22
Granparkens äldreboende	Mölndal	2009/11/02
Solbacka demensboende	Mölndal	2009/11/02
Berggården	Örebro	2012/02/14
Sirishof	Örebro	2010/01/05
Norrgården	Örebro	2012/07/01
Ribbings backe	Örebro	2008/04/03
Minerva	Örebro	2011/10/28
Bergkälla	Örebro	2011/12/08
Björkgården vård och omsorgsboende	Örebro	2009/09/03
Berga vård och omsorgsboende	Örebro	2009/09/03
Ametisten vård och omsorgsboende	Örebro	2009/09/03
Pilegården	Staffanstorps	2011/12/12
Skogsgläntans Gruppboende	Stockholm, Enskede Årsta Vantör	2009/02/16
Hässelgården gruppboende	Stockholm, Hässelby Vällingby	2011/06/09
S:T Eriks Vo B	Stockholm, Hässelby Vällingby	2010/02/04
Alströmerhemmet V o B	Stockholm, Hässelby Vällingby	2010/02/04
Vasens vård- och omsorgsboende	Stockholm, Hässelby Vällingby	2011/06/09
Linnégårdens vård och omsorgsboende	Stockholm, Hässelby Vällingby	2010/02/04
Vintertullens vård- och omsorgsboende	Stockholm, Södermalm	2011/06/09
Guldbrölloppshemmet vård och omsorgsboende	Stockholm, Södermalm	2010/02/04
Magdalenagårdens vård- och omsorgsboende	Stockholm, Södermalm	2010/02/04
Fristad äldreboende Vingslaget	Stockholm, Spånga Tensta	2011/06/09
Valkyrian	Tomelilla	2009/06/01
Ängsgården	Tyresö	2011/07/15
Skogslyckan äldreboende D-hus	Uddevalla	2009/06/30
Skogslyckans äldreboende B-hus	Uddevalla	2009/06/30
Hasselparken	Uppsala	2010/08/27
Bernadotte	Uppsala	2009/01/19
Ferlin	Uppsala	2009/01/19
Karl-Johansgården	Uppsala	2009/01/19
Västergården	Uppsala	2009/01/19
Stångberga Omsorg AB	Vallentuna	2009/05/01
Solhaga	Vänersborg	2007/07/02
Attendo Slotsovalen	Värmdö	2008/06/18
Granen ålderdomshem	Värmdö	2011/10/28
Tujagården	Värmdö	2011/10/28
Södergården	Värmdö	2008/08/14
Hagalidsgården	Värmdö	2008/08/14

Cyrrillus	Vaxholm	2009/05/25
Borgmästaregården	Vaxholm	2009/05/25
Framnåshagen	Vaxholm	2009/05/25
Norrelid	Växjö	2010/02/01
Evelid vårbostad	Växjö	2008/02/18
Kronodalsgården	Vellinge	2011/06/14
Postiljonen	Vellinge	2013/09/02
Eskilsgården	Vellinge	2009/07/24

## Appendix 2: Evaluation model in qualitative study

Criteria	Weak = 1	Medium = 2	Strong = 3
Six cornerstones of quality improvement	<ul style="list-style-type: none"> <li>Comply with SOSFS 2011:9</li> </ul>	<ul style="list-style-type: none"> <li>Comply with SOSFS 2011:9</li> <li>Follow-up and control about implementation and usage amongst personnel of quality management system</li> </ul>	<ul style="list-style-type: none"> <li>Comply with SOSFS 2011:9</li> <li>Follow-up and control about implementation and usage amongst personnel of quality management system</li> <li>Clear requirements to organize care around the elderly's needs in every aspect of the care and/or requirements regarding leadership's skills and knowledge</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>No clear incentive structure</li> </ul> <p>--- OR ---</p> <ul style="list-style-type: none"> <li>Incentives only includes damages for breach in contract and/or fines.</li> </ul>	<ul style="list-style-type: none"> <li>Incentives only includes damages for breach in contract and/or fines.</li> </ul> <p>--- AND ---</p> <ul style="list-style-type: none"> <li>Requirements/practices that increase transparency and leverage the mechanism of reputation (e.g. require reporting to national quality register, with some follow-up)</li> </ul>	<ul style="list-style-type: none"> <li>Incentives includes fines and/or bonus and might include different levels depending on results.</li> <li>Requirements/practices that increase transparency and leverage the mechanism of reputation (e.g. require reporting to national quality register)</li> <li>Connection to tangible targets such as quality registry</li> </ul>
Cooperation and relationships	<ul style="list-style-type: none"> <li>Arm's length – No incentives or structures in place for cooperation or relationship development</li> <li>Limited to rental agreements and annual follow-up</li> </ul>	<ul style="list-style-type: none"> <li>Regular meetings and forums for cooperation</li> <li>Include sharing of resources; MAS, physiotherapists</li> </ul> <p>--- OR ---</p> <ul style="list-style-type: none"> <li>Manage improvement/development projects together with clear aims</li> </ul>	<ul style="list-style-type: none"> <li>Regular meetings and forums for cooperation</li> <li>Include sharing of resources; MAS, physiotherapists</li> </ul> <p>--- AND ---</p> <ul style="list-style-type: none"> <li>Manage improvement/development projects together with clear aims</li> </ul>
Trust & Flexibility	<ul style="list-style-type: none"> <li>Low trust signals – extreme granularity in requirements</li> </ul>	<ul style="list-style-type: none"> <li>One or two areas of the care highly specific, but overall good flexibility.</li> </ul>	<ul style="list-style-type: none"> <li>Basic Requirements only – few restrictions on processes and rather control through values, visions and goals</li> </ul>
Personnel	<ul style="list-style-type: none"> <li>Requirements about education levels and competence development</li> </ul>	<ul style="list-style-type: none"> <li>Minimum level of staff-to-patient ratio</li> </ul>	<ul style="list-style-type: none"> <li>Requirements about education levels and competence development</li> <li>Also include specified time slots as to when personnel should work</li> </ul>

