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**Knowledge intensive service activities
and innovation in public home based
services to elderly in Norway**

**Part project report from
the OECD KISA study**

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Knowledge intensive service activities and innovation in public home based services to elderly in Norway – Part project report from the OECD KISA study

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ABSTRACT

This is the second of three studies of the use of knowledge intensive service activities (KISA) in innovation in specific industries or sectors. The report consists of the Norwegian part of an OECD study which includes several other countries. The main focus is on KISA and innovation processes in home based services to elderly in a city district (Manglerud/Østensjø) in Oslo, Norway. One of the main objectives of the study is to provide insights into how public sector organisations maintain and develop productive and innovative capabilities through utilisation of KISA, provided by internal and/or external sources. However, the ultimate objective of the KISA project, i.e. the study of the three specific industries or sectors, is to inform government policy and programs on how to use KISA in building innovation capability of firms and organisations across industries and sectors in the economy. Typical examples of knowledge intensive service activities provided both internally and obtained by external input in firms and organisations include: R&D, management/administration, IT services, human resource management, accounting and economic services, marketing/information services, project management, organisational development, training etc.

KEYWORDS	ENGLISH	NORWEGIAN
GROUP 1	Public sector innovation	
GROUP 2	Knowledge intensive services	
SELECTED BY AUTHOR	Innovation policy	

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Preface

This report presents the results of the second of the three case studies in the project on Knowledge Intensive Service Activities (KISA). The KISA project is conducted under the auspices of the OECD Group on Technology and Innovation Policy (TIP) subordinated the Committee on Science and Technology Policy (CSTP). The lead countries of the KISA project are Australia and Finland. In this particular part project on KISA in health and social care Finland has the coordinating responsibility. Additional participating countries are Korea, New Zealand, Spain, Ireland and Norway.

The first mandatory case study of the KISA project focused on KISA in the software industry, this second common case study focus on KISA in health and social care, particularly related to innovation in home based services for elderly. The remaining one or two KISA case studies are optional. In the Norwegian part of the project the third and final case study will focus on KISA in the Norwegian aquaculture industry.

The Norwegian KISA project is financed by the Puls and the ICT program of the Research Council of Norway. The KISA project is governed by an internal steering group of the Council consisting of Helge Klitzing, Øystein Strandli and Tron Espeli. The author would like to thank this group for valuable contributions as the project has evolved and for inputs to this report. Many thanks also to the various interviewees contributing with very important input into the case study. These include management, nursing and care employees of the nursing and care section of the city district of Manglerud, management representatives of the nursing and care section of Kristiansand municipality as well as one of the consultants responsible for the Efficiency network of The Norwegian Association of Local and Regional Authorities (KS).

The KISA project is being conducted by STEP – Center for Innovation Research. The research team consists of Arne Isaksen (project leader), Heidi Wiig Aslesen and Marianne Broch. In close interaction within the Norwegian research team as well as with very valuable input from the Finnish KISA health research team Broch has been the main author of this report.

Oslo, 31.04.04

Marianne Broch

Executive summary

This is the second of three studies of the use of knowledge intensive service activities (KISA) in innovation in specific industries or sectors. The report consists of the Norwegian part of an OECD study which includes several other countries. The main focus is on KISA and innovation processes in home based services to elderly in a city district in Oslo, Norway. One of the main objectives of the study is to provide insights into how public sector organisations maintain and develop innovative capabilities through utilisation of KISA, provided by internal and/or external sources.

A set of common research steps for the OECD project is followed in this study. The first two steps describe key aspects of the public sector health and social care services in Norway, and policies and programmes of importance for innovation in the public sector in general, but with particular focus on health and social care services. The third step includes studying innovation and renewal activities and the role of knowledge intensive service activities in innovation processes in the public sector, focussing on innovation processes in home based services for elderly in the city district of Manglerud/Østensjø in Oslo. This city district was chosen as a case context because it constitutes an “information rich” case in this respect, and because studying how innovation processes occur in home based services requires a case in which innovation really has taken place. The main data source of the analysis is in-depth interviews mainly with a set of actors which have participated in the innovation processes studied. The fourth step discusses policy issues, using a framework developed in the KISA software study to systemize the policy implications in a similar manner.

Health and social care statistics

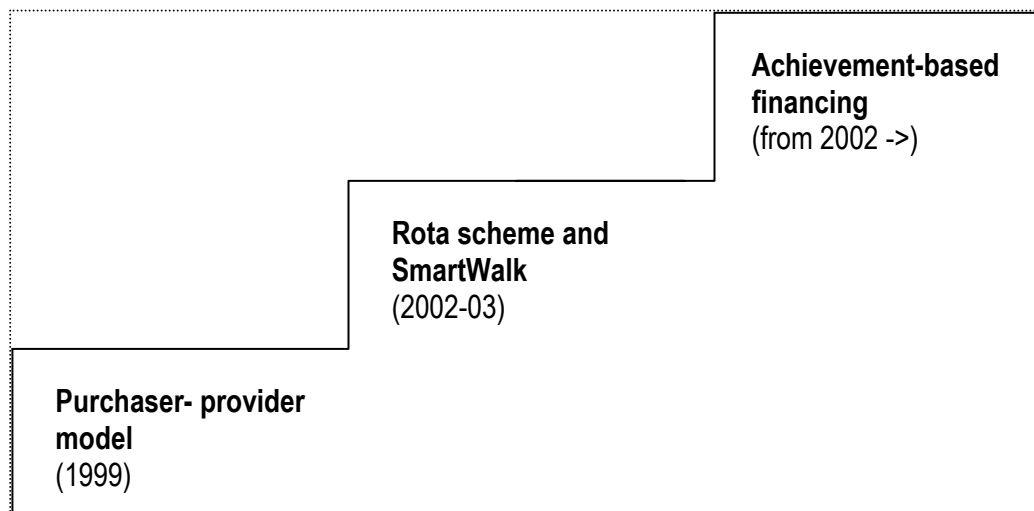
Chapter 2 in this report focuses on aspects of the health and social care sector in the national economy. The statistics employed in this chapter is common to all the participating countries of the OECD KISA part project on health care, and is included to be able to compare and understand the results of case studies in these different countries in a better way.

The statistics show that the expenditures on both health and social care services in Norway have increased during the 1990s. The public proportion of total expenditure on health has remained at around 80 percent in the same time period. Considering the expenditures on social services in the Nordic countries, Norway has by far the highest public expenditures on services per person that is 65 years and older. The growth in the municipal gross running expenses on nursing and care services is mostly due to growth in expenditures outside institutions. The greatest increase in service provision has been related to home nursing services, and the combination of home nursing with practical support.

The innovation processes studied

The case study follows the innovative developments of the city district of Manglerud since 1999 when it was the first city district in Oslo to prepare and implement a purchaser-provider model. The development proceeds to a reorganisation of the provider activities of the city district (introducing rota scheme and SmartWalk), and eventually to the development of a model for achievement based financing, however, not yet implemented. The renewal processes studies may be presented as in the stairways model in Figure S1.

Figure S.1: The innovation processes to be studied in the KISA home based services for elderly case study in the city district of Manglerud/Østensjø



An important general principle in the purchaser – provider model is to make an organisational divide between (i) those employees involved in defining the service requirements, perform control or attention with the carrying out of the services (the purchaser function) and (ii) those employees that are in fact executing the production of the services (provider functions).

One objective of introducing the purchaser-provider model in Manglerud was to achieve a more impartial assignment of home based services for elderly in the city district according to an equality principle. Another was to shield the providers of home based services to the elderly from the storm of demands and requests for services put forward by the elderly users or their relatives. A third objective was to professionalize the case work of executing the individual assignments required for each user to receive home based services.

In 2002 Manglerud undertook a first time mapping exercise based on self registering of the service providers of the home based health and care services in the city district. The main goal and objective of the time mapping was to increase the amount of *direct time* spent in the homes of the service users. The idea of increasing the direct user time was based on perceived “good practice” in other innovative municipalities regarding home based services for elderly. The question was how to improve the organisation of the home based services in the end to be able to offer improved services to the elderly living at home.

One innovative measure was the development and introduction of the IT based steering system of SmartWalk that controls who performs what in the home based service system. The system gives the managers more flexibility as regards optimal utilisation of the manpower resources needed at any time. Another closely related innovation was a rota organisation of the various home care provider units of the city district. Rota organisation creates increased flexibility in the use of the various home service providers. As result of the reorganising a manpower plan may be worked out according to the assignments of the users of the city district. The required manpower may carefully be estimated according to the various needs of either home helpers, trained nurses and enrolled nurses in various parts of the day.

Finally Manglerud has also been engaged in an innovation project concerning achievement based financing of services, where the main focus has been to estimate the prices of the service products being offered to elderly living at home. The fundamental principle of achievement based financing is that the city district gets funding according to the costs connected to the actual service provision of the city district, not a lump-sum budget as is the case today. The innovation process was triggered by the introduction of the purchaser-provider model, the challenge of dimensioning the provision of services as well as budget cuts from the city district management related to home based services.

Innovation characteristics

In relation to the innovation processes followed in the case of Manglerud, some important factors influencing and determining the innovation processes of the city district emerged. These include:

- Top-down innovation by the management
- Innovation barriers at the service level
- Political level barriers

The case study indicates that new ideas and the innovations or renewal activities mostly originate at management levels. Traditionally the actors of the system seem to be rather unaware as regards renewal and innovation activities. The services offered to elderly at home have been executed very much in the same manner by tradition without particular needs of change and innovative thinking. However, less available financial resources the last years have created a more innovation or renewal focused culture in the sector. A general view in the sector seems to be that a high degree of adjustment and adaptation ability at all levels of the sector now prevail, upholding a great tolerance for change amongst the actors of the system.

Also at the service level there seems to be certain barriers for innovation, many of which are related to the stock of employees of the home based services for elderly. One hampering factor pointed out by interviewees of the managerial level is the fact that the service providing employees are often very focused on executing their specifically assigned service tasks. The employees are not really focused on improvements or innovation activities that might renew the service provision in particular and the system of home based services in general. However, the study also suggests that the service providing level to a limited degree is included, and thereby also is not really dedicated to innovation activities.

One hampering factor related to innovation in home based services for elderly seems to be political split regarding planning processes and longer-term priority setting at the local government level (i.e. disagreement amongst city district or municipality politicians). Home based services for elderly is subjugated a bureaucratic assignment system and many actors must come to agreement in order for renewal processes to take place. Another hindrance to innovation in home based services to elderly are the many rules and regulations that must be taken into account in this area of activity. Rules and regulations often contradict and over-rule one another, which creates barriers to innovation and renewal activity in home based services for elderly.

The use of internal and external KISA

In the OECD KISA project the main focus of attention relates to innovation processes, and the Norwegian study follows a set of development projects (cf. Figure S.1) and the use of KISA in these innovation processes. The research questions include to which extent KISA is employed in the development projects, what kinds of KISA are used, and how KISA is used.

In the introduction and implementation of the purchaser-provider model mostly internal KISA were used. The internal providers of KISA include the rehabilitation and care management (RO management), the planning and economy consultant, and the city district manager as well as employees of the purchaser unit. The knowledge intensive services they provided into the innovation process were related to development, legal, and administrative/management activities. In interaction with external KISA providers a mix and match of services occurred including training and information activities. The external KISA provision has not played an important part of any of the phases in the development and implementation of the purchaser-provider model in Manglerud. The internal KISA providers, however, contributed significantly in all the phases of the development project.

The process of introducing the rota scheme and the development of SmartWalk was also rather inward-looking as regards the KISA actors involved. The internal knowledge intensive services important for the innovation process were again related to development and information activities provided by the RO management. Of importance was also IT development for internal use and accounting or economic KISA particularly provided by the internal “development person” of Manglerud city district. All the internal KISA personnel were involved at all stages of the innovation project’s life cycle.

The rehabilitation and care (RO) management team has also been the active development agent in introducing achievement based financing. The RO management has provided development KISA, accounting/economic KISA, training KISA as well as strategy/planning KISA. The ideas for introducing the achievement bases financing model was, however, provided by external KISA providers. The external KISA providers so far include The Norwegian Association of Local and Regional Authorities (KS) and the Kristiansand municipality. The external providers have contributed significantly in at least the early phases of the project life cycle (since the project is still in the development phase). Whether the use of external KISA providers will increase or decrease in the project phases yet to come is still not possible to evaluate.

All in all it seems as if Manglerud/Østensjø to a large degree use internal KISA resources in all phases of their innovation project (cf. Figure S.2). External supply of knowledge intensive services occurs mostly in the idea and development phases of the project, and to a less degree in the implementation phases.

Figure S.2: Innovation and the role of knowledge intensive services activities (KISA) in innovation in home based services for elderly



Policy issues

The objective of policy targeting KISA is to improve the innovation capability, competitiveness and efficiency of private firms and public organisations. The focus on knowledge intensive service activities is not an aim in itself; it is a mean to achieve the objective of more innovation, competitiveness and so on.

Policy to increase the use of knowledge intensive services in innovation processes may stimulate the *users*, in this case study the municipalities or city districts. Users may demand and utilise such services in their innovation processes in home bases care services. Another group to influence may be the *producers* of knowledge intensive services of relevance to innovations in home based care services in order to improve the supply and quality of these services.

In order to support the *supply of internal KISA* to enhance innovation and build innovation capability in home based services for elderly, policy may target the following areas:

- Strengthen the focus on knowledge intensive services in relation to management, organisational and economic activities. One particular measure would be to support specific training of internal management and key personnel in new and innovative ways of organising and administering home based services for elderly.
- Inclusion of the more practical level of the system of home based health and social care services for elderly in order to stimulate more bottom-up innovation. This may be achieved by more advanced training and in-depth information of all actors of home based services, and build stronger incentive structures internally to stimulate participation in innovative thinking.

Demand side policy tools may stimulate the general demand for knowledge intensive services as *external inputs* into firms and organisations. One specific demand side policy measure for promoting KISA in municipalities and city districts is:

- Funding of internal innovation and KISA-related competence build-up. City districts and municipalities could be granted earmarked funding for internal innovation activities, which can make these actors more demanding (potential) customers for external providers of KISA. Policy measures could also focus on

connecting internal and external providers of KISA, in order for internal actors in city districts and municipalities to get first hand experience with the use of external KISA providers.

A third type of policy measures consists more directly of bringing together providers and users of knowledge intensive services, so that an interactive mix and match of activities may occur and give impetus to mutual learning and possible innovation on both sides. Possible *networking measures* for promoting extended use of KISA may be:

- Proactive broking. This includes measures to extend cooperation between municipalities or city districts and research institutions, and to assist municipalities and city districts in locating suitable external KISA providers to cooperate with in innovation processes in home based services. Another idea is to use e.g. KS as an “experience mediator” of innovation and KISA practice from all municipalities. This may occur for example by organising a kind of “idea bank” on the web site of KS.
- International networking. International network cooperation could be arranged between KISA providers in Norwegian municipalities and external providers of KISA in foreign municipalities, preferably in other Nordic countries.
- Exchange of KISA personnel. Measures could stimulate exchange of personnel experienced in development projects in the nursing and care service sector in municipalities and e.g KISA providing organisations like KS, research institutions and consulting firms.

1. Introduction

Innovation is on the policy agenda in all OECD countries after two decades of research by the OECD itself and by researchers in many fields. The awareness of the importance of innovation is demonstrated by the introduction of policies that cross many aspects of the innovative process and target all sectors of the economy.

The literature clearly indicates the multiple dimensions of innovation and innovative activity by firms. From an initial focus on product innovation alone, the interest now also includes new production methods, new marketing methods, new delivery methods and new organisational forms taken up by firms and organisations. It has become clear that all these aspects of change characterise innovative organisations and influence their competitive success.

Over the last decades substantial structural changes have occurred as concerns the generation of competences and capabilities in the economy. New markets and suppliers of productive knowledge and capabilities have emerged. Also new modes of interactions between suppliers and users of such knowledge and capabilities have developed. Related to competence and capability generation in the economy, public policy has traditionally supported research and technology development through government research and technology organisations (RTOs). However, research has also pointed to other suppliers of competence and capabilities, and to other capability enhancing activities that need to be considered and included in policy thinking related to knowledge development and innovative activities of firms and organisations.