## Appendix 3: Evaluation matrix in qualitative study

### Legend

BF	Base decisions on fact
CL	Committed Leadership
COM	Compensation mechanisms
CON	Control
CR	Cooperation and relationships
FC	Focus on the customer
IN	Incentives
LC	Let everybody be committed
PER	Personnel
T&F	Trust & Flexibility

### List of criteria in the evaluation matrix

#### #Resident

BF: Differentiation in compensation (Fixed/Variable)

BF: ESS nutritional requirements

BF: Evidence-based practices

BF: 'MNA (Mini Nutrition Assessment)'

BF: Night time fasting max. 11h

BF: Nutritionist when planning meals

BF: SNR Nutritional requirements

BF: 'Vårdtyngdsmätning'

CL: Experience elderly care >2 years

CL: Leader in 'state of readiness' (beredskap) or 'tillgång arbetsledning'

CL: Leadership experience local leader

CL: Local leader stationed at care home

CL: Maximum # of care takers per leader is 50

CL: Requirement to cooperate with relatives, public bodies etc.

CL: University degree local leader

COM: Extra compensation in case of short-term care patients

COM: Municipality guarantee of minimum # of care takers

COM: Reduction in compensation for empty beds

CON: Clear plan for follow-up (Assess)

CON: Documentation/Medical Records/Routines

CON: Each 'biståndshandläggare' is responsible for genomförandeplan

CON: Individual care plan

CON: Inform local authorities if changing local leader

CON: Interviews employees

CON: Interviews residents

CON: Surveys

CON: Unannounced visits

Contract time

CR: Around quality issues

CR: Care conference

CR: Funding for supporting relatives

CR: Joint development

CR: Joint guidelines from MAS

CR: Joint management team (from provider and authorities)

CR: Joint MAS

CR: Joint occupational therapist (MAR)

CR: Joint physios

CR: Local authorities' MAS and Local Leadership

CR: Municipality wide board of verksamhetschefer

CR: Regular reporting (min 2 times/year)

CR: Support to relatives ('Anhörigstöd')

CR: With relatives

CR: With 'suitable organisations'

Economically Most Advantageous or Lowest Price Procurement

FC: "Homelike" environment

FC: Help keeping in touch with relatives

FC: Individual care plan with clear follow-up

FC: Low individual focus in all, or near all, categories (Assess)

FC: Requirements maintaining lifestyle

FC: Strong individual focus in all, or near all, categories (Assess)

FC: Visits before moving in

FC: Written life-story of individual

Fixed or Variable compensation in compensation model

Fixed or Variable compensation in procurement

FP: In general already defined processes (assess)

FP: In general outcome-based (assess)

FP: Inform relatives of ideology

FP: Information to relatives

FP: Introduction of relatives

FP: Requirement minimum lead time nurse (<30 min)

FP: Requirement of 24h access to 'nurse care'

IC: Action plans for errors

IC: Dedicated time for personnel for competence development

IC: Dedicated time for personnel for improvement work

IC: Feedback requirements

IC: Focus on quality development (Assess)

IC: Integrating new technology into care

IC: Problem solving without delay (<10 days)

Idea-driven or For-Profit

Impact of access to personnel with suitable education

IN: Damages for breach of contract

IN: Fines

IN: Reporting quality registry

IN: Tangible target connected to quality registry

IN: Vague requirements connected to quality registry

LC: (Some) Fixed roles for the staff ( $\geq 2$ )

LC: Contact with relatives continuously

LC: Contact with relatives intro

LC: Describe how to achieve participation amongst personnel

LC: Funding for resident- and/or relative board

LC: Inform personnel regarding contract

LC: Introduction plan for new personnel

LC: Management board

LC: Personnel board

LC: Relative board

LC: Requirement inviting politicians to care home board

LC: Resident board

PER: Continuity requirements

PER: Education requirements

PER: Minimum level of staff-to-patient ratio

PER: Staffing are evaluation criteria in procurement

Population

Population density [population/km<sup>2</sup>]

Price per night and person

Staff-to-patient ratio daytime

T&F: Defined processes rather than goals/targets (Assess)

T&F: Max one area of granularity (Assess)

T&F: Must ask permission to change staff-to-patient ratio

T&F: Outcome-based rather than defined processes (Assess)

Use of evaluation matrix

## Appendix 4: Detailed results of qualitative study

In this appendix, the relevant statistical data will be presented. Other tests were conducted as part of the study, in addition to the tests included in this appendix. However, these are not included for the sake of brevity.

### Cornerstones and their correlations

Correlations				
		Difference Municipality Average and Care Home	Care home rating %	Cornerstones
Difference Municipality Average and Care Home	Pearson Correlation	1	.958**	.305**
	Sig. (2-tailed)		.000	.003
	N	95	95	95
Care home rating %	Pearson Correlation	.958**	1	.235*
	Sig. (2-tailed)	.000		.022
	N	95	95	95
Cornerstones	Pearson Correlation	.305**	.235*	1
	Sig. (2-tailed)	.003	.022	
	N	95	95	95

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Correlations				
		Difference Municipality Average and Care Home	Care home rating %	Incentives
Difference Municipality Average and Care Home	Pearson Correlation	1	.958**	.055
	Sig. (2-tailed)		.000	.594
	N	95	95	95
Care home rating %	Pearson Correlation	.958**	1	.084
	Sig. (2-tailed)	.000		.420
	N	95	95	95
Incentives	Pearson Correlation	.055	.084	1
	Sig. (2-tailed)	.594	.420	
	N	95	95	95

\*\* . Correlation is significant at the 0.01 level (2-tailed).



Correlations				
		Difference Municipality Average and Care Home	Care home rating %	Cooperation
Difference Municipality Average and Care Home	Pearson Correlation	1	.958**	.132
	Sig. (2-tailed)		.000	.201
	N	95	95	95
Care home rating %	Pearson Correlation	.958**	1	.120
	Sig. (2-tailed)	.000		.248
	N	95	95	95
Cooperation	Pearson Correlation	.132	.120	1
	Sig. (2-tailed)	.201	.248	
	N	95	95	95

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Correlations				
		Difference Municipality Average and Care Home	Care home rating %	Trust
Difference Municipality Average and Care Home	Pearson Correlation	1	.958**	.069
	Sig. (2-tailed)		.000	.506
	N	95	95	95
Care home rating %	Pearson Correlation	.958**	1	.033
	Sig. (2-tailed)	.000		.751
	N	95	95	95
Trust	Pearson Correlation	.069	.033	1
	Sig. (2-tailed)	.506	.751	
	N	95	95	95

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Incentives	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean				
					Lower Bound	Upper Bound	Minimum	Maximum	
Difference Municipality	1.0	35	-2.885714285714290	13.283717207812800	2.245338023358690	-7.448330800136910	1.677402228708330	-30.000000000000000	24.000000000000000
Average and Care Home	2.0	47	.127659574468069	10.666112574261000	1.555812419960170	-3.004028398413430	3.259347547349560	-27.000000000000000	22.000000000000000
Total	3.0	13	-2.384615384615370	10.021131519098900	2.779361810021490	-8.440324554577320	3.671093785346570	-28.000000000000000	17.000000000000000
Care home rating %	1.0	95	-1.326315789473690	11.594608161176600	1.189581697421650	-3.688258135719310	1.035626567719300	-30.000000000000000	24.000000000000000
Total	2.0	35	79.485714285714300	12.839212520682900	2.170223017843760	75.075290473706900	83.896138097721700	50.000000000000000	100.000000000000000
Total	3.0	47	82.765957446808500	10.984599428602100	1.602268602260820	79.540758230321000	85.991156663296000	55.000000000000000	100.000000000000000
Total	3.0	13	81.076923076923100	9.534687011656780	2.644446378156080	75.315169380829600	86.838676773016600	57.000000000000000	100.000000000000000
Total	1.0	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

**Cornerstones**

Cornerstones	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean				
					Lower Bound	Upper Bound	Minimum	Maximum	
Difference Municipality	1.0	25	-6.000000000000020	11.456439237389600	2.291287847477920	-10.728985692685100	-1.271014307314900	-30.000000000000000	17.000000000000000
Average and Care Home	2.0	29	-2.689655172413800	12.206856283873100	2.26676677103160	-7.332895738503560	1.953585393675950	-30.000000000000000	22.000000000000000
Total	3.0	41	2.487804878048780	10.146728416636300	1.584652747688120	-7.14897792484424	5.690507548581990	-27.000000000000000	24.000000000000000
Care home rating %	1.0	95	-1.326315789473690	11.594608161176600	1.189581697421650	-3.688258135719310	1.035626567719300	-30.000000000000000	24.000000000000000
Total	2.0	25	77.840000000000000	12.126692321761400	2.425338464358270	72.834347431962500	82.8456252568037400	52.000000000000000	100.000000000000000
Total	3.0	29	80.137931034482800	12.540574542349200	2.328766230576060	75.367751592485300	84.908110476480300	50.000000000000000	100.000000000000000
Total	3.0	41	84.292682926829300	9.778148859674370	1.527090291722130	81.206318319454500	87.379047534204000	56.000000000000000	100.000000000000000
Total	1.0	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

**Correrstones**

Borferroni	Dependent Variable	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
					Lower Bound	Upper Bound	
Difference Municipality	1.0	2.0	-3.310344827586220	3.043375441864250	.839	-10.731742347302100	4.111052692129650
Average and Care Home	2.0	3.0	-8.487804878048804*	2.829682378283110	.010	-15.388102979590300	-1.587506776507290
Total	3.0	1.0	3.310344827586220	3.043375441864250	.839	-4.111052692129650	10.731742347302100
Care home rating %	3.0	3.0	-5.177460050462590	2.705738042758290	.176	-11.775514737802400	1.420594636877220
Total	1.0	1.0	8.487804878048804*	2.829682378283110	.010	1.587506776507290	15.388102979590300
Total	2.0	2.0	5.177460050462590	2.705738042758290	.176	-1.420594636877220	11.775514737802400
Care home rating %	1.0	2.0	-2.297931034482800	3.085231028650760	1.000	-9.821395142398960	5.225533073433360
Total	3.0	3.0	-6.452682926829300	2.868599041253200	.081	-13.447880928681800	.542515075023212
Care home rating %	2.0	1.0	2.297931034482800	3.085231028650760	1.000	-5.225533073433360	9.821395142398960
Total	3.0	3.0	-4.154751892346500	2.742950097476340	.400	-10.843549721918800	2.534045937225830
Total	3.0	1.0	6.452682926829300	2.868599041253200	.081	-1.542515075023212	13.447880928681800
Total	2.0	2.0	4.154751892346500	2.742950097476340	.400	-2.534045937225830	10.843549721918800

\*. The mean difference is significant at the 0.05 level.