One group of new suppliers of productive knowledge is so called knowledge intensive business services (KIBS), increasingly competing with the traditional RTOs in various areas of knowledge and competence development and diffusion. The competition mainly concerns the provision of services that can directly be appropriated by clients. Both the new suppliers and the more traditional suppliers, however, provide highly knowledge intensive services to their customers. These services are based on a set of activities that may be termed knowledge intensive service activities. However, such knowledge intensive service activities (KISA) take place not only within KIBS and RTOs. The knowledge intensive services provided by these kinds of organisations to their clients are most often co-produced in interaction between providers and users. Thus, KISA are an important part of the internal activities of *all types of firms and organisations*, even though the firms and organisations as such may not be regarded as particularly knowledge intensive, for example according to industrial classification standards. Nevertheless it is important to understand the role of knowledge intensive service activities (KISA) provided either internally in firms and organisations or externally by e.g. KIBS firms and RTOs, and the dynamic interaction between them. KISA are believed to be of vital importance for learning and innovation capability building inside firms and organisations (Wood 2002).

1.1. *The KISA project*

In this OECD project KISA are defined as *innovation services provided either internally or externally to a firm or organisation*. Innovation services are understood as services related to the development of an organisation and its patterns and objectives of innovation – of

changes in its “way of doing things in the way of economic life”¹. This definition of innovation prominently includes the introduction and sale of new and altered (service) products, the modes of producing these products and the structure of supplying these to customers.

This study on the use of KISA in innovation in health and social care services for elderly at home is a part of a 15 country OECD research project. The KISA study, of which this case study is the second part, mainly focuses on the structural changes indicated above.

- The core objective of the KISA project is to explore the functional provision and use of KISA in innovation in three sectors² and recent policy initiatives in this area in a range of countries. The three functional sectors include software production and health and social care, both of which will be studied by all participating countries. The third sector to be studied in Norway is aquaculture.
- The project will provide insights into how firms and organisations maintain and develop productive and innovative capabilities through utilisation of KISA, provided internally or through various institutional channels. One basic aim of the project is to obtain a broad understanding of the role of KISA in firms and organisations and its potential role in the wider innovation system.
- With this as a basis the project provides implications for innovation policies related to knowledge intensive service activities.

1.2. *Method and data of the KISA health and social care study*

The objectives presented above will be attained through research organised in four steps in each sector. The four steps of the various case studies are:

1. Review and analysis of national statistics on the contours of the sectors selected
2. Description and evaluation of government and semi-public programs and policies and private ones if appropriate
3. Interviews with representatives of firms and organisations (investigating the use and integration of KISA in firms / organisations)
4. Policy implications of KISA for the development of National Innovation Systems

The four steps in the case studies build on different data material and use different methods for collecting information.

Step 1

The review of national statistics of the Norwegian health and social care study builds on a variety of sources:

- The Firm and Enterprise Register of Statistics Norway
- National accounts of Statistics Norway

¹ Joseph Schumpeter (1939) *Business Cycles*. Vol.1, Mac Graw-Hill, New York

² Some of the OECD national studies will include four KISA studies, the mandatory two studies of software and health care and two optional studies.

- OECD Health Data 2002
- National Science, Technology and Innovation Statistics of NIFU³
- NOSOSCO statistics of the Nordic Social-Statistical Committee, a permanent committee under the Nordic Council of Ministers and the Nordic Committee on Social Policy
- Norwegian Labour Force Statistics

Step 2

The data used in the evaluation of government and semi-public programs and policies is based on information on the web sites of the various agencies responsible for the policies or programs and telephone based communication with persons responsible for the programs.

Step 3

The Norwegian case study of home based care services to elderly is executed at the local government service level. Home based care services in Norway are mostly organized at municipal/community level, except from the larger towns or cities where the services are organized by town or city districts. In this KISA case study the unit of analysis is the RO (rehabilitation and care) unit providing home based services to elderly in the city district of Manglerud/Østensjø in the capital city of Oslo.

The city district of Manglerud was chosen as a case context because it is well known for being genuinely interested in and actively involved in various efficiency creating, renewal oriented and innovative processes in later years⁴. Thus, the case does not constitute a typical case of Norwegian municipalities or city districts, but is an “information rich” case in this respect. However, a study of how innovation processes occur in home based services requires a selection of a case in which innovation really has taken place.

Due to a city district reform of January 2004 the city district of Manglerud is now larger than before and has changed name to Østensjø. The enlargement of the city district will of course affect the provision of home based services to elderly, but the innovation processes chosen to be followed in this KISA study will not be directly affected by the city district reform developments. For processes that have been undertaken before January 2004 we will use the name Manglerud, and when describing processes after 2004 we will thus use the term Manglerud/Østensjø.

The mapping exercise started with pilot interviews with the coordinators of the home based services to elderly in the city district of Manglerud to get an informed picture of the services and actors involved in providing home based services to elderly. By using the “snowball method” the coordinator would be able to point out relevant and interesting informants for our further study with a particular focus on innovative processes undertaken in the city district and the use of knowledge-intensive service activities related to these innovations.

The first in-depth interviews with the main coordinators were of crucial importance to the remaining parts of the case study. In addition to pointing out the relevant services and actors

³ Norwegian Institute for Studies in Research and Higher Education

⁴ The city district of Manglerud was recommended a suitable candidate for a case study by Sigbjørn Iversen, city of Oslo, department of Development and Competence (Utviklings- og Kompetanseetaten), for the time being engaged by KS.

these informants will be the most important interviewees to understand the range of integrated services and the service system as a whole.

Table 1.1: Interviews in the case study of home based services for elderly in Manglerud:

Actors	Number of interviews (informants)
Pilot and follow-up interview with coordinators of home based services (RO services), project leaders	2 (x 2)
Section leader	1
Manager of the purchaser unit	1
Practical health care workers and/or manager of health care workers/home care workers	2
Service centre and/or nursing home and/or hospital management	1
External KISA providers (Kristiansand municipality and KS consultant)	2
Total	11

All the informants were interviewed in relation to important innovation processes that have been taken place in Manglerud/Østensjø since 1999 and the use and cooperation with both internal and external knowledge-intensive service activities (KISA). In this way we have aimed to identify and exemplify whether knowledge-intensive service activities have a role to play in developing capabilities to innovate in the health and social care system, with a particular focus on home based services for elderly.

1.3. Research questions

The main research issue in this KISA case study is the role of KISA in various innovation processes (implementing the purchaser-provider model, the reorganisation of provider units and the development of achievement based financing) related to home based services in the city district of Manglerud/Østensjø.

The common research questions of the OECD KISA focus group related to this particular health (and social) care case study focusing on innovation and KISA in home based services for elderly include:

1. A description of the concept of home based care services to elderly at home
 - What are the elements of home based care services to elderly?
 - What are key actors of the innovation system of home based care services to elderly?
 - What is the relationship between the actors/ degree of integration?
 - What internal and external KISA actors have participated into the case study?
2. An analysis of innovation capability
 - What are the framework conditions for innovation?
 - What is important knowledge and skills of the actors of home based care services?
 - Are there networks and cooperation between the actors?
 - What is the regulatory framework (concerning innovation in home based care services)?

- What are the institutional structures (concerning innovation in home based care services)?
 - Is there an innovation culture in the home based care complex of services?
 - What processes of improving home based care services to elderly people take place?
 - What are the bottlenecks in innovation (improvement of services) and in building innovation capacity in home based care services
 - Are there any supporting instruments (public measures) to innovation in home based care services?
3. An analysis of the role of KISA in innovation and building innovation capability in home care services
- What kinds of KISA have been used?
 - Why are these KISA used?
 - How do KISA and core activities interact? (How has the interaction between KISA and core service providers supported innovation?)
 - When have different kinds of KISA been used?
4. Policy implications

To be able to compare the results of the various national case studies undertaken in the health (and social) care sector, as well as comparison of the use of KISA between the very different sector studies of the project, it is desirable to discuss the main findings according to three chosen perspectives, namely i) the value network perspective ii) the life cycle perspective and iii) the business model perspective. In section 6.4 the depicted perspectives will be treated in relation to the main findings of this Norwegian case study of home based services for elderly.

The value network perspective relates to the process of interaction between the actors in the production of better home based services for elderly. Important questions are how the health and social care professionals interact in networks with other actors in order to perform their main activity of providing and improving the home based services for elderly, how and why the cooperation has been undertaken and whether barriers of such cooperation exist (why no KISA cooperation)?

Included in the life cycle perspective is to take a particular look at the life cycle of the projects or processes undertaken. What particular phases do the development processes contain and at which point in these processes are KISA particularly important for innovation to occur?

The background of the business model perspective is to be found in relation to private sector firms, and was particularly developed and utilised by the Finnish KISA team regarding various types of business models present amongst software firms in their first KISA case study (Forssén et al, 2003). The main objective of applying the business model perspective is to investigate whether various business models may be an explanatory factor for different use of internal and external knowledge intensive business activities. This perspective seems, however, not to be a particularly relevant one in connection with innovation and innovation capability building through the use of KISA in publicly provided home based services for elderly.

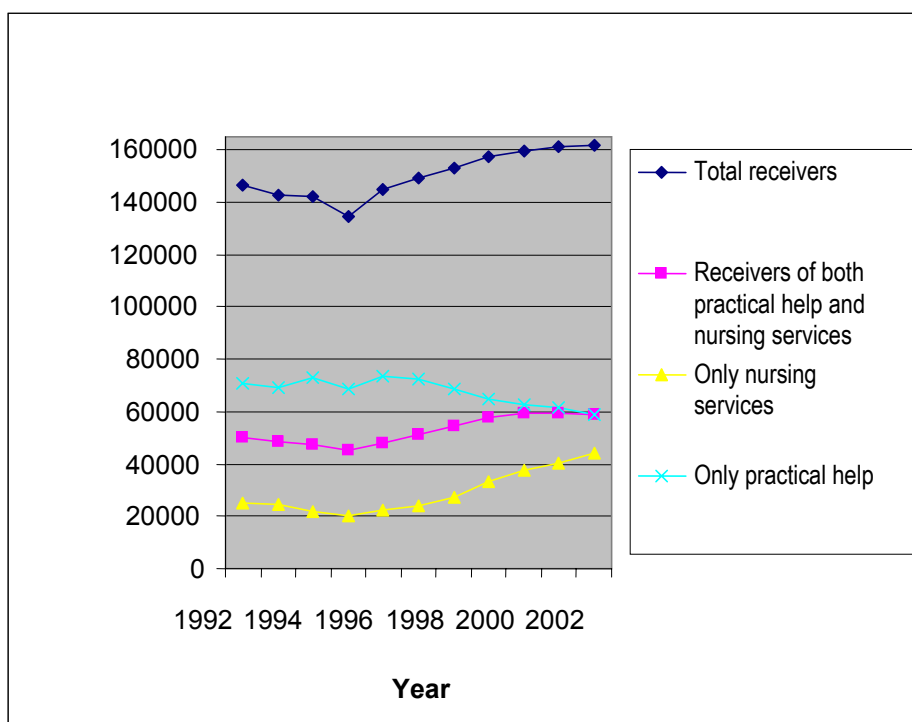
2. KISA and innovation activity

2.1. The concept of home care for elderly

Home based care for elderly involves mostly publicly provided health-, social- and practical services in the residents' own homes, however private and non-public providers are also part of the picture. The first publicly financed system for home based care in Norway was introduced in the 1950s. At that time the system was thought mainly to be a relief for the hard-pressed hospitals. It was not until the 1970s that the development of home services for elderly and other groups began on a large scale. The only alternatives before this time were either nursing homes or publicly provided homes for elderly (Christensen and Næss 1999).

Although home care for elderly is not a new policy in Norway, the use of home-based services has increased in later years as can be seen from the figure below.

Figure 2.1: Receivers of home services in Norway arranged according to type of service, 1992-2002



Source: Statistics Norway

The increase in home-based services is often put in connection with a government white paper from 1992 (Gjærevoll 1992). This white paper recommends that public services to elderly (and physically handicapped) to a wider extent should be provided in a manner ensuring the receivers' feeling of being at home. This means that the services are either provided in their original homes, or the elderly may choose to live in small communities of "care homes", especially designed for elderly or physically impaired, often in near proximity to other health- and social service centres.

The increase in the total number of receivers of home-based services can especially be attributed to an increase in the number receiving nursing services. It is also worth noting that although elderly people by far is the largest group of recipients of home-based services there are also other disadvantaged groups receiving such services included in this statistics (i.e. handicapped).

The trend in this statistic also reflects the increase in development of “care homes”. Services rendered in “care homes” are counted as home services in the cases where these apartments are bought or rented by the residents, and therefore, not regarded as public institutions.

2.2. The Norwegian health and social care system

The first part of this KISA case study contains a description of the Norwegian health and social care system at an aggregate level. The main focus of the first part of this section is on the health care provision system.

In contrast to the model in many OECD countries where health care services are funded by a mix of social and private insurances one of the main characteristics of the Norwegian health care system is that there is a predominance of tax-financed public provisions. The Norwegian health care system has succeeded in securing universal coverage and high quality services, but still faces several challenges amongst others i) acute capacity shortages with long waiting lists for hospital admission and lack of physicians and other medical staff, ii) the contrast between the requirements of a cost-efficient health care system on the one hand and the ambition to maintain a full coverage health service in even the most remote parts of the country and finally iii) the risk of major expenditure increase in the future.

The health care system in Norway provides a wide range of services to all parts of the country. The provision of health care has traditionally been in the hands of the public sector, and even today the private provision of health services is at a low level. There are some specialised hospitals in urban areas and some voluntary health organisation, but most of the health service provision in Norway is public. However, a significant private provision of ambulatory health care (physicians, dentists, physical therapists) has coexisted with the public system throughout the post war period.

The planning, regulation and supervision of the Norwegian health care system is centralised, but the provision of the tasks was during the 1970s and early 1980s transferred to the counties⁵ and municipalities. The central supervisory authority, the Norwegian Board of Health, receives instructions from the Ministry of Health and The Ministry of Social Affairs and is assisted by medical officers who are stationed in the counties.

Since 1984 primary health care has been the responsibility of the municipalities. Each municipality must offer services for disease prevention and health provision, diagnosis and treatment of illness, rehabilitation and long-term care, often in “health centres”. Dental care for children, adolescents up to 18 years of age, disabled persons, patients in nursing homes or elderly receiving home care services, is provided free of charge by specialised services owned by the counties. Since 1970 the counties have been responsible for the hospitals, but

⁵ Since 1974 the 19 counties have been grouped into five so called health regions headed by regional health committees.

in January 2002 the responsibility for the hospitals was transferred from the counties and back to the national authorities. The hospitals are now operated as health enterprises and are fully owned by the central government. Since 1988 the task of running nursing homes was shifted from the counties to the municipalities followed in 1991 with the transfer of the care of mentally retarded also from the counties to the municipalities.

The municipalities receive grants from the central authorities and largely fund the primary health care system in Norway. The state-run National Insurance Scheme created in 1967 offers public insurance against individual medical expenses (fees for services) of ambulatory care provided by hospitals and private practitioners. The Norwegian health care system is characterised by extensive coverage, high quality and proven medical competence. The health status of the population is considered as very good.

Below an overview of health care provision in Norway distributed on the various governmental levels, political decision making bodies, executing bodies and what specific responsibilities are attached to the different levels and bodies is presented.

Table 2.1: Health care provision by government level

Government level	Political decision making body	Executing body	Responsibilities
National authorities	Parliament	Ministry of Health and Social Affairs	-Preparing legislation -Approving capacity expansion -Budgeting and planning -Information management -Policy design -Hospitals (somatic and psychiatric)
Counties (19)	County councils	County Administration Authority	-Specialist health services -Institutions for the treatment of drug and alcohol abuse -Dental services
Municipalities (435)	Municipal councils	Local administration	-Municipal health and social services plan
	Municipal executive boards	Municipal executive boards	-Primary health care -Social services/social security administration
	Mayors, Sector committees for health and social affairs	Health and social services	-Nursing homes -Care of mentally handicapped persons

Source: Ministry of Health and Social Affairs.

2.3. *The health sector in the national economy*

The sections on the health sector in the national economy, R&D in the health sector, the production of medical products as well as the KISA description of the health care sector below are common statistical parts for all the participating countries of the KISA part project on health care. These parts are included to be able to compare and understand the results of case studies originating from very different national settings in a better way.

Expenditure on health

During the 1990s the expenditure on health as a percentage of GDP in Norway grew from 6,4 at the beginning of the decade to a top level of 7,5 in 1999. However, in 2000 there was a marked drop to 6,7 percent again.

There has been a real growth in the Norwegian economy of more than 30 percent in the 1990s and total health expenditure grew correspondingly (Ministry of Health and Social Affairs). In 1997 health expenditure grew faster than GDP. Costs of medicines and pharmaceutical services, and those of medical rehabilitation increased at twice the rate of GDP. The trait of substantial increase in expenditures on medicines is similar to the development in many other countries (ibid).

The Norwegian total expenditures on health as a percentage of GDP from the OECD database show lower estimates than the official Norwegian statistics indicates (European Observatory on Health Care Systems⁶). According to Statistics Norway total health expenditure of GDP in 1996 was 8 percent, in 1997 it was 8, 3 and reached almost 9 percent in 1998.

Table 2.2: Total expenditure on health in 1990-2000 (2001), per capita US\$ and of GDP

Year	Expenditure on health per capita, US\$ (PPP)	Expenditure on health of GDP, %
1990	1363	6,4
1991	1516	6,9
1992	1675	7,0
1993	1729	6,8
1994	1744	6,7
1995	1865	6,7
1996	2026	6,7
1997	2193	6,7
1998	2439	7,3
1999	2550	7,5
2000	2362	6,7

Source: OECD Health Data 2002 4th edition.

The public proportion of total expenditure on health has been rather stable with more than 80 percent. There are a number of problems with the data on public versus private expenditure on health (ibid). One is that the public expenditure data include some out-of-pocket payments in particular those derived from co-payments to publicly employed general practitioners, which will tend to inflate the estimate of public expenditure. This is a general problem, not a particular Norwegian issue. Another problem is that there are no data on expenditure on voluntary health insurance.

⁶ European Observatory on Health Care Systems is a partnership between the World Health Organisation Regional Office for Europe, the Government of Norway, the Government of Spain, the European Investment Bank, the World Bank, the London School of Economics and Political Science, and the London School of Hygiene & Tropical Medicine. The European Observatory publication used above is "Health Care Systems in Transitions – Norway"

Table 2.3: Public and private expenditure and on health in 1990-2000 (2001), of total expenditure on health and of GDP, %

Year	Public expenditure on health, of total expenditure, %	Private expenditure on health, of total expenditure %
1990	82,8	17,2
1991	84,5	15,5
1992	84,8	15,2
1993	84,6	15,4
1994	84,6	15,4
1995	84,2	15,8
1996	84,2	15,8
1997	84,3	15,7
1998	84,7	15,3
1999	85,2	14,8
2000	85,2	14,8

Source: OECD Health Data 2002.

The main trend is that the proportion of Norway's total GDP for the public health and health care sector has been rather constant during the 1990s because Norway is a rapidly growing economy due to petroleum (which accounts for its high GDP growth rate) and because cost containment in the health sector was perceived a major concern for public policy mainly in the 1980s and at the beginning of the 1990s, and not very much after that (ibid). The public health care expenditures therefore have risen in correspondence with the general growth in the economy.

Health resources and use

The number of practicing physicians per 1000 inhabitants in Norway has been rather constant during the 1990s. Practicing physicians working in the public sector may work in either municipality primary care, in the secondary care of the hospitals or tertiary care of the specialised medical services such as laboratory, radiology and ambulatory care, special care for alcoholics and drug addicts and dental care for adults.

In primary health care the municipality may contract with private practitioners to meet their obligations for primary and specialised care. General practitioners are a central part of the primary health care system, often organised in single or group practices.

Secondary care practitioners may be employed either in public hospitals, in the few hospitals owned by voluntary organisations or in some of the few private hospitals in Norway. Hospitals owned by voluntary organisations receive public funds in the same way as public hospitals and are treated as public hospitals. The private hospital sector in Norway consists of five very small hospitals with outpatient clinics in Oslo, representing less than 1 percent of the total number of hospital beds and 5 percent of the outpatient services in Norway. Norwegian law poses tight regulations on establishing private hospitals.

The majority of the physicians and other staff engaged in specialised health care are employed in public hospitals and are paid salaries according to a national pay scale.

Table 2.4: Practising physician⁷ density per 1000 population and consultations with doctors per capita in 1990-2000

Year	Physicians per 1000 population, No.	Consultations with doctors per capita, No.
1990	n. a	n. a
1991	2,6	n. a
1992	2,6	n. a
1993	2,6	n. a
1994	2,7	n. a
1995	2,8	n. a
1996	2,8	n. a
1997	2,5	n. a
1998	2,7	n. a
1999	2,8	n. a
2000	2,9	n. a

Source: OECD Health Data 2002.

In Norway the most urgent problem facing the health care system has been the insufficient ability both of general (somatic) and psychiatric hospitals to absorb patient inflows. Long waiting lists for non-emergency treatment are considered unacceptable both by patients and health authorities. Major reforms and different means to handle this problem are being implemented. New measures include the introduction of national standards for admission priorities in the late 1980s and a “waiting list guarantee” of maximum six months for non-emergency patients in the early 1990s⁸.

Since the summer of 1997 the number of patients waiting at any time has been fairly constant at about 280 000 patients, but the number of unfulfilled waiting-time guarantees has fallen sharply.

Table 2.5: Acute-beds⁹ and acute-care admission in 1990-2000, per 1000 population

Year	Acute-beds 1000 population, No.	Acute-care admission per 1000 populations, No.
1990	3,8	148,0
1991	3,6	n. a
1992	3,5	142,5
1993	3,4	145,4
1994	3,3	143,8
1995	3,3	146,5
1996	3,3	148,7
1997	3,3	150,5
1998	3,2	154,0
1999	3,2	155,2
2000	3,1	154,1

Source: OECD Health Data 2002.

⁷ Practising physicians is defined as the number of physicians, who are actively practising medicine in public and private institutions, or the numbers of physician entitled to practise medicine.

⁸ The system of nationally managed waiting lists was intended as an instrument to measure discrepancy between capacity and demand. This led to the unfortunate situation in which hospitals and hospital departments were encouraged to keep as many patients as possible on the waiting list, preferably with a waiting-list guarantee, in order to gain the largest possible share of the available economic resources.

⁹ Acute-beds are beds accommodating patients where the principal intent is to do one or more the following: manage labour, cure illness or provide definitive treatment of injury, perform surgery, relieve symptoms of illness or injury, perform diagnostic or therapeutic procedures etc.

General tendency on health

The general health status of the population is considered as very good. This is reflected in both low levels of infant mortality and the high level of life expectancy. Infant mortality has decreased during the 1990 from 7 deaths per 1000 live births in 1990 to below 4 per 1000 at the end of the decade. The life expectancy has grown for both sexes, but most for men. Life expectancy for males has increased from 73, 4 years to 76 from 1990 to 2000, a relatively substantial growth of 2,6 percent. Likewise the life expectancy of women has risen during the 1990s from 79, 8 to 81, 4 years.

Table 2.6: Infant mortality¹⁰ and life expectancy at birth¹¹ in 1990-2000

Year	Infant mortality, deaths per 1000 live births	Life expectancy of males, years	Life expectancy of females, years
1990	7	73,4	79,8
1991	6,4	74,4	80,4
1992	5,9	74,4	80,4
1993	5,1	74,4	80,4
1994	5,2	74,4	80,4
1995	4,1	74,8	80,8
1996	4,1	75,4	81,1
1997	4,1	75,4	81,0
1998	4	75,5	81,3
1999	3,9	75,6	81,1
2000	3,8	76	81,4

Source: OECD Health Data 2002, Statistics Norway.

Production and employment

The production in health work has experienced a growth in PPP (purchasing power parity¹²) prices from US\$ 5530 at the beginning of the decade to US\$ 7300 in 2000. However, as a share of GDP the production value of health work has decreased in Norway during the 1990s. The employment of health care workers has risen with about 20 percent during the 1990s in Norway, however as a share of total employment the health care workers remain fairly constant.

¹⁰ Infant mortality is the number of deaths of children below one year of age expressed per 1000 live births.

¹¹ Life expectancy at birth is the average number of years a person can be expected to live from the time he or she is born assuming that age-specific mortality levels remain constant.

¹² PPPs are simply price relatives which show the ratio of the prices in national currencies of the same good or service in different countries. (OECD)

Table 2.7: Growth in the production value of health work (Nace 851) and in the share of GDP, 1990-2000.

Year	Value added, US\$ million (PPP)	Share of GDP, %
1990	5530	4,8
1991	5739	4,8
1992	6241	4,9
1993	5654	4,8
1994	5844	4,7
1995	6928	4,7
1996	7339	4,6
1997	7222	4,6
1998	7378	4,9
1999	7692	4,9
2000	7300	4,4

Source: Statistics Norway

Table 2.8: Employment of health work (Nace 851) and its share of total economy employment, 1991-2000

Year	Employment, No.	Share of total economy employment, %
1991	131380	6,4
1992	131210	6,4
1993	130290	6,4
1994	132150	6,5
1995	131960	6,4
1996	135340	6,4
1997	139690	6,5
1998	146590	6,6
1999	149740	6,6
2000	154100	6,7

Source: Statistics Norway

Production and employment by sectors

Both the production and the employment in the health care sector mostly take place in the public sector. Central government and local or municipal health care activities make up three fourths of the total value added (production) in health care. Private business enterprises make up one fifth of the value added and other activities, mostly non-profit private institutions like voluntary organisations make up less than 4 percent of the total production.

The employment of health care workers shows that the public sector employs almost 10 percent more than their share of total value added, which may indicate a lower degree of efficiency in the public sector. Oppositely the private sector businesses engaged in health care activities employ almost 10 percent less than their share of value added.

Table 2.9: Production and employment of health work (Nace 851) by sectors in 2000, %

	Share of value added, %	Share of employment, %
Market production	21,4	12,0
Government activities	74,7	83,5
Other activities	3,9	4,5
TOTAL	100,0	100,0

Source: Statistics Norway

Enterprises by size class and industry

In 2001 there were close to 7000 private sector business enterprises engaged in health care related activities in Norway. Of these 5200 employ less than 4 employees and consist mostly of self-employed general practitioners and health personnel in the specialised services (physicians, dentists, physical therapists, ergo therapists). Making up almost every fourth of the private business enterprises engaged in health care this group of enterprises employ only 7, 2 percent of the total personnel in the health sector.

Table 2.10: Business enterprises engaged in health work (Nace 851) by personnel size class in 1999.

Personnel size class, employees	Enterprises, No.	Share of total personnel in health sector, %	Share of total turnover in the health sector, %
-4	5200	7,2	2,5
5-19	469	3,3	7,5
20-49	523	8,8	6,9
50-	738	78,7	83,1
Unknown	54	2,0	-
TOTAL	6984	100,0	100,0

Source: STEP, based on National Business Register, SSB.

By fare the most important group of enterprises regarding employment is the group of firms employing more than 50 employees. The most important group of firms employing more than 50 health care workers is most probably the group of medical laboratory services and hospitals. Private enterprises employing more than 50 employees also make up by fare the largest share of total turnover in the sector with 83 percent.

Table 2.11: Business enterprises engaged in health work (Nace 851) by industry in 1999.

Industry	Enterprises, No.	Share of personnel, %	Share of turnover, %
Hospital activities (Nace 8511) ¹³	462	46,6	68,8
Medical practise activities (Nace 8512) ¹⁴	2260	7,4	2,0
Dental practise activities (Nace 8513)	2177	4,6	0,4
Other human health activities (Nace 8514) ¹⁵	2085	41,5	28,7
TOTAL	6984	100,1	99,9

Source: National Business Register, SSB.

¹³ Nace 8511 *Hospital activities* include general and specialised somatic hospital activities, specialised nursing homes activities, rehabilitation, maternity home activities and cottage hospital activities, mental hospital activities, psychiatric treatment for children and adolescent and psychiatric nursing home activities and finishing treatment

¹⁴ Nace 8512 *Medical practise activities* include general and specialised practitioners, somatic outpatient treatment, psychiatric specialised practitioners and psychiatric outpatient treatment.

¹⁵ Nace 8514 *Other human health activities* include day and night nursing, home nursing, physiotheapeutic treatment, health visitor service, other prophylactic health service, midwife service, clinical psychologist services, medical laboratory services and ambulance services.

2.4. R&D in the health sector

Research and development activities

The development regarding research and development activities in the health sector in Norway has experienced some ups and downs during the later years. In 2001 the total R&D expenditure in the sector amounted almost \$ 350 million. This was an increase of \$ 50 million since 1995, however, in 1999 the level was as high as \$ 387 million.

Distributed by main sectors the total R&D expenditures in Norway show a rather skewed picture. Considering the business sector, there was a similar peak in R&D expenditure in the middle of the period 1995-2001 as described above. The business sector in 2001 spent just above \$ 100 million on research and development activities. Comparatively the public sector health research (excl. the university sector) was relatively stable at a much lower level. The public sector health research as such shows a decrease in R&D expenditures from \$ 44 million in 1995 to \$ 35 million six years later. The single sector that has experienced the highest actual increase in R&D expenditure is the university sector. The university sector research and development activity expenditures increased from about \$ 150 million to above \$ 200 million.

Table 2.12: R&D expenditure and research personnel in health care by sector, 2001

Year 2001	R&D expenditure, US\$ million (PPP)	Share of R&D expenditure by sectors, %	Research personnel, full time equivalents, No.	Share of research personnel by sectors, %
Business sector ¹⁶	106,1	30,4	1044	28,9
Public sector	35,5	10,2	449	12,4
University sector	207,6	59,4	2116	58,6
TOTAL	349,2	100,0	3609	100,0

Source: National Science, Technology and Innovation Statistics, Norwegian Institute for Studies in Research and Higher Education (NIFU).

In Norway it is, however, commonplace to consider the university sector part of the public expenditures on R&D. The relationship between business sector and public sector expenditures is, thus, what is most commonly discussed. As the tables below show the relative share of the business sector expenditures on R&D has decreased in the period considered, particularly from 1999 to 2001. The public expenditures on health research (including the research and development activities taking place in the university sector) have increased from 65 to 70 percent of the total R&D expenditures from 1995 to 2001.

Table 2.13: R&D expenditure and research personnel of health care by sector, 1999

Year 1999	R&D expenditure, US\$ million (PPP)	Share of R&D expenditure by sectors, %	Research personnel, full time equivalents, No.	Share of research personnel by sectors, %
Business sector	142,2	36,7	1397	36,5
Public sector	35,8	9,2	445	11,6
University sector	209,1	54,0	1985	51,9
TOTAL	387,1	100,0	3827	100,0

Source: National Science, Technology and Innovation Statistics, NIFU

¹⁶ These are approximate numbers including pharmaceutical manufacturing and manufacturing of medical equipment.

Considering the research personnel employed in health research activities the long-term picture is rather stable. In 1995 and 2001 just above 1000 persons in the business sector were occupied in health research, with a somewhat higher level in 1999. Within the public sector, there has been a steady increase in research personnel in the university sector, in 2001 amounting above 2100 full time equivalents, increasing from about 1770 in 1995. The health research personnel employed in the public sector except from the university sector has been decreasing from 580 at the beginning of the period to about 450 at the end. From 1995 to 2001 the relative share of the public sector health researcher total has remained stable at 70 percent, as to 30 percent in the business sector.

Table 2.14: R&D expenditure and research personnel of health care by sector, 1995

Year 1995	R&D expenditure, US\$ million (PPP)	Share of R&D expenditure by sectors, %	Research personnel, full time equivalents, No.	Share of research personnel by sectors, %
Business sector	101,4	33,9	1025	30,3
Public sector ¹⁷	44,3	14,8	580	17,2
University sector	153,6	51,3	1774	52,5
TOTAL	299,3	100,0	3379	100,0

Source: National Science, Technology and Innovation Statistics, NIFU

2.5. Production of medical products

In 2000 there were just above 1000 private sector enterprises engaged in medical manufacturing and trade of medical products in Norway. These enterprises were distributed on such a variety of industries as manufacturing of pharmaceuticals, medicinal chemicals and botanical products and medical and surgical equipment and orthopaedic appliances, wholesale of pharmaceutical products, dispensing chemists and retail sale of medical and orthopaedic goods.

The highest share of total turnover of businesses engaged in medical manufacturing and trade of medical products is ascribed wholesale of pharmaceutical products amounting for more than half of the total turnover amongst these industries. Dispensing chemists amount for almost one fourth of total turnover. Considering the share of personnel amongst these industries, the group of dispensing chemists shows the highest share of employment with 37 percent of the total personnel, followed by wholesale of pharmaceutical products at about 27 percent.