**Trust & Flexibility**

Dependent Variable		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Difference Municipality	1.0	-3.783333333333330	2.870262182952880	.572	-10.782586975352700	3.21592308686070
	3.0	-1.987356321839100	3.023624519327310	1.000	-9.360590395957220	5.385877752279030
	2.0	3.783333333333330	2.870262182952880	.572	-3.21592308686070	10.782586975352700
Average and Care Home	3.0	1.795977011494240	2.897129497431440	1.000	-5.268793693681360	8.860747716669830
	1.0	1.987356321839100	3.023624519327310	1.000	-5.385877752279030	9.360590395957220
	2.0	-1.795977011494240	2.897129497431440	1.000	-8.860747716669830	5.268793693681360
Care home rating %	1.0	-3.550000000000000	2.850911514633150	.649	-10.502066232967800	3.402066232967780
	3.0	-.920689655172424	3.003239916295430	1.000	-8.244215027465530	6.402835717120680
	2.0	3.550000000000000	2.850911514633150	.649	-3.402066232967780	10.502066232967800
	3.0	2.629310344827570	2.877697695661880	1.000	-4.387831249849770	9.646451939504910
	1.0	.920689655172424	3.003239916295430	1.000	-6.402835717120680	8.244215027465530
	2.0	-2.629310344827570	2.877697695661880	1.000	-9.646451939504910	4.387831249849770

**Trust & Flexibility**

Difference Municipality Average and Care Home	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean				
					Lower Bound	Upper Bound	Minimum	Maximum	
1.0	30	-3.366666666666680	11.816071268822200	2.157309591674200	-7.778860190815520	1.045526857482160	-30.000000000000000	17.000000000000000	
2.0	36	.416666666666653	10.594810050208500	1.765801675034760	-3.168101313538690	4.001434646872000	-27.000000000000000	22.000000000000000	
3.0	29	-1.379310344827580	12.570980735417800	2.334372518880620	-6.161055684112760	3.402434994457600	-30.000000000000000	24.000000000000000	
Total	95	-1.326315789473690	11.594608161117600	1.189581697421650	-3.688258135719310	1.035626556771930	-30.000000000000000	24.000000000000000	
Care home rating %	1.0	30	79.700000000000000	12.368341120334800	2.258139810175370	75.081585524149900	84.318414475850100	50.000000000000000	100.000000000000000
	2.0	36	83.250000000000000	10.627121636911600	1.7711869394845260	79.654299351738000	86.845700648262000	56.000000000000000	100.000000000000000
	3.0	29	80.620689655172400	11.721207254689600	2.176573545002910	76.162180860946300	85.079198449398600	52.000000000000000	100.000000000000000
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000	

**Personnel**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean			Minimum	Maximum
					Lower Bound	Upper Bound			
Difference Municipality	14	2.142857142857130	8.282113654943780	2.213487981080120	-2.659092912925460	6.924807198639710	-19.000000000000000	10.999999999999900	
Average and Care Home	38	1.157894736842100	11.480950887706000	1.862456168936160	-2.61579991537910	4.931589389062120	-30.000000000000000	24.000000000000000	
Care home rating %	43	4.651162790697890	11.9420898972400400	1.821151632324530	-8.326395577949220	-.973930003446153	-30.000000000000000	22.000000000000000	
Total	95	1.326315789473690	11.594608161117600	1.189581697421650	-3.688258135719310	1.03562556771930	-30.000000000000000	24.000000000000000	
Home	14	84.071428571428600	8.534673944601450	2.280987557751790	79.143654545880000	88.999202596977100	64.000000000000000	93.999999999999900	
Municipality	2.0	83.289473684210500	11.145009535812100	1.807959285415340	79.626200206639000	86.952747161782100	50.000000000000000	100.000000000000000	
Average and Care Home	3.0	78.697674418604600	12.316336197102000	1.878223661793760	74.907265612938600	82.488083224270700	52.000000000000000	100.000000000000000	
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000	

**Cornerstones Re-calibrated**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean			Minimum	Maximum
					Lower Bound	Upper Bound			
Difference Municipality	54	-4.222222222222240	11.871428625488300	1.615496813906450	-7.462498487163320	-.981945957281162	-30.000000000000000	22.000000000000000	
Average and Care Home	41	2.487804878048780	10.146728416636300	1.584652747688120	-.714897792484424	5.690507548581990	-27.000000000000000	24.000000000000000	
Care home rating %	95	-1.326315789473690	11.594608161117600	1.189581697421650	-3.688258135719310	1.03562556771930	-30.000000000000000	24.000000000000000	
Home	54	79.074074074074100	12.288745966467500	1.672286510918350	75.719892101776100	82.428256046372100	50.000000000000000	100.000000000000000	
Municipality	41	84.292682926829300	9.778148859674370	1.527090291722130	81.206318319454500	87.379047534204000	56.000000000000000	100.000000000000000	
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000	

**Cornerstones Re-calibrated (ANOVA test)**

	Sum of Squares	df	Mean Square	F	Sig.
Difference	Between Groups	1	1049.307	8.422	.005
Municipality	Within Groups	93	124.598		
Average and Care Home	Total	94			
Home	Between Groups	1	634.693	4.990	.028
Care home rating %	Within Groups	93	127.185		
Total	Total	94			

**Personnel Re-calibrated (ANOVA test)**

	Sum of Squares	df	Mean Square	F	Sig.
Difference Municipality	Between Groups 868.424	1	868.424	6.863	.010
Average and Care Home	Within Groups 11768.460	93	126.543		
	Total 12636.884	94			
Care home rating %	Between Groups 542.814	1	542.814	4.235	.042
	Within Groups 11920.070	93	128.173		
	Total 12462.884	94			

**Personnel recalibrated**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Difference Municipality	52	1.423076923076920	10.6444608602841700	1.476141620184270	-1.540401036292240	4.386554882446070	-30.000000000000000	24.000000000000000
Average and Care Home	43	-4.651162790697690	11.942089872400400	1.821151632324530	-8.326395577949220	-.975930003446153	-30.000000000000000	22.000000000000000
Care home rating %	95	-1.326315789473690	11.59460816117600	1.189581697421650	-3.688258135719310	1.035626556771930	-30.000000000000000	24.000000000000000
	52	83.500000000000000	10.430911828245300	1.446507209483930	80.596015602595700	86.403984397404300	50.000000000000000	100.000000000000000
	43	78.697674418604600	12.316336197102000	1.878223661793760	74.907265612938600	82.488083224270700	52.000000000000000	100.000000000000000
	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

Cornerstones Recalibrated				
		Difference Municipality Average and Care Home	Care home rating %	NewCorn
Difference Municipality Average and Care Home	Pearson Correlation	1	.958**	.288**
	Sig. (2-tailed)		.000	.005
	N	95	95	95
Care home rating %	Pearson Correlation	.958**	1	.226*
	Sig. (2-tailed)	.000		.028
	N	95	95	95
NewCorn	Pearson Correlation	.288**	.226*	1
	Sig. (2-tailed)	.005	.028	
	N	95	95	95

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Personnel Recalibrated				
		Difference Municipality Average and Care Home	Care home rating %	NewPersonnel
Difference Municipality Average and Care Home	Pearson Correlation	1	.958**	-.262*
	Sig. (2-tailed)		.000	.010
	N	95	95	95
Care home rating %	Pearson Correlation	.958**	1	-.209*
	Sig. (2-tailed)	.000		.042
	N	95	95	95
NewPersonnel	Pearson Correlation	-.262*	-.209*	1
	Sig. (2-tailed)	.010	.042	
	N	95	95	95

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Interaction CornerstonesXPersonnel				
		Difference Care Home and Municipality Average - Elderly's Overall Rating %	Care Home - Elderly's Overall Rating %	Interaction CornerstonesXPerson nel
Difference Care Home and Municipality Average - Elderly's Overall	Pearson Correlation	1	.958**	.027
	Sig. (2-tailed)		.000	.795
	N	95	95	95
Care Home - Elderly's Overall Rating %	Pearson Correlation	.958**	1	.014
	Sig. (2-tailed)	.000		.892
	N	95	95	95
Interaction CornerstonesXPers onnel	Pearson Correlation	.027	.014	1
	Sig. (2-tailed)	.795	.892	
	N	95	95	95

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Interaction CornerstonesXPersonnel (ANOVA)						
	Sum of Squares	df	Mean Square	F	Sig.	
Difference Care Home and Municipality Average - Elderly's Overall	Between Groups	11.796	2	5.898		.958
	Within Groups	12625.088	92	137.229		
	Total	12636.884	94			
Care Home - Elderly's Overall Rating %	Between Groups	2.537	2	1.269		.991
	Within Groups	12460.347	92	135.439		
	Total	12462.884	94			

**Multiple Comparisons**

Dependent Variable		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
					Lower Bound	Upper Bound	
Difference Care Home and Municipality Average - Elderly's Overall Rating %	1.0	2.0	-.038690476190487	2.946002583992470	1.000	-7.222640234464670	7.145259282083700
	4.0	4.0	-1.176190476190480	4.500849534213110	1.000	-12.151699153280400	9.799318200899450
	2.0	1.0	.038690476190487	2.946002583992470	1.000	-7.145259282083700	7.222640234464670
Care Home - Elderly's Overall Rating %	4.0	4.0	-1.137500000000000	3.983356421482290	1.000	-10.851080210933300	8.576080210933290
	1.0	1.0	1.176190476190480	4.500849534213110	1.000	-9.799318200899450	12.151699153280400
	2.0	2.0	1.137500000000000	3.983356421482290	1.000	-8.576080210933290	10.851080210933300
Care Home - Elderly's Overall Rating %	1.0	2.0	-.248511904761912	2.926718708211700	1.000	-7.385437130367120	6.888413320843300
	4.0	4.0	-.604761904761915	4.471387977119670	1.000	-11.508427350243800	10.298903540719900
	2.0	1.0	.248511904761912	2.926718708211700	1.000	-6.888413320843300	7.385437130367120
Care Home - Elderly's Overall Rating %	4.0	4.0	-.356250000000003	3.957282258873000	1.000	-10.006247281579500	9.293747281579470
	1.0	1.0	.604761904761915	4.471387977119670	1.000	-10.298903540719900	11.508427350243800
	2.0	2.0	.356250000000003	3.957282258873000	1.000	-9.293747281579470	10.006247281579500

Individual criteria

PER: Minimum level of staff to patient ratio											
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum			
					Lower Bound	Upper Bound					
Difference Municipality	.0	-4.84090909090909	13.118322322221000	1.977661500988680	-8.829243612665540	-8.52574569152647	-30.000000000000000	22.000000000000000			
Average and Care Home	1.0	1.705882352941160	9.191940203563250	1.287129080062600	-8.79392489268003	4.291157195150320	-19.000000000000000	24.000000000000000			
Total	95	-1.326315789473690	11.594608161117600	1.189581697421650	-3.688258135719310	1.035626556771930	-30.000000000000000	24.000000000000000			
Care home rating %	.0	77.40909090909090	13.074594896687000	1.971069343554830	73.434050739807400	81.384131078374400	50.000000000000000	100.000000000000000			
	1.0	84.705882352941200	8.780191609861500	1.229472744523890	82.236413668848600	87.175351037033700	64.000000000000000	100.000000000000000			
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000			
PER: Continuity requirements											
95% Confidence Interval for Mean											
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum			
Difference Municipality	.0	-6.612903225806470	12.737549265471900	2.287731382906000	-11.285074016530800	-1.940732435082100	-30.000000000000000	12.000000000000000			
Average and Care Home	1.0	1.234374999999990	10.144577388774000	1.268072173596750	-1.29966503340320	3.768415035340310	-27.000000000000000	24.000000000000000			
Total	95	-1.326315789473690	11.594608161117600	1.189581697421650	-3.688258135719310	1.035626556771930	-30.000000000000000	24.000000000000000			
Care home rating %	.0	77.40909090909090	13.074594896687000	1.971069343554830	73.434050739807400	81.384131078374400	50.000000000000000	100.000000000000000			
	1.0	84.705882352941200	8.780191609861500	1.229472744523890	82.236413668848600	87.175351037033700	64.000000000000000	100.000000000000000			
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000			
PER: Staffing are evaluation criteria in procurement											
95% Confidence Interval for Mean											
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum			
Difference Municipality	.0	-5.921052631578950	11.720579219492400	1.901329017461750	-9.773511156497980	-2.068594106659930	-30.000000000000000	17.000000000000000			
Average and Care Home	1.0	1.736842105263150	10.536545780875300	1.395599581846650	-1.058879804298620	4.532564014824920	-30.000000000000000	24.000000000000000			
Total	95	-1.326315789473690	11.594608161117600	1.189581697421650	-3.688258135719320	1.035626556771930	-30.000000000000000	24.000000000000000			
Care home rating %	.0	77.131578947368400	12.078954341336200	1.959465139025160	73.161325451107900	81.101832443628900	52.000000000000000	100.000000000000000			
	1.0	84.122807017543900	10.307885635069100	1.365312805657500	81.387756811286800	86.857857223800900	50.000000000000000	100.000000000000000			
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000			