Table 2.15: Business enterprises engaged in medical manufacturing and trade of medical products by industry, share of personnel and turnover, in 2000

Industry	Enterprises, No.	Share of personnel, %	Share of turnover, %
Manufacture of pharmaceuticals, medicinal chemicals and botanical products (Nace 244)	32	19,6	16,4
Manufacture of medical and surgical equipment and orthopaedic appliances (Nace 331)	265	14,4	5,1
Wholesale of pharmaceutical products (Nace 5146)	335	26,9	54,1
Dispensing chemists (Nace 5231)	367	37,0	23,3
Retail sale of medical and orthopaedic goods (Nace 5232)	79	2,1	1,1
TOTAL	1078	100,0	100,0

Source: National Business Register

¹⁷ For 1995 the numbers include running R&D expenses only, not total R&D expenses, however the capital expenses are not too large.

2.6. The social sector in the national economy

Social care in Norway includes social welfare services, care for elderly, the disabled and psychiatric patients, and care for alcoholics and drug addicts. During the past ten years municipalities have got increasing responsibility for providing health and social care services to these groups. In the below tables the main focus is on social care services for elderly, since this is the focus of the case study of this KISA project.

Expenditure on social services

In 2001 cash benefits to elderly in Norway per capita were rather average compared to the other Nordic countries, as were old-age pensions per pensioner. In relation to both these indicators of social services to elderly Denmark holds the highest shares. However, related to the public resources spent on services per person for elderly 65 years and older, Norway shows by far the highest expenditures in PPP.

Table 2.16: Expenditure on cash benefits to the elderly in PPP/capita and per pensioner, 2001

	Denmark	Finland	Iceland	Norway	Sweden
Cash benefits to elderly per capita	2403	1630	999	1603	1944
Old-age pension per pensioner	13536	9208	9817	11461	10736
Services per person 65 years and older	3141	1266	2946	4597	3508
Total benefits and services to the elderly per capita	2868	1820	1340	2292	2548

Source: NOSOSCO (Nordic Social-Statistical Committee, a permanent committee under the Nordic Council of Ministers and the Nordic Committee on Social Policy)

The table below shows that the development regarding total public social expenditures as well as total expenditure on services for the elderly and disabled in Norway have increased steadily the later years. From 1990 to 1998 the expenditures spent on services for elderly and disabled as a percentage of GDP has increased from 3,05 to 3,36 percent.

Table 2.17: Total expenditure on services for the elderly and the disabled 1990-1998, in NOK, current prices and in percent of GDP

Year	Total public social expenditure	Total exp on services for the elderly and the disabled	Expenditure on services for the elderly and the disabled, % of GDP
1990	187 902	22 025	3,05
1991	207 302	24 329	3,19
1992	223 002	26 779	3,41
1993	231 723	28 084	3,41
1994	242 517	30 084	3,47
1995	256 514	32 309	3,48
1996	269 212	34 460	3,39
1997	286 732	41 385	3,78
1998	300 641	37 435	3,36

Source: OECD Social Protection Statistics 2002

The expenses spent on nursing and care services are distributed on the activities taking place in both institutions and outside institutions. In this case study of home based services for elderly the resources spent outside institutions are of greatest interest. From the table below one can observe that the growth in municipal gross running expenses for nursing and care

services is almost entirely due to the growth in outside institution expenditure in the period 1991 to 1998.

Table 2.18: Municipal gross running expenses for nursing and care services distributed on institution services and services outside institution. In million NOK. 1991-199, relative shares in parenthesis

	1991	1992	1993	1994	1995	1996	1997	1998
Gross running expenses	24136	25153	25396	26340	28230	30268	31993	35456
In institution	17124 (71)	17085 (68)	16081 (63)	15909 (60)	16264 (58)	16634 (55)	16770 (52)	17728 (50)
Outside institution	7012 (29)	8068 (32)	9316 (37)	10431 (40)	11966 (42)	13635 (45)	15222 (48)	17728 (50)

Source: Statistics Norway (2001/4)

This growth has also influenced the relative share of services provided. In 1991 institution provided service expenses amounted for about 70 percent of the total gross running expenses in the municipalities. At the end of the decade the shares between services provided in institutions and outside institutions were about half – half.

Table 2.19: Expenditure outside institution distributed on home based services and services in adjusted housing. In percent. 1991-1998

	1994	1995	1996	1997	1998
In users own home	53	51	51	49	49
In adjusted housing	47	49	49	51	51

Source: Statistics Norway (2001/4)

Of the expenditures spent on providing nursing and care services outside institutions the relative shares of resources home based services and services provided in particularly adjusted housing (set up by the municipality) have shifted a bit in the period 1994 to 1998. The services provided in the users' own homes have declined from 53 to 49 percent.

The general pattern is that the total expenses for home based services have increased significantly during the 1990s. Who then are the receivers of the home based services in the municipalities? Distributed by sex and age the pattern shows at both points in time that men less than 66 years of age receive more resources than women. However, from 67 years of age women in general receive more home based services than men as a group do. Amongst both men and women it seems as if the period of most needs of home based services is when the elderly is in between 80 and 84 years of age.

Table 2.20: Municipal expenditure for home based services by sex and age. Million NOK, 1991 and 1998

	1991			1998		
	Total	Men	Women	Total	Men	Women
0-66 years	1078	601	477	2882	1643	1239
67-74	497	192	305	915	359	555
75-79	583	186	397	1240	394	846
80-84	695	198	497	1492	401	1091
85-89	580	151	428	1360	347	1013
90 and above	310	65	245	735	144	591
Total municipal expenditure for home based services	3744	-	-	8624	-	-

Source: Statistics Norway (2001/4)

Social resources and use

The basic principle of care for the elderly and disabled in Norway is that services and individualised support should be arranged in ways that enable care in people's home communities, and the opportunity to live in their own homes for as long as possible.

The total number of receivers of home based services in Norway in 1992 was just above 142.000 increasing with about 20.000 to just above 162.000 ten years later. The greatest increase in service provision has been related to home nursing services, and the combination of home nursing with practical support. There has, in fact been a decrease in the number of individuals receiving practical support only. This development is closely related to the goal of keeping particularly elderly persons in their own home as long as possible, which means that the users of the home based services tend not to be as healthy and fit as earlier times.

Table 2.21: Receivers of home based services, all ages, by type of service, 1992 and 2002

	1992	2002
Both practical support and home nursing	50110	58789
Home nursing only	25316	44399
Practical support only	70846	58924
Total	142272	162112

Source: Statistics Norway

The main group of recipients of home based services are elderly persons. Considering only the elderly (defined as pensioners 67 years and above) this group amounted to around 120.000 recipients in the entire period. There has been a general decrease in users of home based services amongst the "young" elderly, from 67 to 80 years of age and a marked growth in the group of recipients of 80 years and above.

Table 2.22: Receivers of home based services, by age, 1992 and 2002

	1992	2002
Total	142272	162112
Under 67	24870	41634
67-74	24413	17946
75-79	28758	24797
80-84	34613	35651
85-89	22530	28362
90 and above	9854	13722
Unregistered age	1234	0

Source: Statistics Norway

In average the assigned amount of weekly man-hours (services offered) per user of home based services has increased somewhat during the period 1995-1998. If the quality of the services may be seen to be connected to the amount of man-hours of assigned help (more hours, better quality) then it is obvious to draw the conclusion that the quality of the services has increased during the period. But, the average nursing weight¹⁸ for users has also

¹⁸ Nursing weight (Norwegian: pleietyngde) is an indicator based on a set of variables which in various ways capture the users' need for services. The objective of using such an indicator is to estimate how well the user master or function according to certain daily activities (function variables). The indicator consists of 17 predefined function variables, 10 of these relate to daily activities, 7 relate to more emotional and cognitive function abilities. The objective is to develop indicators which express how much help the individual user

increased during the period. This means that one cannot without more ado conclude that the quality of the services has increased.

Table 2.23: Users of home based services. Average assigned amount of time ((wo)man-hours) per week and average nursing weight. GERIX¹⁹ municipalities 1995-1999

	1995	1996	1997	1998	1999
Average assigned man-hours	6,7	6,8	6,5	7,5	8,2
Average nursing weight	1,63	1,65	1,66	1,68	1,69

Source: Statistics Norway (2001/12)

The table below shows that when considering all receivers of home based services men in average are assigned more services than women. This is particularly the case amongst younger users of home based services. Amongst the elderly users of home based services the differences are less pronounced, however men tend to receive more services and have a higher need of services than women until the very last period of their lives. Only in the group of elderly more than 90 years of age living at home, which is dominated by women, the female users get more help assigned than men.

Table 2.24: Users of home based services. Average assigned amount of time ((wo)man-hours) per week and average nursing weight for the whole period. GERIX municipalities, 1995-1999

	All receivers		65-79 yrs		80-89 yrs		90 -	
	Men	Women	Men	Women	Men	Women	Men	Women
Average assigned weekly man-hours	9,6	5,9	5,2	4,0	4,9	4,6	5,3	6,4
Average nursing weight	1,80	1,60	1,69	1,51	1,68	1,56	1,77	1,79

Source: Statistics Norway (2001/12)

Table 2.25: Accessibility of home based services. 1994-2000. Share of municipalities offering the services indicated. The whole country of Norway, in percent.

	All week		Week days only		Daytime		Afternoon		24 hours a day	
	Home-help	Home-nursing	Home-help	Home-nursing	Home-help	Home-nursing	Home-help	Home-nursing	Home-help	Home-nursing
1994	48,3	95,5	47,9	2,0	76,3	26,6	32,7	33,3	7,3	59,4
1995	44,9	97,1	54,5	2,0	86,7	31,8	28,8	32,4	5,7	63,7
1996	64,3	97,6	32,3	1,6	58,3	23,0	24,6	22,2	34,7	73,2
1997	66,2	98,1	34,8	2,1	64,6	21,9	28,9	21,1	33,5	77,2
1998	65,8	98,5	33,3	1,5	57,4	16,0	22,4	16,2	38,2	80,6
1999	67,0	98,9	33,4	0,9	58,3	14,7	24,0	14,9	40,6	83,2
2000	65,0	99,8	35,0	0,2	58,4	13,5	23,4	13,3	39,5	85,6

Source: Statistics Norway (C696, 2002)

needs to sustain a reasonable life quality. The assignment of services must, however, additionally be based on other and more detailed knowledge about the private situation of the user.

¹⁹ GERIX municipalities have partaken in a project of Statistics Norway with the objective of providing a basis for better policy formulation in relation to the nursing and care services. The intention of the project was to develop a system to be used both as an administrative system for municipal nursing and care services as well as provide essential information for decision making at various levels in the municipalities. In the period 1995-1998 about 50 municipalities and city districts have provided individual data as a basis for statistics of the users of nursing and care services. The sample of municipalities are not pulled out as a random sample of municipalities.

Production and employment

In general the municipalities provide the home based services and employ the personnel working in this sector in Norway. Private actors are also present in some municipalities offering home based services like food provision and other practical services, but related to the traditional home based services of home nursing and practical support (including for instance cleaning services and transportation) the municipalities are still the major service suppliers. Some nursing homes and day care centres are owned and managed by (private, non-profit) voluntary organisations, employing professionals and are mostly funded by the municipalities. Until now, very few enterprises involve private commercial entrepreneurs in Norway.

Table 2.26: (Wo)Man labour years in the nursing and care services²⁰ (full time equivalents), 1992 and 2001

	1992	2002
Total man labour years	66 430	93 690
Man labour years per user²¹	0,35	0,46
Man labour years per 1000 inhabitants 67 years and above	107	155
Man labour years per 1000 inhabitants 80 years and above	397	457

Source: Statistics Norway

As a general characteristic all occupations within the nursing and care services, with the exception of the supervisory medical practitioners partly in nursing and old people's homes, partly in the home based services (as well as other marginal groups of janitors and service personnel, are dominated by women. Another characteristic is that part time work is widespread.

There is a tendency towards specialisation in the sector. On the one hand the specialisation relates to the education of the individual worker, where further education has become increasingly more common. This is particularly the case regarding home helpers in the home based services. On the other hand the specialisation of the sector relates to the growth of new types of specialists among the occupations in the sector, e.g. psychiatric nurses and more consultants (e.g. mentally handicapped consultants).

In the mid 1990s a new occupational group appeared in the nursing and care sector, the so called "care worker". This new occupational group was designed to cover the need for generalist competence in the sector, in the way that the care workers were trained to work both in institutional care and in home based care, as well as being trained to work with all age groups. However, research shows that the care workers are particularly prone to seek jobs in relation to mentally handicapped persons (Grinde 1997, Høst 1997).

²⁰ Nursing and care services employment includes all employees both within the home based services (home nursing and practical support) and in institutions, which means that not only the functions related to the users are included, but also administration and management, cleaning and kitchen personnel.

²¹ Man labour years per user is calculated from the sum of users of practical support, home nursing and the number of places in institutions.

Table 2.27: (Wo)Man labour years in the nursing and care services²² (full time equivalents), by education. 1994 and 2000

	1994	2000
Total man-years	68 331	89 669
Psychiatric nurses	416	1 006
Geriatric nurses	283	626
Other nurses	10 655	14 483
Registered nurses for the mentally sub-normal	1 443	2 918
Enrolled nurses	23 406	28 984
Ergo therapists	462	519
Home helpers	15 620	8 547
Other personnel in administration and management	3 431	2 897
Other personnel in service functions²³	-	7 990
Other personnel in client directed services²⁴	10 664	21 699
Unspecified	1 951	0

Source: Statistics Norway

As can be seen from the table above the total (wo)man-years related to nursing and care services in Norway has increased quite substantially in the period, in 2000 employing almost 90.000 workers. The largest groups of employees in 1994 were enrolled nurses, home helpers as well as trained nurses of various kinds. In 2000 there has been a marked drop of home helpers in the sector and a significant increase in the group of other personnel in client directed services. This is most probably due to the introduction of the new occupational group of care workers mentioned above which is included in the latter personnel category of "other client directed services".

The overall need for home based nursing and care services is expected to increase due to the age structure of the population and especially to the expected increase in the number of elderly people over the age of 80 years.

2.7. A KISA description of the health care sector

Employment of knowledge-intensive professions

The interesting approach proposed in the KISA project is that it aspire a functional perspective to the analysis of the provision and use of KISA. One way of exploring KISA provision from a functional perspective is to investigate the actual occupations of employees working in the sector. Educational background might give indications of what tasks the employees execute but occupational statistics specify in an exact and functional way what tasks the employees actually are doing.

²² Nursing and care services employment includes both the home based services (home nursing and practical support) and employees in institutions.

²³ Personnel in other service functions includes categories such as kitchen personnel and janitor personnel.

²⁴ Other client directed personnel includes categories such as social worker, child welfare officer, environment therapist, child and youth worker and care worker.

The data used in the case of Norway is the Labour Force Survey. There is considerable error sources connected to the use of this data. The tables presented below are based on 2-digit data, including both health and social work, a much larger category of employees than in home based services for elderly, and should therefore not be used for country comparisons. The tables should be read only as an indication of the occupational patterns of the aggregate sector only.

Table 2.28: Employment in health and social work (Nace 851+853) by group of profession, 1996

Group	Professions (based on ISCO 88)	Employment, No.	Share of total employment in health and social work, %
Expert professions related to health work	Health professionals (except nursing) (ISCO 222)	16 380	4,3
	Nursing and midwifery professionals (ISCO 223)	12 740	3,3
	Modern health associate professionals (except nursing) (ISCO 322)	13 720	3,6
	KISA professions in health work (See the footnote ²⁵)	2 940	0,8
	<i>Total expert professions related to health work</i> ²⁶	45 780	-
Other professions related to health work	Nursing and midwifery associate professionals (ISCO 323)	48 720	12,8
	Personal care and related workers (ISCO 513)	182 420	47,7
	Other professions ²⁷	105 140	27,5
	<i>Total other employment related to health work</i> ²⁸	336 280	-
	TOTAL	382 060	100,0

Source: Labour Force Statistics

The overall picture is that the number of expert professions in health and social work has increased from around 45.000 to above 51.000 employees from 1996 to 2000, making up 12 and 13, 4 percent of total employment in the sector in the respective years. This group of professional experts includes health professionals in general, nursing and midwifery professionals, modern health associate professionals and KISA professionals such as various natural scientists, computing, engineering, life science, teaching, business, administrative and legal professionals, associate professionals and technicians.

²⁵ KISA professionals in health and social work

ISCO 123	“Special managers”
211	Physicist, chemist and related professionals
212	Mathematicians, statisticians and related professionals
213	Computing professionals
214	Architects, engineers and related professionals
221	Life science professionals (biologists etc.)
235	“Teaching professionals”
241	Business professionals
242	Legal professionals
311	Physical, chemical and engineering science technicians
312	Computer associate professionals
342	Business services agents and trade brokers
343	Administrative associate professionals.

²⁶ Expert professions related to health plus KISA professions

²⁷ All other professions except professions related to health and social work and KISA professions.

²⁸ Other professions related to health and social work plus other professions.

Table 2.29: Employment in health and social work (Nace 851+853) by group of profession, 2000

Group	Professions (based on ISCO 88)	Employment, No.	Share of total employment in health and social work, %
Expert professions related to health work	Health professionals (except nursing) (ISCO 222)	16 660	4,3
	Nursing and midwifery professionals (ISCO 223)	16 660	4,3
	Modern health associate professionals (except nursing) (ISCO 322)	12 880	3,3
	KISA professions in health work (See the footnote above)	5 740	1,5
	<i>Total expert professions related to health work</i>	<i>51 940</i>	<i>-</i>
Other professions related to health work	Nursing and midwifery associate professionals (ISCO 323)	50 820	13,1
	Personal care and related workers (ISCO 513)	187 040	48,1
	Other professions	98 700	25,4
	<i>Total other employment related to health work</i>	<i>336 560</i>	<i>-</i>
	TOTAL	388 500	100,0

Source: Labour Force Statistics

Use of purchased KIBS services and other intermediate products in health and social work

The cost structure in health and social work is presented in the table below. Of total costs in both the sectors labour costs make up the highest share of expenditures, secondly the purchase of intermediate products and services and finally, least resources are dedicated capital costs.

Table 2.30: Cost structure in health and social work (Nace 851+853), 1999

Inputs 1999	Share of total costs health, %	Share of total costs social, %
Total intermediate consumption at purchased prices	26,0	18,6
Labour costs (Wages and salaries, social contributions)	59,7	75,2
Capital costs ²⁹	14,3	6,2
TOTAL COSTS	100,0	100,0

Source: Use and Supply –tables (Input-Output-analysis)

The labour costs in the social sector are significantly higher than in the health sector, amounting almost three fourths of the total costs of the social sector. As a share of total costs in the sectors the intermediate consumption of goods and services at purchased prices are higher in the health sector than in the social sector.

To get an overall impression of the health and social work as a user of particular knowledge-intensive services provided externally to the sectors one possibility is to analyse the shares of intermediate inputs into the sector. National accounts are divided into domestic input and output, reflecting the flows of goods and services traded between Norwegian sectors, as well as imports. The domestic inputs and the import of KIBS services are considered together in the table below.

²⁹ Consumption of fixed capital, operating surplus/mixed income, other taxes on production less subsidies

Table 2.31: Use of KIBS services (intermediate inputs concerning business services) in health and social work (Nace 851+853), 1999, % of total intermediate inputs.

Inputs (See: e.g. Nace rev. 1.1) 1999	Share of intermediate consumption in health, %	Share of intermediate consumption in social, %
72-74 Total KIBS-services (business services)	6,72	12,05
-- 72 Computer and related services	1,10	2,32
-- 73 Research and development	0,83	2,37
-- 74 Other business services	4,79	8,53
Other intermediate inputs	93,28	86,78
TOTAL INTERMEDIATE INPUTS	100,0	100,0

Source: Use and Supply –tables (Input-Output-analysis)

As a share of intermediate consumption the social sector purchase about twice the amount of KIBS services than the health sector. The difference between the two sector regarding the purchase of intermediate KIBS services are particularly evident in relation to other business services including legal, administrative and organisational services, advertisement services, employment services, guard duty services, cleaning services and other business services. Some of these services are not particularly knowledge-intensive.

3. Characteristics of innovation in the health and social care sector

This chapter gives a description of how innovation activity is often seen to occur in the public sector and the role of knowledge intensive service activities in innovation processes in general. The introductory sections serve as a background for the empirical analyses of this report.

3.1. Innovation as interactive learning

Innovation is seen as an increasingly important activity in stimulating the competitiveness of firms and organisations. Innovation activity is seen as a complex, interactive, non-linear learning process. Learning includes the building of new competencies and establishing new skills by individual workers, firms and organisations, and not only to get access to new information. This view of the innovation process is based on a broad definition of innovation to include both improvements in technology and better methods or ways of doing things (COM 1995). The broad definition involves a critique of the linear, sequential model of innovation which focuses on more radical, technological innovations. The broad understanding of innovation means an extension of the range of industries and sectors that can be viewed as innovative from typical high-tech industries also to include traditional, non-R&D-intensive industries and the public sector. One of the basic critiques of the linear model is precisely the equation of innovative activities with R&D, giving poor prospects for the traditional industries, service industries and the public sector (Broch and Isaksen, 2004).

The conceptualisation of innovation as interactive learning furthermore emphasises the importance of cooperation in innovation processes as well as a systemic view of innovation. The concept of innovation system is based on the idea that the overall innovation performance of an economy to a large extent depends on how firms and organisations manage to utilise the experience and knowledge in other firms and organisations, research institutions, the government sector etc and mix this with internal capabilities in innovation processes (Gregersen and Johnson, 1997).

With the perspective on innovation as interactive learning, networking and cooperation are considered to be of strategic importance in promoting competitiveness of firms and organisations. Cooperation almost always includes interpersonal, human linkages. These linkages are quite different from arms-length, anonymous market transactions, and the existence of social institutions facilitates collaboration and the exchange of qualitative information between actors. Thus, “in networks... people develop codes of communication, styles of behaviour, trust, methods of cooperation etc. to facilitate and support interactive learning” (ibid, pg. 482).

3.2. The role of KISA in innovation processes

The above conceptualisation of innovation as interactive learning underscores the importance of knowledge intensive service activities (KISA). Firms and organisations must build up internal competences and knowledge, and most often mix internal and external knowledge and competences in their learning and innovation processes (Broch and Isaksen,

2004). We are then at the heart of how KISA is to be conceptualised. According to Hales (2001) it is, however, important to distinguish between knowledge intensive service activities as functions performed within all firms and organisations *and* knowledge intensive services in particular institutional settings. According to traditional industry classifications service firms (institutions) may be categorised as “knowledge intensive” and thereby perform knowledge intensive service activities (KISA), as can also e.g. knowledge organisations such as research institutes and universities. Such knowledge intensive firms and organisations rely heavily on qualified professionals (input).

Knowledge intensive service activities are, however, not bound to the institutional settings of particular knowledge intensive firms or institutions. All firms and organisations, regardless of being perceived as knowledge intensive or not, to a various degree perform and make use of a set of knowledge intensive activities, provided internally and/or externally to the firm or organisation in question. This KISA project sets out to explore the functional perspective of knowledge intensive service activities. In this context KISA should rather be seen in terms of the output of the knowledge intensive activities performed, perceivably increased competences in the organisation and the development of enhanced innovative capabilities and innovation activity in the organisation in question.

3.3. *General trends in public sector innovation*

The public sector is not a homogeneous sector and this is also reflected in the innovation activities in the sector. Parts of the public sector are similar to traditional manufacturing production systems, while other activities would be classified as pure service activities.

Several dimensions are associated with a broad definition of innovation. These include:

- Innovations involving changes in characteristics and design of service products and production processes (including development, use and adaptation of relevant technologies)
- Delivery innovations (involving new or altered ways of solving tasks, delivering services or otherwise interacting with clients for the purpose of supplying specific services)
- Administrative and organisational innovations (involving new or altered ways of organising activities within the supplier organisation)
- Conceptual innovations (in the sense of introducing new missions, new worldviews, objectives, strategies and rationales. These innovations are particularly important to institutions operating under social or public objectives as they furnish a link between the social objectives of the policy and institution and the operational and economic goals and functions of the agency in question. This type of innovation includes major parts of the impacts of the process called “policy learning”)
- System interaction innovations (new or improved ways of interacting with other organisations and knowledge bases)

In this case study we will focus mainly on administrative and organisational innovations. Related to administrative and organisational innovation we will focus particularly on the processes of developing and introducing a purchaser-provider organisational model, a reorganisation of home based service activities as well as the preparation of a model for

achievement based financing in relation to home based services in one city district of Oslo. The main objective of developing and implementing these innovations is to create improved home based services for elderly in the city district, to improve the quality of the services offered and create a right volume of services produced in the city district according to the actual needs of the elderly in the city district. This we will return to in a later chapter.

Innovations in both the private and the public sector may be labelled in the following ways:

- Incremental innovations – radical innovation
- Top-down innovations – bottom-up innovations
- Needs-led innovations – efficiency-led innovations

The public sector has a number of advantages which permits it to undertake important innovation tasks which are closed to private firms. The public sector has a higher ability to cope with uncertainty and thereby handle risk to a larger extent than private firms. Secondly the public sector is able to carry out very large scale projects and may obtain enough resources to finance such large scale projects. Finally the public sector may to a larger extent explore a range of possible innovation paths than private firms

Public sector innovation cannot however be fully understood without being seen in the wider social context of which they are part. Although being driven by its own innovation incentives the public sector also interacts and may depend on innovations in private market-based organisations and on the structure of incentives of these organisations to innovate. It is important to build in the systemic dimension of innovation performance related to any kind of innovation, also the public.

Irrespective of whether we consider private or public organisations, innovation is generally defined as deliberate changes of behaviour at the level of actors or institutions. A factor that seriously complicates studies of public sector innovation is a lack of clear-cut relations between the objectives of the public organisation and its incentives for innovation.

Ways of generating or introducing innovations into the public sector

Innovations may be generated or introduced into the public sector in a variety of ways. Here we present four different ways, namely

- Technology procurement
- Innovation development
- Bureaucratic and organisational reform and
- New policies

Public technology procurement will normally account for 10-15 percent of GNP in industrialised countries (Geroski 1990). The greater parts of what is procured are ordinary commodities, not necessarily innovative as such. However, public procurement engages public employees in innovative processes when the technology (including products, processes and work organisations) is to be integrated into the context-specific requirements of its application.

A substantial amount of technology development (including products, processes and work organisations) is also taking place within the public sector itself. The public sector supplies

society with services not provided in the market or cannot be produced in a sufficient quantity in the market. Many of these services involve challenges where the solutions cannot simply be imported from the private sector (e.g. related to city planning, traffic solutions, pollution, defence etc.). Nearly all levels of bureaucracy partake in public sector development activities, some of which will be the focus of this particular case study of home based services for elderly.

Bureaucratic and organisational reform could involve administrative and organisational innovations, conceptual innovations and system interaction innovations. Reforms related to what has become known as New Public Management³⁰ (NPM) are good examples. A conceptual innovation would be the implementation of privatisation as a principle for the downsizing of the public sector. Administrative and organisational innovations may be the introduction of “managerialism” (strategic management, management by objectives, team management) and the introduction of new systems for budgeting and accounting, as e.g. the chosen innovation process in this case study, the preparation and implementation of achievement based financing. Examples of system interaction innovations may for instance be a strengthened interaction between the public and the private sector (e.g. in the form of public-private partnerships).

New policies and reforms are related concepts, but while reform means changing something into an improved condition, new policy is a more open-ended concept in that it allows for the introduction of something totally different. The political decision to prioritise home care for elderly does not only imply innovations in how care for elderly is organised and how employees interact with the clients. The policy also involves the development and implementation of new technical aids and innovations in how staff cooperates with other care persons.

Barriers to innovation

The public sector is often described as “bureaucratic” in a negative sense, often considered slow moving, rigid and hierarchically organised. If this is the case the main problem seems to be the structure of the organisation in the public sector. Administrative innovation will then perhaps be the solution, creating improved structures for policy learning and innovation.

Incentives for change in the public sector are institutionally grounded. The members enter the organisation with individually shaped ideas, expectations, agendas, values, interests and abilities. If they do not agree to the institutionalised norms and preferences this is problematic to the individual and the result will either be to leave the organisation or to change one’s own preferences. Because of this, innovation in the public sector is often perceived as something that must be forced upon the organisation from the outside. However, personal incentives such as power, status, improved promotional opportunities and salary does of course stimulate to innovative behaviour within the public sector as well, implying that innovation in the public sector must also be interpreted as the result of internal processes as well as forced upon the organisation from the outside.

³⁰ New Public Management was a full scale reorganisation reform introduced into the public sector during the 1980s and 1990s. Key elements of the reorganisation of public service provision was e.g. establishing user-producer relationships, the introduction of competition in the supply of services and the separation of political and administrative decision-making and control from the actual producers of public services.

The introduction of market incentives

The innovation incentive structures of private sector firms and public sector organisations are traditionally rather different. Firms in the private sector have always had to relate to other producers of the product or service they offer in a market. Market based competition is one of the very important incentives for private sector firms to innovate.

A trend in the public sector of many countries has been the replacement of hierarchical contracts with market contracts. Thus market based financing of public organisations and services become a supplement or alternative to the traditional budget financing of the public sector. Additionally there has been a trend towards creating economically autonomous units in the public sector. There has also been a shift from the state as the monopolist provider of public services to the use of private providers of public services. The use of outsourcing is an example of this³¹.

New forms of collaboration with the private sector

An alternative to regular outsourcing, which let government retain a higher degree of control in the production, is public-private partnerships. Collaborations between both public and private actors and between private service providers are seen as strategies to create improved and more effective public services than would be achieved through traditional public hierarchies. The major task of modern government thus becomes to administer networks rather than hierarchies. Another new form of collaboration is self-organising networks with various forms of relationships (hierarchical contracts, market contracts, relational contracts).

3.4. Innovation processes in the public sector in Norway

Today the public sector faces great challenges. Nationally as well as internationally the societal developments call for renewed thinking and the ability to take advantage of new solutions for organising and steering the common institutions of society. There is an increased need to contribute to the development of common solutions for the future as well as develop policies and measures that are able to trigger innovative action and the will to change within the public sector to day.

In later years there has been a wide political consensus that this is a prioritised focus area in Norway, and this priority has particularly been expressed in the so called “Modernisation program”.

The modernisation program

In the beginning of 2002 a statement about modernisation, efficiency and simplification of the public sector was published³². The main purpose of the initiative is to trigger action in all individual sectors, departments, municipalities and service producing units which in sum make up the public sector. Some working targets have been formulated for the modernisation of the public sector and they include creating a simpler and more orderly society, offering a public service provision adjusted the needs of the individual, creating an

³¹ Other examples are state support of private institutions and the privatisation of state owned companies.

³² ”Fra ord til handling” (“From word to action”) Statement to the Storting (Parliament) 24.01.02 by the Department of Labour and Government Administration

efficient and productivity enhancing public sector as well as developing an including and stimulating personnel policy.

The renewals and adjustments presented in the modernisation program relate to changes in steering measures, new working and production methods, the introduction of electronic executive work, changes in administrative structures and forms of connections, new forms of cooperation and changed organisational forms. The public sector is diversified and the change processes are plenty and heterogeneous, but some development traits are more pronounced than others:

- Many public administrative agencies are transformed to public enterprises
- Public administrative agencies are merged to fewer and larger units
- Out localisation of public administrative agencies
- Tasks are moved from the ministries to new or already existing agencies
- Many new initiatives are effectuated to introduce market resembling mechanisms and competition exposure at both national and local level (e.g. compulsory competitive tendering, the money follows the user principle, free user choice, bench marking and public-private cooperation)
- At all levels there is a process of flattening the organisational structures towards team organisation and matrix organisation
- Increased focus on inter municipality cooperation and mergers of municipalities
- Introduction of flat structures at local municipality level, delegating operating authority to the service providing level
- Cooperation between national and local administrative agencies (e.g. public service offices integrating social services, social security services and public sector job related services)

The reform processes at different government levels

The national reform process in Norway may be described as sector specific and uncoordinated. There are many initiatives with clear similarities within the various national sectors. The renewal initiatives seem first and foremost to be initiated within individual administrative agencies and local initiatives are coordinated only to a limited degree. Little is done to communicate experiences across sectors and administrative agency initiatives.