**BF: ESS nutritional requirements**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Difference Municipality	.0	-3.631578947368440	12.197235604471100	1.615563322486780	-6.867941178850520	-.395216715886357	-30.000000000000000	22.000000000000000
Average and Care Home	1.0	2.131578947368420	9.792912640276400	1.588620205515050	-1.087271339661490	5.350429234398340	-19.999999999999900	24.000000000000000
Total	95	-1.326315789473690	11.59460816117600	1.189581697421650	-3.688258135719310	1.03562656771930	-30.000000000000000	24.000000000000000
Care home rating %	.0	57 79.192982456140400	12.440484884456900	1.647782476704180	75.892077503003200	82.493887409277600	50.000000000000000	100.000000000000000
	1.0	38 84.526315789473700	9.2231699538180150	1.496195669813540	81.494735400081100	87.557896178866300	67.00000000000100	100.000000000000000
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

**FC: Strong individual focus in all, or near all, categories (Assess)**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Difference Municipality	.0	-4.541666666666680	12.295922751548800	1.774763577635390	-8.112030458087200	-.971302875246168	-30.000000000000000	22.000000000000000
Average and Care Home	1.0	1.957446808510630	9.921337231942840	1.447175770985090	-.955566931767605	4.870460548788880	-27.000000000000000	24.000000000000000
Total	95	-1.326315789473690	11.59460816117600	1.189581697421650	-3.688258135719310	1.03562656771930	-30.000000000000000	24.000000000000000
Care home rating %	.0	48 79.000000000000000	12.706172063632600	1.833977965327000	75.310512225864600	82.689487774135400	50.000000000000000	100.000000000000000
	1.0	47 83.702127659574500	9.724274631754470	1.418431236484060	80.846973666286300	86.557281652862600	56.000000000000000	100.000000000000000
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

**CL: Local leader stationed at care home**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Difference Municipality	.0	-4.657894736842110	12.395021484864100	2.010738000220980	-8.732036918015550	-.583752555668673	-30.000000000000000	22.000000000000000
Average and Care Home	1.0	.894736842105252	10.563894388986200	1.399221993483010	-1.908241629946890	3.697715314157400	-30.000000000000000	24.000000000000000
Total	95	-1.326315789473690	11.59460816117600	1.189581697421650	-3.688258135719310	1.03562656771930	-30.000000000000000	24.000000000000000
Care home rating %	.0	38 78.078947368421100	12.581370996807800	2.040967882875520	73.94355326854700	82.214341109987400	52.000000000000000	100.000000000000000
	1.0	57 83.491228070175400	10.297577397166100	1.363947446192810	80.758913007593900	86.223543132757000	50.000000000000000	100.000000000000000
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

**IN: Fines**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Difference Municipality	.0	-4.72222222222230	12.084490913353400	2.014081818892230	-8.811025690899700	-.633418753544756	-30.000000000000000	24.000000000000000
Average and Care Home	1.0	.745762711864396	10.873240199015300	1.415575300342720	-2.087819116955250	3.579344540684040	-30.000000000000000	22.000000000000000
Total	95	-1.326315789473690	11.59460816117600	1.189581697421650	-3.688258135719310	1.03562656771930	-30.000000000000000	24.000000000000000
Care home rating %	.0	36.775555555555600	11.728949397463300	1.954824899577210	73.587050028583200	81.524061082527900	52.000000000000000	100.000000000000000
	1.0	59.83627118644067800	10.846735255023900	1.412124650548860	80.800444041272200	86.453793246863400	50.000000000000000	100.000000000000000
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

**IC: Problem solving without delay (<10 days)**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Difference Municipality	.0	-2.66666666666680	11.706504752535100	1.379624815751680	-5.417560418149440	.084227084816088	-30.000000000000000	24.000000000000000
Average and Care Home	1.0	2.869665217391290	10.384885642238500	2.165398344741090	-1.621196091050970	7.360326525833550	-27.000000000000000	22.000000000000000
Total	95	-1.326315789473700	11.59460816117600	1.189581697421650	-3.688258135719320	1.03562656771930	-30.000000000000000	24.000000000000000
Care home rating %	.0	72.798333333333300	11.6606955990630900	1.374226201388320	77.093204113156000	82.573462553510700	50.000000000000000	100.000000000000000
	1.0	23.86000000000000000	9.876510241246880	2.059394745882290	81.729076700331900	90.270923299668100	56.000000000000000	100.000000000000000
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

**CL: University degree local leader**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Difference Municipality	.0	-6.66666666666680	10.857442515206500	2.216266172821360	-11.251362551787600	-2.081970781545760	-30.000000000000000	10.000000000000000
Average and Care Home	1.0	.478873239436614	11.345054498300900	1.346410258979310	-2.206457348740650	3.164203827613880	-30.000000000000000	24.000000000000000
Total	95	-1.326315789473690	11.59460816117600	1.189581697421650	-3.688258135719310	1.03562656771930	-30.000000000000000	24.000000000000000
Care home rating %	.0	24.781666666666700	11.801498308216600	2.408970754620810	73.18330981843700	83.150002351489600	52.000000000000000	93.999999999999000
	1.0	71.82394366197183100	11.300415761301400	1.341112615547720	79.719601425670700	85.069130968695500	50.000000000000000	100.000000000000000
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