Public activities also take place at regional and local level. Unlike reform processes at national level the processes at local government level seems to be characterised by more projects with a central coordinator, either the Ministry of Local Government and Regional Development or The Norwegian Association of Local and Regional Authorities (KS). In these projects experience exchange and network building between municipalities working within the same problem areas is the main focus.

4. Home based services to elderly

4.1. *Range of integrated services*

The service system of helping frail elderly to live at home is a multi provider system integrating both health and social care services such as home care, home nursing and other more practical services provided by public, semi-public and private providers, with the help of relatives and friends. A major challenge in this sector is the integration of services at home to enable the elderly to stay longer in their own homes. Thus, the sharing of tasks and the communication between the actors is vital to ensure cost-effectiveness and quality of home based care services. There is always a danger that the services will be provided on the terms of the service provider, not of the elderly.

Advances in technologies enabling and supporting independent living and the delivery of home care services have allowed an increasing number of elderly people to maintain their home setting. However, studies have shown that the uptake of these technologies requires systemic innovations or they lead to increased costs and amount of work for the involved actors.

Even though there are numerous examples of new technical aids being introduced to facilitate, simplify and render possible the situation of elderly living at home (security alarms, cooking stove safeguards, special handrails etc) this KISA case study will not primarily focus on practical technological innovations directly related to elderly living at home.

4.2. *Regulatory frameworks*

Legislation

The Act on Local municipality health services (Kommunehelsetjenesteloven³³) of 1982 is an administrative reform focusing on organisational problems and has as a central objective to move responsibility for health services down-ward in the Norwegian system, from regional to local authorities (a dislocation from second line services to first line services). The objective of the reorganisation of services is to create more equality in the access to public aid. The reform aims at creating a general or holistic orientation (helhetsorientering) in the provision of services and a central concept in the law is cooperation. In 1988 a change in the law also gives the local municipalities the responsibility for running the nursing homes (the nursing home reform).

The Act on Social services (Sosialtjenesteloven³⁴) of 1991 is first and foremost a coordinating and steering law because the objective of the law is to regulate the activities of local and regional authorities as well as the rights of individual persons to public services. The law, contrary to the one it succeeds, introduces some important principle improvements. Firstly it formalises all decisions made by the social services regarding the distribution of services, and the decisions are now seen as “individual decisions”, anchored in the Public

³³ <http://www.lovddata.no/all/hl-19821119-066.html#map0>

³⁴ <http://www.lovddata.no/all/hl-19911213-081.html>

Administration Act³⁵. This means that it is not longer possible to make decisions regarding the public care services unless these are adapted to regulations with particular procedures and guidelines.

Secondly what is termed “practical aid and training” (earlier “home help”) is in the new law capturing something more than before, in principle including all every-day functions. The training element is new and has the objective of making the individual as self-sufficient as possible. This implies a turn towards offering services that presuppose that the service recipient performs a self-care which is only to be supplemented with public aid. The training element is to make the recipient more self-sufficient.

The third important change in the law is that the practical aid is to be assigned on the basis of needs, independent of the economic situation of the service recipient. The economic situation of the applicant should not be mixed up in the decision of aid being assigned, but after the decision is made an income based scale for self-financing of the help shall be used.

Other laws relevant to the provision of home based services for elderly, but which will not be presented here, are The Public Administration Act (1967), The Public Accessibility Act (1970), The Act of Health Personnel (1974), The Working Environment Act (1977), The Planning Act (1982) and The Elderly Council Act (1991), just to mention a few.

New organisational strategies

The organisational principles following the legislative and reform changes of the 1980s and 1990s (see new legislation above) may be summarised by the principles of decentralising, flexibility and coordination. Related to decentralising the local municipalities get more responsibility and the service activities are organised in smaller units closer to the service recipients.

The increased flexibility may be related to a number of dimensions, for one thing *where* the service is provided. The services are now to a larger degree offered in the recipients’ own homes. During the 1980s a dominating strategy grew up holding that the individual recipient should be able to live at home as long as possible. The flexibility is also related to *who* is providing the public care services. During the 1980s there was also a tendency of transferring the most routine nursing tasks to the home helpers. Lastly the flexibility is related also to *when* the services are to be provided. The enlarged service supply means that the services are not only provided at daytime, but 24 hours a day, which implies an increased possibility for the recipients of the services to stay longer in their own home.

Related to cooperation the most important changes are about the big integration and the small integration. The big integration concerns the coordination of institutional care services and home based care services and the small integration is about coordinating the services provided in the homes of the recipients, mainly between home helpers and home nursing.

³⁵ <http://www.lovddata.no/all/nl-19670210-000.html>

4.3. *Institutional structures*

City of Oslo

In Norway the responsibility of providing home based services for elderly is placed at the local authority level, in local municipalities or city county districts of the larger cities. In this case study the executing and responsible unit for providing home based services for elderly is the city county district of Manglerud in the capital city of Oslo.

Oslo has a particular governance structure compared to the other major cities in Norway. The capital has a city county district structure and a parliamentary system. Many decision making processes are directed through the aggregate city of Oslo. The city has a double governance system. The administrative governance system is at the superior level managed by the Town hall administration. The town hall and the local city county district administrations have divided and complementary tasks. The same kind of supplementary division of tasks is the case at political level. The city council of Oslo is responsible for certain tasks at aggregate level as the local city ward councils have certain responsibilities in the various city county districts as in Manglerud/Østensjø.

Related to home based services for elderly the most relevant ministries are:

- The Ministry of Labour and Government Administration
- The Ministry of Local Government and Regional Development
- The Ministry of Health and
- The Ministry of Social Affairs

Ministries

The Ministry of Labour and Government Administration is responsible for the Government's employment policy, administration and personnel policy, work environment and safety policy, competition and income policy and measures to make government more efficient and service-oriented.

The Ministry of Local Government and Regional Development was originally responsible for issues involving the labour market and local government finance and administration. Over the years, however, the Ministry's sphere of activity has been expanded to embrace work in a wide range of other fields, including regional and district development, local government and the administration of elections.

The Ministry of Health has the overall responsibility of health readiness/preparedness, municipal health services (except nursing and care services), dental health services, specialist health services, psychic health work, medical rehabilitation, the medicine and drug area, the public health area, policy within gene and bio technology as well as tasks related to food articles and food safety.

The Ministry of Social Affairs has the overall responsibility of the National Insurance Scheme and the Social Schemes in Norway. The National Insurance Scheme provides support through e.g. unemployment benefits, sickness and disability benefits, maternity benefits and old age pensions. The Social Schemes among other areas includes social care services for the elderly and disabled. Social benefits and other social services are the

responsibility of the municipals (city county districts), and they cover the expenses themselves. The social services are regulated through the Act of Social services, of which the Ministry of Social Affaire has the responsibility.

The city of Oslo is not a member of KS and has its own negotiation system with the state and a different salary and personal system than other municipalities in Norway. Nonetheless Oslo is an associated member of KS and the city districts do participate in among others the development projects of KS.

4.4. Statistics of home based services for elderly in Manglerud

Statistical information from the 2003 annual report of Manglerud shows that there is a slight decline in the population of elderly in the city district during the last four years. In 2003 the population group of elderly above 67 years of age in Manglerud was, however fare higher than in the city of Oslo as a whole, particularly for the group of elderly in between 67 and 79 years of age. In Manglerud about every fifth inhabitant was more than 67 years of age, as to only about 12 percent in the city as a whole. This indicates that the city district has particular incentives for efficient provision of services to the relatively high proportion of elderly in the city district, and thereby also possibly high incentives for renewal thinking and innovation activities.

Table 4.1: Population development in the city district of Manglerud

Population development	01.01.2000	01.01.2001	01.01.2002	01.01.2003	Share of pop in city district per 01.01.2003	Share of pop in Oslo per 01.01.2003
67 yrs +	2649	2629	2636	2596	20,5	12,4

Source: Annual report of Manglerud 2003

At the overall level Manglerud spent about NOK 150 million on measures for elderly and physically disabled persons in 2003, about NOK 6 million more than the previous year of 2002. The running expenses spent on home based services for elderly in particular in 2003 amounted to about 20 percent of the total expenses for elderly and disabled, making up NOK 30 million only.

Table 4.2: Running expenses for Measures for elderly and physically disabled and Home based services for elderly (in 1000 NOK)

	Accounts 2002	Orig. budget 03	Reg. budget 03	Accounts 2003	Divergence reg. budget/ accounts 2003
Measures for elderly and physically disabled total	143 977	148 068	151 848	149 242	-2 605
Home based services for elderly	26 457	28 530	29 496	30 055	559

Source: Annual report of Manglerud 2003

4.5. The relationship between the actors of home based services

The initiatives affecting elderly living at home may be divided into three main groups of activities:

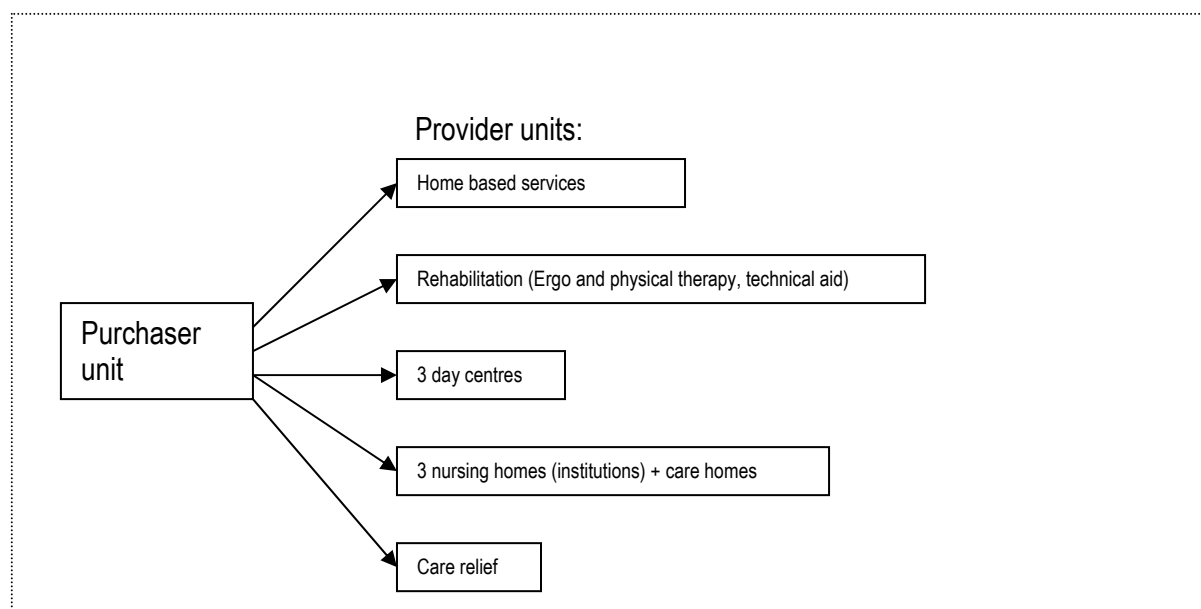
- Voluntary activities
- Home based services and
- Institutions

The three groups may be seen as a chain of initiatives. The goal of the system is to keep elderly persons as far “down” the chain of initiatives as possible, that is to keep persons in their own homes, with the help of a set of activities and services, as long as possible. Institutions are both the most expensive alternative to care for elderly and the solution which gives the elderly the least degree of autonomy over its own life.

The voluntary activities consist of e.g. elderly centre activities, food services (mainly transportation, two times a week to persons which are not included in the daily food service arrangement of the district organised mainly by the home help services), visitor and support services etc.

The home based services and institutions in the city district of Manglerud/Østensjø are organised according to a purchaser-provider model which will be the main topic in the section on innovation processes later in this report. Below is a short introduction of the organisational arrangements and the relationship between the various actors and units of the city district of Manglerud/Østensjø.

Figure 4.1: Purchaser-provider model in Manglerud/Østensjø city district



The purchaser unit has decision authority and orders services from the various service provider units of the city district. This model was introduced in 1999, and Manglerud was then the first city district in Oslo to introduce such a model.

The RO (Rehabilitation and Care) services³⁶ in the district of Manglerud consist of home nursing services, home help services and from 2004 also transportation services³⁷. The home based RO services are organised in groups of about 15 (wo)man years per group. The groups consist of both trained nurses, enrolled nurses and home helpers and are managed by a chief trained nurse. The responsibility of these groups is to provide a good overall service supply of nursing and care services to elderly in their own homes. This requires flexibility and the groups therefore work according to “the small integration”, where the services of home nursing and home helping services are integrated and coordinated. When resources are scarce there seems to be a prioritising of health related services, of which the home helpers take part in the more routine parts. Additionally the RO services are closely coordinated with the rehabilitation service unit and there is a continuous learning process going on between the RO teams and the rehabilitation unit.

The rehabilitation services are partitioned from the nursing services and organised in a separate pool, but are closely connected to the nursing and care services. The rehabilitation personnel perform its services within the whole area of the Manglerud/Østensjø city district. The services consists of ergo therapy and physical therapy. The rehabilitation unit has its own decision authority and thus manages according to its own objectives.

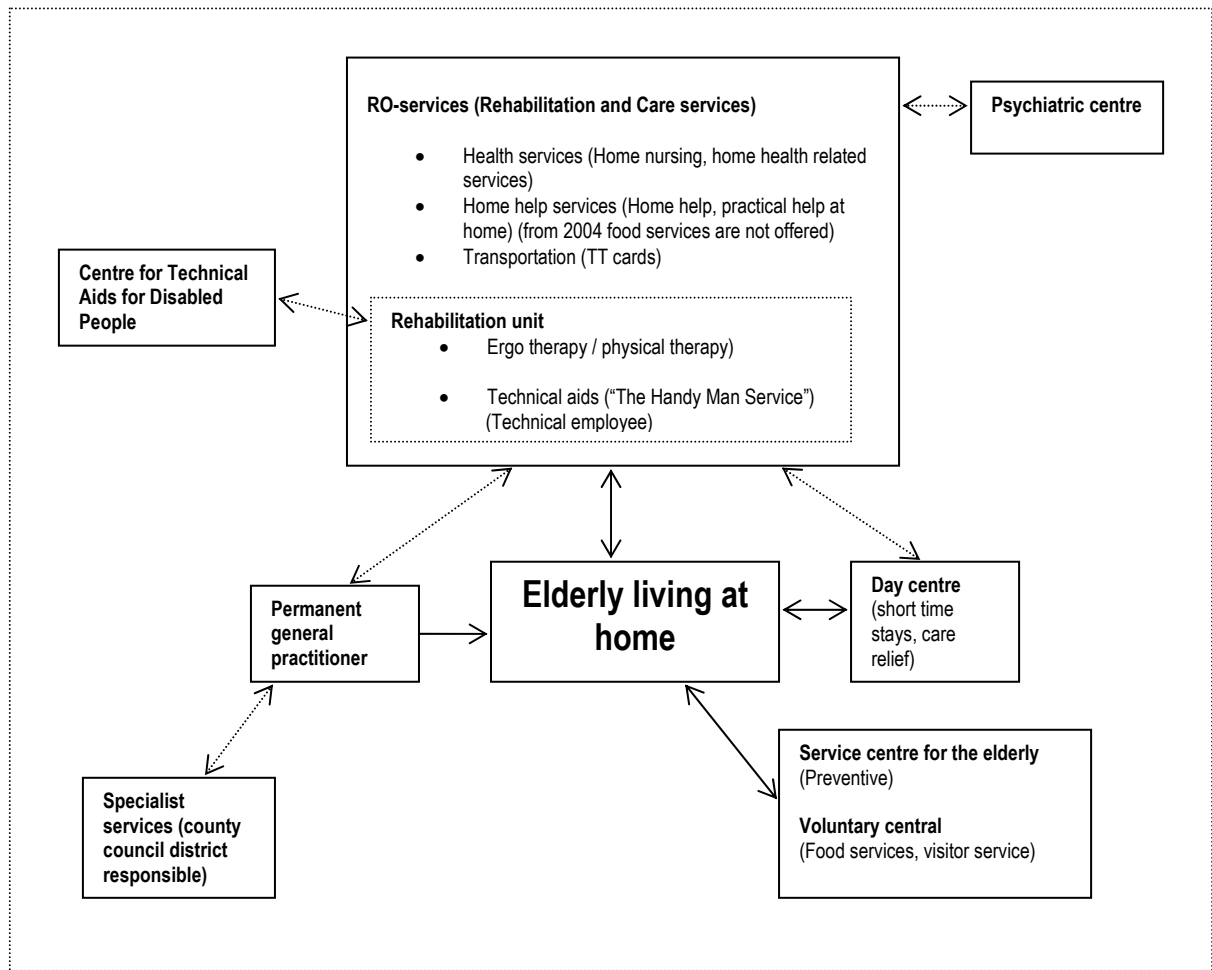
Included in the rehabilitation services is the provision of various technical aids to elderly. The rehabilitation unit evaluates incoming orders and places the orders of the technical remedies to The Centre for Technical Aids for Disabled People (one in each county council district). When receiving the ordered technical aid the rehabilitation unit is responsible of bringing the technical aid to the elderly at home, make the necessary adjustments and/or installations and train the elderly in using the new technical equipment.