**BF: Night time fasting max. 11h**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Difference Municipality	30	-4.8000000000000010	11.940657869013200	2.180055888770040	-9.258714925218010	-.341285074782016	-30.000000000000000	17.000000000000000
Average and Care Home	65	.276923076923070	11.161467886645300	1.384409706946030	-2.488753248367750	3.042599402213890	-30.000000000000000	24.000000000000000
Total	95	-1.326315789473690	11.594608161117600	1.189581697421650	-3.688258135719310	1.035626556771930	-30.000000000000000	24.000000000000000
Care home rating %	0	30	78.86666666666700	12.195910375411000	2.226658407307970	74.312638889136900	52.000000000000000	100.000000000000000
	1.0	65	82.461538461538500	11.099094730929800	1.376673269131360	79.711317447488800	50.000000000000000	100.000000000000000
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

**CR: Regular reporting (min 2 times/year)**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Difference Municipality	48	-3.437500000000010	11.779726995355500	1.700257137937200	-6.857976168145920	-.017023831854095	-30.000000000000000	24.000000000000000
Average and Care Home	47	8.29787234042540	11.144657672242400	1.621239446863650	-2.433598513343350	4.093172981428420	-28.000000000000000	22.000000000000000
Total	95	-1.326315789473690	11.594608161117600	1.189581697421650	-3.688258135719310	1.035626556771930	-30.000000000000000	24.000000000000000
Care home rating %	0	48	78.854166666666700	11.481696040726300	1.6572240074966700	75.520229666880100	50.000000000000000	100.000000000000000
	1.0	47	83.851063829787300	11.106165500046600	1.6200000663367190	80.590171624249400	55.000000000000000	100.000000000000000
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

**IC: Focus on quality development (Assess)**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Difference Municipality	75	-2.586666666666660	12.399970938646600	1.431825311874230	-5.439640878076500	.266307544743149	-30.000000000000000	24.000000000000000
Average and Care Home	20	3.399999999999990	6.038473142669170	1.350243642731500	.573907576451149	6.226092423548840	-6.000000000000000	17.000000000000000
Total	95	-1.326315789473690	11.594608161117600	1.189581697421650	-3.688258135719320	1.035626556771930	-30.000000000000000	24.000000000000000
Care home rating %	0	75	80.080000000000000	12.2328313222394800	1.412525691387180	77.265481121851100	50.000000000000000	100.000000000000000
	1.0	20	86.000000000000000	6.633249580710790	1.483239697419130	82.895543634848500	71.000000000000000	100.000000000000000
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

**CR: Joint guidelines from MAS**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Difference Municipality	33	-4.757575757575770	12.359283714657300	2.151475138338980	-9.139987204483360	-.375164310668173	-30.000000000000000	22.000000000000000
Average and Care Home	62	.4999999999999992	10.829150096073000	1.375303437505400	-2.250089190159920	3.250089190159900	-30.000000000000000	24.000000000000000
Total	95	-1.326315789473690	11.594608161117600	1.189581697421650	-3.688258135719310	1.035626556771930	-30.000000000000000	24.000000000000000
Care home rating %	0	33	77.484848484848500	12.525277472278800	2.180370942569010	73.043578210818700	52.000000000000000	100.000000000000000
	1.0	62	83.370967741935500	10.477507323016300	1.330644760668500	80.710179095253300	50.000000000000000	100.000000000000000
Total	95	81.326315789473700	11.514507135786000	1.181363505624650	78.980690855690800	83.671940723256600	50.000000000000000	100.000000000000000

## Individual criteria with correlations

Correlations				
		Difference Municipality Average and Care Home	Care home rating %	Price per night and person
Difference Municipality Average and Care Home	Pearson Correlation	1	.958**	.170
	Sig. (2-tailed)		.000	.101
	N	95	95	95
Care home rating %	Pearson Correlation	.958**	1	.153
	Sig. (2-tailed)	.000		.140
	N	95	95	95
Price per night and person	Pearson Correlation	.170	.153	1
	Sig. (2-tailed)	.101	.140	
	N	95	95	95

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Correlations				
		Difference Municipality Average and Care Home	Care home rating %	# Residents
Difference Municipality Average and Care Home	Pearson Correlation	1	.958**	-.266**
	Sig. (2-tailed)		.000	.009
	N	95	95	95
Care home rating %	Pearson Correlation	.958**	1	-.270**
	Sig. (2-tailed)	.000		.008
	N	95	95	95
# Residents	Pearson Correlation	-.266**	-.270**	1
	Sig. (2-tailed)	.009	.008	
	N	95	95	95

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Correlations				
		Difference Municipality Average and Care Home	Care home rating %	Staff to patient ratio
Difference Municipality Average and Care Home	Pearson Correlation	1	.958**	-.001
	Sig. (2-tailed)		.000	.993
	N	95	95	93
Care home rating %	Pearson Correlation	.958**	1	.016
	Sig. (2-tailed)	.000		.878
	N	95	95	93
Staff to patient ratio	Pearson Correlation	-.001	.016	1
	Sig. (2-tailed)	.993	.878	
	N	93	93	93

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Correlations				
		Difference Municipality Average and Care Home	Care home rating %	Maximum contract time
Difference Municipality Average and Care Home	Pearson Correlation	1	.958**	-.009
	Sig. (2-tailed)		.000	.931
	N	95	95	95
Care home rating %	Pearson Correlation	.958**	1	.062
	Sig. (2-tailed)	.000		.553
	N	95	95	95
Maximum contract time	Pearson Correlation	-.009	.062	1
	Sig. (2-tailed)	.931	.553	
	N	95	95	95

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Analysis of mode of operation for care homes

Idea-driven (1) vs For-profit (2)									
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean				
					Lower Bound	Upper Bound	Minimum	Maximum	
Difference Care Home and Municipality Average - Elderly's Overall Rating %	1.0 2.0 Total	4.133333333333320 -3.846153846153860 95 -1.326315789473690	11.413039527854400 10.863112424092000 11.594608161176000	2.083726399701330 1.347403266334980 1.189581697421650	-1.283656654298172 -6.537901307635250 -3.688258135719320	8.395032332096520 -1.154406384672460 1.035626556771930	-25.000000000000000 -30.000000000000000 -30.000000000000000	24.000000000000000 22.000000000000000 24.000000000000000	100.000000000000000 100.000000000000000 100.000000000000000
Care Home - Elderly's Overall Rating %	1.0 2.0 Total	85.966666666666700 79.184615384615400 95 81.326315789473700	11.8306553735787000 10.796255583089200 11.514507135786000	2.159971973707770 1.339110695805730 1.181363505624650	81.549027959864100 76.509434237190800 78.980690855690700	90.384303573469300 81.859796532040000 83.671940723256600	55.000000000000000 50.000000000000000 50.000000000000000	100.000000000000000 100.000000000000000 100.000000000000000	100.000000000000000 100.000000000000000 100.000000000000000

Idea-driven (1) vs For-profit (2) - ANOVA TEST						
	Sum of Squares	df	Mean Square	F	Sig.	
Difference Care Home and Municipality Average - Elderly's Overall Rating %	1306.956	1	1306.956	10.728	.001	
	11329.928	93	121.827			
Total	12636.884	94				
Care Home - Elderly's Overall Rating %	944.133	1	944.133	7.623	.007	
	11518.751	93	123.858			
Total	12462.884	94				

Fixed (1) or Variable (2) price in tendering									
	N	Mean	Std. Deviation	Std. Error	Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
Difference Care Home and Municipality Average - Elderly's Overall Rating %	1.0 2.0 Total	2.062489999999990 -4.787234042553200 95 -1.326315789473690	9.253880727059230 12.767038648802200 11.594608161176000	1.335682632204080 1.8622263692230850 1.189581697421650	-6.624546864689742 -8.535776432671500 -3.688258135719310	4.79546864689710 -1.038691652434890 1.035626556771930	-19.000000000000000 -30.000000000000000 -30.000000000000000	22.000000000000000 24.000000000000000 24.000000000000000	100.000000000000000 100.000000000000000 100.000000000000000
Care Home - Elderly's Overall Rating %	1.0 2.0 Total	85.104166666666700 77.468085106383000 95 81.326315789473700	8.892357663988530 12.650573219234300 11.514507135786000	1.283501272745660 1.845275755067100 1.181363505624650	82.522095156861100 73.733737660216300 78.980690855690800	87.686238176472200 81.182432552549700 83.671940723256600	64.000000000000000 50.000000000000000 50.000000000000000	100.000000000000000 100.000000000000000 100.000000000000000	100.000000000000000 100.000000000000000 100.000000000000000

# Appendix 5: Interview Questionnaire, v2

## Presentation of our thesis

### General information

- Master thesis part of a bigger research project
- Our background
- Interviews with both providers and local authorities
- Planned to be done by February

### Interview information

- Anonymous
- Request for recording; interviews will be transcribed but anonymous.

## General questions

- Position
- Years in profession
- Describe role in organisation
- Previous relevant experience
- How you view your role and the purpose with it

## Quality and quality management

### Definition of quality

- How do you define quality?
- What is quality within eldercare for you?
  - What is it?
  - Which part constitute it?
  - When is quality achieved?
- What is your personal motivation for working with quality?

### The organisation's quality work

- How do you work with quality improvement?
  - How do you take into account the perspective of the resident?
  - How do you ensure that you deliver care in the best way possible?
  - Which indicators do you use to evaluate quality? Facts?
  - How do you create commitment amongst the personnel?
  - What is your role in all of this?
- For private providers: How do you work with coordination and information concerning quality within your organisation?
- Do you use and quality improvement methods? Evidence-based leadership, lean, 6 sigma etc.

- Do you have any quality management system ?
  - What is the purpose with it?
  - Have you implemented SOSFS 2011:9?



## Procurement, follow-up and cooperation

### Structure in procurement process

- How do a normal procurement process look like for your municipality?
  - Could you describe the process?
  - Which actors take part and which competencies?
  - What is your role?
- What is the main challenge?
- Do you cooperate with any other municipalities or public bodies concerning procurement?
  - The procurement agency? SKL?
  - How do these cooperations look like?
- What is your main learnings from procuring and the procurement process?

### Quality criteria in the procurement process:

- What is the purpose with quality criteria?
- **Municipalities;** How do you decide upon quality criteria in the procurement process?
- Do you have any examples on good or bad quality criteria?
- **Municipalities;** How do you evaluate the providers quality management system?
- **Providers;** How is your quality management system evaluated during the contract period and in procurement processes?

### Follow-up:

- Could you describe how your follow-up procedure of quality look like today?
  - Why do you do it in this way?
  - Who are involved?
  - Which quality register do you report to currently?
  - Varför följer ni upp på just det sättet?
  - **Municipalities:** In case of any deviations, which actions are taken?
- How can the follow-up process be developed?

### Cooperation

- How does your formal cooperation look like?
- How does your informal cooperation look like?
- Would you like to develop the cooperation in any way?
  - Could you in that case see any potential barriers to cooperate more closely?

## Regarding the specific procurement

*A list of identified quality criteria from the procurement specification was shown to the municipalities*

- **Municipalities:** Are you satisfied with the results of the service delivery at the care home?
- Do you perceive that any of these quality requirements has affected the quality in a positive or negative way?
- How do you follow-up on these criterias?

## Wrap-up

- Is there something else we should be aware about regarding quality or quality improvement in your organisation?
- Is there any person that should be good for us to talk to?
- Is there any relevant documentation we can get access to?