The RO services are coordinated by the RO leader meeting which consist of the leaders of the various provider units depicted above, a representative of the purchaser unit, the head of the RO services, an economic advisor as well as a special consultant (an all-rounder) which has the responsibility of particular development or innovation projects in the city district of Manglerud/Østensjø.

³⁶ Until 01.01.04 called PRO services (Nursing, rehabilitation and Care services)

³⁷ From 01.01.04 the responsibility of transportation service for elderly (TT cards) was subjugated the RO services of the city districts. Previously this service was administered by the city of Oslo, the Communication department

Figure 4.2: The relationship between the actors and units in the provision of home based services for elderly in Manglerud/Østensjø

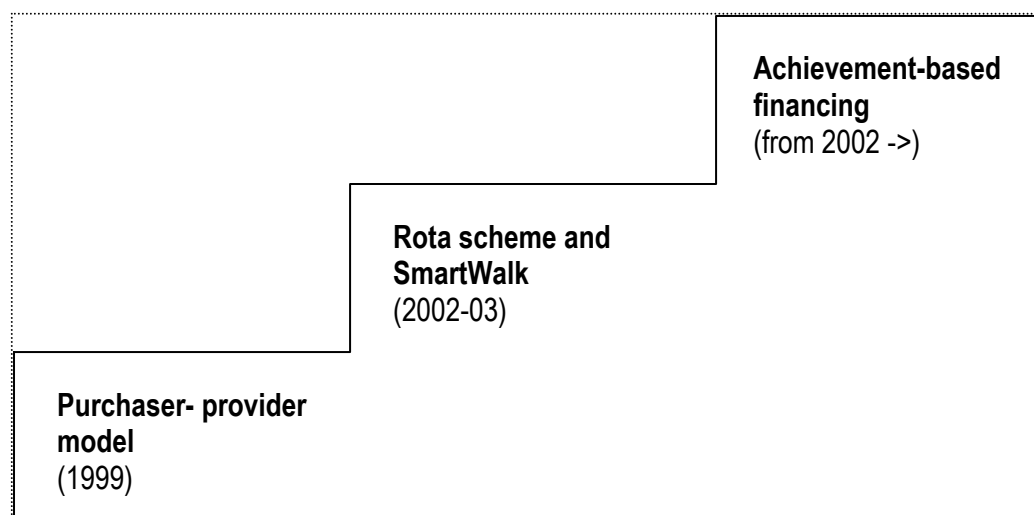


5. Innovation in home based services for elderly

5.1. The innovation processes of home based services to elderly

In this case study we will follow the innovative developments of the city district of Manglerud since 1999 when it was the first city district in Oslo to prepare and implement a purchaser-provider model, via reorganisation of the provider activities of the city district (introducing rota scheme and SmartWalk) to the development of a model for achievement based financing for the city district of Manglerud/Østensjø, however, not yet implemented. The renewal processes to be followed in this KISA case study may be presented as in the stairways model below.

Figure 5.1: The innovation processes to be studied in the KISA home based services for elderly case study in the city district of Manglerud/Østensjø



Purchaser – provider organisation

Below a general introduction to purchaser-provider organisation is presented, thereafter the implementation process in Manglerud.

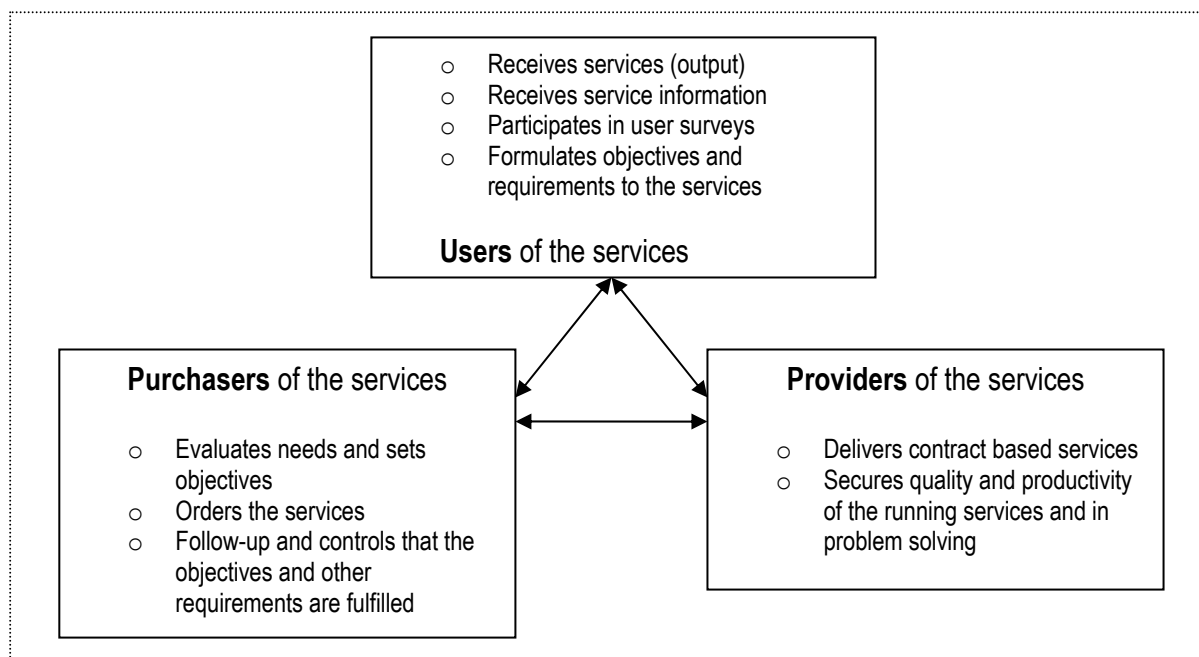
The purchaser – provider model has traditionally been used in relation to procurement of public service production and to secure legal qualification and order related to procurement processes. Local authority organisations have grown to large hierarchies which are difficult to govern and readjust. Experience show that various organisational changes e.g. purchaser – provider organisation, flatter organisational structures and explicit result units have a positive effect in relation to service production and the employees (Pape 2000).

An important principle in the purchaser – provider model is to make an organisational divide between those employees involved in defining the service requirements, perform control or attention with the carrying out of the services (purchaser function) and those employees that are in fact executing the production of the services (provider function). There are various organisational variants of this purchaser – provider model.

The purchaser – provider model does not present new roles, but makes existing roles more explicit. In Norway it is the local municipalities (or city districts) which have the responsibility for the provision of primary health and social services to the public. The political and administrative authorities in the municipality level have the responsibility to decide what services are to be offered, what volume to be offered, the quality level of these services and which criteria to be used for receiving public support. The local municipality decides whether the production of the services is to be produced by internal service producers or by external providers. The municipal (county) council may act as a purchaser related to a market and/or as a purchaser of services from the organisation internally. Usually the external provider is a private organisation totally or partly owned by the local municipality.

What regulates the relationship between the purchaser and the provider of services is the contract. The advantage related to an internal provider unit is that the purchaser retains the possibility to make re-ranking of priorities between the services, change the course of action, intervene etc. Meanwhile this advantage may pull down one of the most important building bricks in the purchaser – provider model, the principle of creating more explicitness and predictability in the purchaser – provider roles.

Figure 5.2: The roles of purchasers, providers and users in a purchaser-provider model



Some local municipalities have chosen a centralised purchaser unit closely connected to the town hall, both geographically and organisationally. Others have chosen a more decentralised solution closer to the provider area where the actual services are ordered. The decentralised purchaser unit most often has the responsibility for one service area, like for instance the nursing and care services. Many local communities in Norway have chosen to combine these solutions. Swedish investigations show that the separation of the service providing units and the administration might be too strong by using a centralised purchaser model. The flexibility might disappear and heavy and inappropriate procedures for executive

work might be developed. E.g. nursing and care services need a high degree of flexibility in the system because the needs of the service users may change rapidly and without warning.

The purchaser unit finances the running production of services of the provider units. The financing is based on the existing individual decisions of each user in the community or city district. The size of funding is dependent on the number of provider units and the unit costs of each provider unit. The purchaser unit is responsible for both needs evaluations and the formal assignment of services to users. The purchaser unit is also the application responsible unit.

The provider units are responsible for the direct service production and contact with the users, commissioned by the purchaser unit. The extent of the services offered is made clear in the individual decisions of each individual user. The provider units also have the responsibility to capture any changes in user needs that may have consequences for the services offered, and that a new needs evaluation should be carried out by the purchaser unit. The user has the possibility to influence on the services provided through its regular voting influence and through user surveys.

The implementation of the purchaser-provider model in Manglerud

Manglerud was the first city district in Oslo to implement the purchaser-provider model in 1999. The start-out situation before implementing the purchaser-provider model in the city district was that the city district got rather imprecise orders of home based care services for elderly from a variety of sources. The demands or requests could come from hospitals sending elderly people back home from being treated in a hospital, from the elderly themselves or from the relatives of elderly being concerned about the home situation of the old relative. In the pre purchaser-provider model situation the providers of the home based care services were responsible for defining the needs of the elderly of home care services, creating a problem of subjectivity when assigning the services. It was not easy to keep the two roles separate and evaluate the needs objectively. Related to the assignment of home based care services there was also limited control of the amount of time assigned to each elderly. One of the objectives of introducing the purchaser-provider model was to achieve a more impartial assignment of home based services for elderly according to an equality principle. Another was to shield the home based service providers from the storm of demands and requests for services put forward by the elderly users or their relatives. A third objective of introducing the model was to professionalize the case work of executing the individual assignments required for each user to receive home based services.

Due to the increased focus on keeping elderly in their own homes as long as possible there was also increasing needs for services offered to elderly at home. The financial resources allocated to home based care services did, however, not keep up with the increased needs for these services. As a result of these developments a pressure on how to control the resources for home based care services in a better way grew out. The answer to these pressures were found in the purchaser-provider model where one group of personnel were to be responsible for defining the needs of the elderly and to make the formal assignments of home based services, and yet another group of personnel responsible for executing the assignments. Before implementation of the purchaser-provider organisation there was a lengthy process of defining criteria for both the purchaser and the provider units. The PRO management team (4-5 persons) were responsible for the development of these specific criteria, and even after

the implementation of the model these criteria were revised several times due to feed-back from both the purchaser and the provider units.

Development and implementation of rota scheme and SmartWalk

In 2002 Manglerud undertook a first time mapping exercise based on self registering of the service providers of the home based health and care services in the city district. The main goal and objective of the time mapping was to increase the amount of *direct time* spent in the homes of the service users. The idea of increasing the direct user time was based on perceived “good practice” in other innovative municipalities regarding home based services for elderly. The management of the city district presented this efficiency goal to the home based care for elderly unit and there was an explicit expectation that this goal was to be obtained amongst the providers of home based services for elderly in Manglerud. The ideal time distribution was pre-set to be 60-40 (percent direct user time and indirect user time) for home nursing employees and 70-30 for home helpers. The rather strictly executed mapping exercise registered the direct time spent with users within their own homes as well as indirect time spent on tasks helping the users in other ways, but not undertaken in their homes (like running errands to the pharmacy, shopping for the elderly, bank visits etc) as well as administrative time including documentation (reporting activity), meetings, training, course participation etc of the service providers.

Prior to the time mapping exercise and reorganisation of the provider units many myths or subjective views connected to the time spending of the home based health and care services in Manglerud prevailed. The actors of the home based service system believed that a very high share of the time was spent in direct contact with the users. The actual time mapping thus showed a more diversified picture than expected. Additionally the efficiency of providing the home based services was found to be rather low, a surprising fact to the provider units that had themselves been in charge of the time study. The providers of the home based services had a feeling of working very hard. The question was how to improve the organisation of the home based services in the end to be able to offer improved services to the elderly living at home.

One innovative measure introduced was the development and introduction of the IT based steering system of SmartWalk. Another and closely connected innovation was a rota organisation of the various (4) home care provider units of the city district of Manglerud.

SmartWalk is a reporting system which couple working lists of employees in home based services for elderly (both home nursing and home helping), the lists of users and their explicit assignments³⁸ (allotted by the purchaser unit) and thereby the system provides a distribution of workload on the various home care providers participating in the rota scheme. The steering system provides control regarding who performs what in the home based service system and gives the service provider management flexibility regarding optimal utilisation of the manpower resources needed at any time. The system gives the leading nurses greater managing space. SmartWalk provides good indications regarding which days

³⁸ The SmartWalk system is not compatible with the existing patient registering system (Gerica) of the city district. One of the draw-backs of the SmartWalk system for the time being is that much time and resources are used for registering the users and their assignments into the SmartWalk system, which easily could have been transferred from Gerica to SmartWalk. Due to the recently accomplished city district reform (01.01.04) in Oslo the harmonisation of the two systems is delayed and will not be operative before early 2005.

will be busy and which may be used e.g. for course participation, professional up-dating, training and common meetings in the provider units.

The introduction of the SmartWalk system required that most of the home service providers joined in a rota scheme. Traditionally the home helpers of the system had only been working day time providing practical services to the elderly at home, while the home care workers, like trained and enrolled nurses, had been working according to a rota scheme at most hours of the day. Rota organisation creates increased flexibility in the use of the various home service providers. A manpower plan may be worked out according to the assignments of the users of the city district. The required manpower must carefully be estimated according to the various needs of either home helpers, trained nurses and enrolled nurses in various parts of the day. While introducing the rota scheme to all home service providers the home helpers were at the same time given enlarged responsibility for easy care tasks related to the elderly at home. These care tasks could e.g. be to help the elderly get out of bed in the morning, getting dressed, help out making breakfast, go to bed at night etc, not only practical services like cleaning, shopping etc. On the one side this expansion of tasks and responsibilities provides flexibility to the system of home based services to elderly and on the other side the home helpers got higher salary due to increased payment rates in the afternoon and evenings.

The home based services are now thus divided into service groups with the total responsibility for both home care services and home nursing services in various sub districts of the city district of Manglerud/Østensjø, what is termed “the small integration”. As a result of this reorganisation many users now have to relate to new service providers, and many users have reacted negatively to this.

While introducing SmartWalk as an organisational innovation in the provision of home based services for elderly it was perceived that there was less need for daily reporting meetings amongst the range of service providers of the sub-groups of the city districts. These short (half an hour) meetings were removed and substituted by written reporting activity and more thorough weekly meetings. The review of the routines of the system also resulted in a more faired cooperation with general practitioners, pharmacies and other actors of the enlarged system of service providers surrounding elderly living at home (not part of the scope of this particular case study).

The reorganisation process of Manglerud is a part of the development towards achievement based financing and should be seen in relation to these later developments. The main rationale of the reorganisation and introduction of the SmartWalk steering tool was to be able to dimension the resources needed for the provision of home based services for elderly in the city district in a best possible way according to the assignments made and thereby the needs of the elderly.

Achievement based financing

The situation before starting out the process of introducing a model of achievement based financing was the implementation of the purchaser-provider model and the reorganisation of the provider units of the city district. The dimensioning of the provider units were, however, based on tradition only and not on critical evaluation of what the optimal or right level of service provision might be etc. One of the main triggers of the process of achievement based

financing was therefore an outspoken need to analyse the dimensioning of the home based services.

The need for renewal activities and innovation related to the dimensioning of services defined by the city district was eventually brought into a national project financed by KS and the Ministry of Local Government and Regional Development (KRD) in the period 2002-2003 called “Municipality network for renewal and efficiency improvement” and the idea of achievement based financing was further developed there.

Efficiency network participation

Since May 2002 Manglerud has participated in this efficiency network. The network project includes a variety of fields or themes where communities and city district cooperate, such as education, nursing and care services, child care, child welfare, building affairs and social services. The network of Manglerud consists of three other Oslo city districts. The particular focus of this efficiency network is efficiency improvement, quality development and the degree of services coverage in the various city districts and local communities participating in the network. In the network Manglerud focus mainly on home based services and nursing homes.

The network collaboration includes various ways of looking at prioritising, evaluations of quality and costs of the services. Key statistics from the yearly reporting of costs and production, user surveys and self-reporting of the districts are important indicators and information used to enlighten the key themes of the network. Additionally the network chose to carry out time studies of the providers of home care services (as Manglerud had already undertaken in 2001, see above). Based on all these indicators the participating city district use one another to benchmark and communicate experiences, possible reasons for differences in performance and costs as well as possible ways of improvement and renewal activities.

Before joining the network Manglerud had the lowest cost of services per client (user) in the home based services as well as the highest user satisfaction. At the same time the city district had the lowest number of clients (users) per employee in the home nursing services, while home care services had a higher number of clients (users) than the two other city districts of the network.

Whenever an assignment of providing home based nursing services to a client was made the mapping showed that it was also quickly effectuated in Manglerud. Actually making the service assignments on the provision of home care services were, however, a slower process. Compared to the other districts in the network Manglerud used more resources on institution care than home based services.

The user survey undertaken in relation to the efficiency network showed that the user satisfaction in Manglerud was generally reduced since the previous survey undertaken in 2000 (ISIT 2000). This was, according to the city district, an expected result due to the recent reorganisation of the provider units of home based services for elderly (the introduction of the rota scheme).

The user survey also showed that there were certain problems related to effectuating service assignments in Manglerud. The user survey uncovered that the home based services in

Manglerud had poor routines and that service assignments were left undone if certain employees were sick. The result was that the home care services were not delivered according to the assignments.

The main reason for joining the efficiency network was primary that Manglerud wanted to become more efficient. The city district has always participated actively in relevant modernising and efficiency improving projects focusing on learning and interaction in dialogue with other actors.

The process of developing a model of achievement based financing in Manglerud

The renewal activities and idea process of developing more efficient dimensioning and thereby more efficient and better home based services to elderly in Manglerud was headed by the management group for home based services in the city district. The process was for all triggered by the introduction of the purchaser-provider model, the challenge of dimensioning the provision of services as well as the budget cuts from the city district management (bydelsledelsen).

In parallel with participating in the efficiency network Manglerud has engaged in a separate project concerning achievement based financing of services, where the main focus has been to estimate the prices of the service products being offered to the users. The fundamental principle of achievement based financing is that the city district gets funding according to the costs connected to the actual service provision of the city district (in this case nursing and care services), not a lump-sum budget as is the case today. Supported by KS and the Ministry of Local government and Regional Development (KRD) the municipalities of Kristiansand and Trondheim have introduced two different models of achievement based financing and there has been an evaluation of these pilot municipalities.

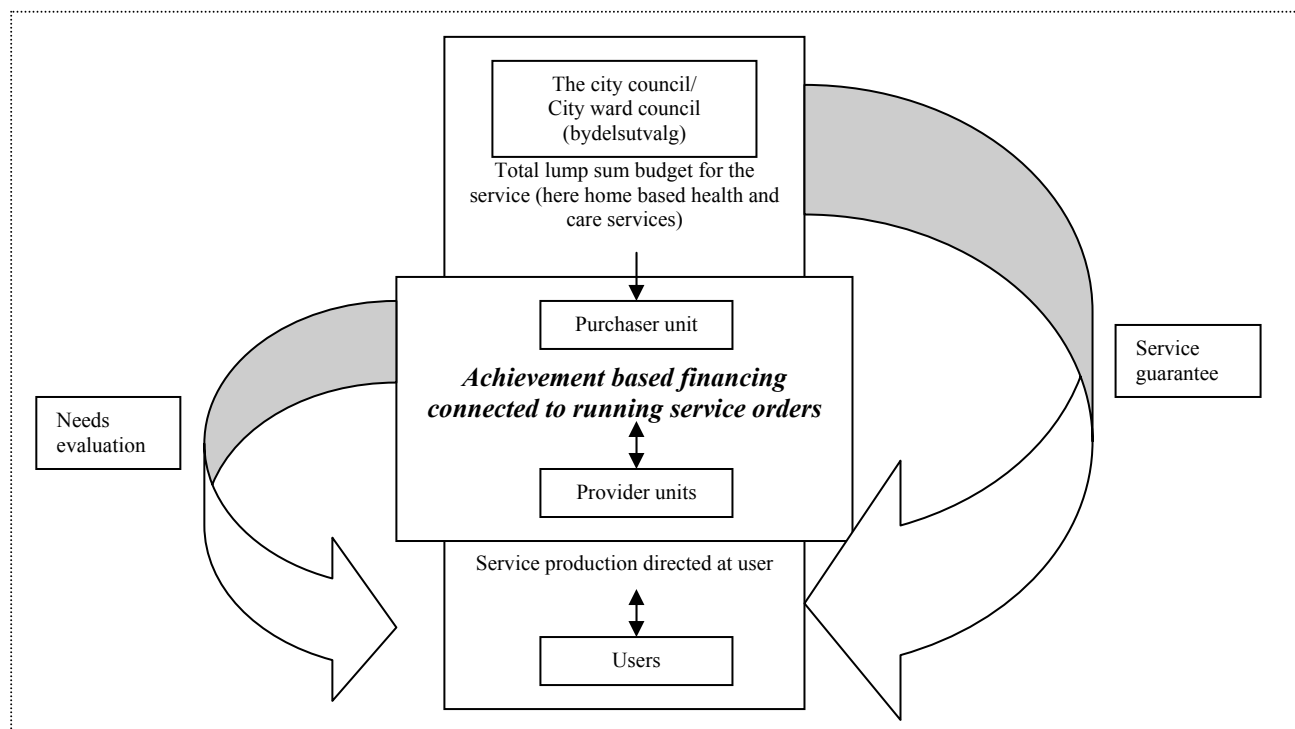
The main difference between the two models of Trondheim and Kristiansand is that the Trondheim model is based on the predefined needs weight of the user (bruker-tyngde). Each individual user is evaluated regarding what services he or she needs to be able to live at home and then the services needed to fulfil this need is priced. The funding allocated the service providing unit is based on the varying degree of user weight. The Kristiansand model is on the other hand based on a system of pricing the services offered by the provider unit (e.g. the price of one unit (hour) of home care service).

Being the first city district in the capital of Oslo to introduce the purchaser-provider model of coordinating and organising orders and provision of health and care services Manglerud also wanted to be a pilot city district in Oslo regarding the introduction of achievement based financing. A proposal for acting as such a pilot city district was, however, rejected by the city of Oslo main administration (The city council of Oslo). Manglerud thus introduced the innovative thoughts and ambitions to the efficiency network and gained support for this idea by the administrators of the network project. The innovation process of developing a model for achievement based financing in the city district of Manglerud has been elaborated further within the efficiency network. The present status of the project is that Manglerud is granted pilot city district status together with three other Oslo city districts³⁹.

³⁹ The future of the project is still not clarified, but the mandate of this working group of pilot city districts is to develop an achievement based financing model particularly adopted the specific framework conditions which apply to the city of Oslo and its governing and financing structures.

Manglerud has based its innovative model thinking on the Kristiansand model of achievement based financing, but with particular adaptations because of the specific governance system in the City of Oslo. The main focus of the common model is presented here and in the figure below the application range of achievement based financing is introduced.

Figure 5.3: The relationship between the actors involved in an achievement based financing model



Source: KS/Ernst & Young, 2003

The city council (or city ward council in the city districts of Oslo) decides annual lump sum budgets to finance the services provided by the local community or city district. The purchaser unit in the communities or city districts administers the lump sum budgets at the local level. Through service guarantees the politicians in an indirect way decide the quality and cost level of each individual service offered to the users.

The achievement based financing model forces the purchaser unit to pay more the more services it orders from the provider units. The costs related to the level of activity is the responsibility of the purchaser and therefore also the responsibility of the politicians. The objective of the provider is on the other hand to produce the ordered services to the costs equal to or lower than the financing following the order. In this model the city council/county council is responsible for activity divergence related to the budget assumptions, and the provider units is responsible for efficiency divergence related to the estimation assumptions.

It is important to separate variable and fixed expenses in an achievement based financing model, and therefore it is adequate to divide the financing in two, that is into short term and long term achievement based financing. Short term financing is the funding of provider expenses which are thought to vary according to the activity level and the orders within a rather short period of time (monthly). Long term financing is the funding of provider costs

which may only be affected and changed within a longer time span (quarterly, biannually or annually).

Consequences of achievement based financing

Achievement based financing may have consequences for the organisation, the politicians and the users of the services offered. One of the consequences for the organisation of the services is that the production conditions of the service provider become clearer and more predictable. Because the financing is less dependent on the activity level of the provider units the units to a higher degree may be in the position of levelling out the total work load of the employees and possibly reduce the high sickness absenteeism. Additionally the distribution of funds becomes better and fairer. Also efficiency comparisons between the provider units will be more just.

The main objective of achievement based funding is to obtain a more efficient allocation of resources in the city or municipality. By giving the sub units the possibility to keep their own profits better incentives for efficiency improvement is created. The largest potential for efficiency increase is probably to be obtained through good management and efficient manpower planning (Ernst&Young, 2003). The sub units are entitled to keep 90 percent of potential profits, but must at the same time be responsible for potential deficits. Based on time studies the unit prices are estimated from the average situation of the provider units the previous year, incorporating over capacity, sickness absenteeism and possible inefficiencies. The focus of efficiency improvement is thus on manpower planning according to the demand for services.

By using the purchaser-provider model in combination with achievement based financing the politicians should be in a better position to manage the economy of the city, city district or municipality. The systematic registering of service production gives a better overview and control of the production as well as an improved basis for decision making. It is assumed that the focus to a higher degree will be on the content and the quality of the services than on saving costs. The reporting of service production will also simplify predictions about future service needs. If the lump sum budget assigned for the various services seems to be exceeded the politicians must either allocate more funding, reduce the activity and/or the quality of the services offered or increase user payments.

For the users the purchaser-provider model provides a more uniform executive work and service offer. Independent of whether the activity level locally is higher than expected in the budget the total service provision offered to the user is secured.

5.2. Drivers and hampering factors for innovation in home based services for elderly

Information from the in-depth interviews indicates that traditionally the actors of the system of providing home based services to elderly seem not to have had a very conscious attitude to renewal and innovation activities. The services offered to elderly at home have been executed very much in the same manner by tradition without particular needs of change and innovative thinking. Traditionally the local government level and service providing units have rather passively received lump sums to finance, administer and deliver home based

services to elderly with limited incentives to increase efficiency and thereby to provide new or improved solutions when delivering, organising or administering the public services. However, in later years the cash flow from the state as been substantially limited and the local actors have been forced to think more creatively. There has been an increased focus on efficiency processes and cutting costs related to the provision of public services. Generally less financial resources is available to the local service level to provide home based services and at the same time the span of services to be provided has been extended. This climate has created a certain pressure for change and innovation. Manglerud seems to have been in the forefront of this development, being proactive in developing new solutions for organising and providing home based services to elderly imposed on the local government level by law.

Drivers and hampering factors of innovation processes

As highlighted above traditionally the actors of the system of providing home based services to elderly seem not to have had a very conscious attitude to renewal and innovation activities. The changed framework conditions related to less available financial resources for the provision of services has created a somewhat more innovation or renewal related culture in the sector. A general view in the sector seems to be that a high degree of adjustment and adaptation ability at all levels of the sector prevail, upholding a great tolerance for change amongst the actors of the system.

In relation to the innovation processes followed in the case of Manglerud some important factors influencing and determining the innovation processes of the city district emerged. These are:

- Political level barriers
- Top-down innovation by the management
- Service providing level barriers and possible innovation drivers

Political level

One of the main barriers of innovation in home based services for elderly at local level mentioned through the in-depth interviews seems to be the hampering factor of political split regarding planning processes and longer-term priority setting at the local government level (city district/municipality politicians). Home based services for elderly is subjugated a bureaucratic assignment system and many actors must come to agreement in order for renewal processes to take place. Experience of interviewees seems to indicate that cooperation and general agreement at the city district/municipal political level regarding the quality of the services as well as harmonized long-term goals is a basic foundation for innovative thinking and the initiation of improvement processes related to home based services for elderly at the local level.

Another hindrance to innovation in home based services to elderly are the many rules and regulations that must be taken into account in this area of activity. Rules and regulations often contradict and over-rule one another and creating barriers to innovation and renewal activity in home based services for elderly. New ways of doing things may conflict with some of these rules and regulations. The rules or regulations inhibiting innovation might for instance affect the rights of the employees related to home based services for elderly (agreed to in framework agreements) as well as the rights of the users of the home based services.

An example of this dilemma is the fact that once a user is granted the right to a certain home based service it is not possible to withdraw this right.

For the particular city district of Manglerud/Østensjø the governance structure of the city of Oslo is an additional barrier to unhampered renewal activity because of the fact that many decisions are not to be decided at the local city district level, but require the approval and support of the city of Oslo administration at an aggregate level.

Top down innovation by management

One of the characteristics of the innovation processes followed in this case study of home based care services in Manglerud/Østensjø is, however, that new ideas, the innovations or renewal activities, seem mostly to originate at management levels. The informants both at the service provider level and at the service management level hold that generally innovation is a top-down activity. The management level includes the levels above the practical service providing level and includes either the management level of the city district or the management level of the range of home based services for elderly as such (the RO management). The Kristiansand interviewees held that management, education, knowledge, together with the employee organisations represented in the sector as well as the agreement frameworks of the sector, is what decides the innovation culture of the sector. To a large degree innovation processes are steered from the management of home based services, they emphasised.

Service providing level barriers and possible innovation drivers

The service provider level is characterised by its particular focus on executing practical, operational work for the users, either home nursing or home helping services. Service providers hold that many change processes related to the home based services have been undertaken during the later years and these have been rather positively welcomed, however the provider level now seems to be rather weary regarding change processes. To be able to act as a possible source of innovation the provider level seems to need a certain period of absence of change.

Generally the attitude related to innovation and change depends rather strongly on how the innovation and change processes are presented to the provider level. It seems as if active participation in the change and innovation processes, being included in the processes from the initial stages, is of vital importance for the innovation and renewal processes to be accepted amongst the operational providers of home based services to elderly.

An outspoken policy in Manglerud is that good ideas of renewal activities or innovations should be communicated and if possible developed further, regardless of where in the service system the ideas emerge. There are examples of “bottom-up” initiatives as well as more “top-down” initiation processes of change and innovative ideas. However, one factor claimed to be inhibiting the process of bottom-up innovative initiatives is that employees at the more practical service providing level generally have more limited knowledge about public administration procedures, the decision structure and the delegation systems. This means that new ideas arising from the service level employees may not take these structural settings into consideration to a sufficient degree and will therefore be inhibited from being developed further.

Also at the service level there seems to be certain barriers for innovation, many of which held to be connected to the stock of employees of the home based services for elderly. One of the hampering factors at the service level pointed out by interviewees of the managerial level of home based services is the fact that the service providing employees are often very focused on executing their specifically assigned service tasks and are therefore not really directed or focused on improvement or innovation activities that might renew the service provision in particular and the system of home based services in general. The service providers are too busy with the production of running services, all year round, and are not in the position of placing the provision of services on hold to be able to focus on developing innovative initiatives, some of the interviewees hold.

On the other side interviewees belonging to the service provider level hold that what is hampering innovation is that the operating or service providing level to an insufficiently degree is integrated into the processes of developing new ideas for innovation. Active participation by the provider level is of vital importance and creates loyalty, anchors the innovation processes in the organisation and creates understanding for the importance of such innovation processes, they hold.

Another important impeding factor pointed out in relation to innovation in home based services for elderly is the general lack of skilled employees in the positions needed within the system. For the system to be able to function properly, to thrive and be focused on renewal and innovation activities an imperative is that the positions are held by professionals.

A related but contradictory factor pointed out is that profession conflicts is prevalent within this sector and that this may be a barrier to innovation in it self. The various professions (trained nurses, enrolled nurses, home helpers etc) have different understandings of how things are to be handled in a best possible way and use different terms when communicating with each other. The question is whether professional conflicts are more prevalent in this particular setting than in other settings.

6. KISA in innovation in home based services for elderly

6.1. *KISA in home based services for elderly in Manglerud/Østensjø*

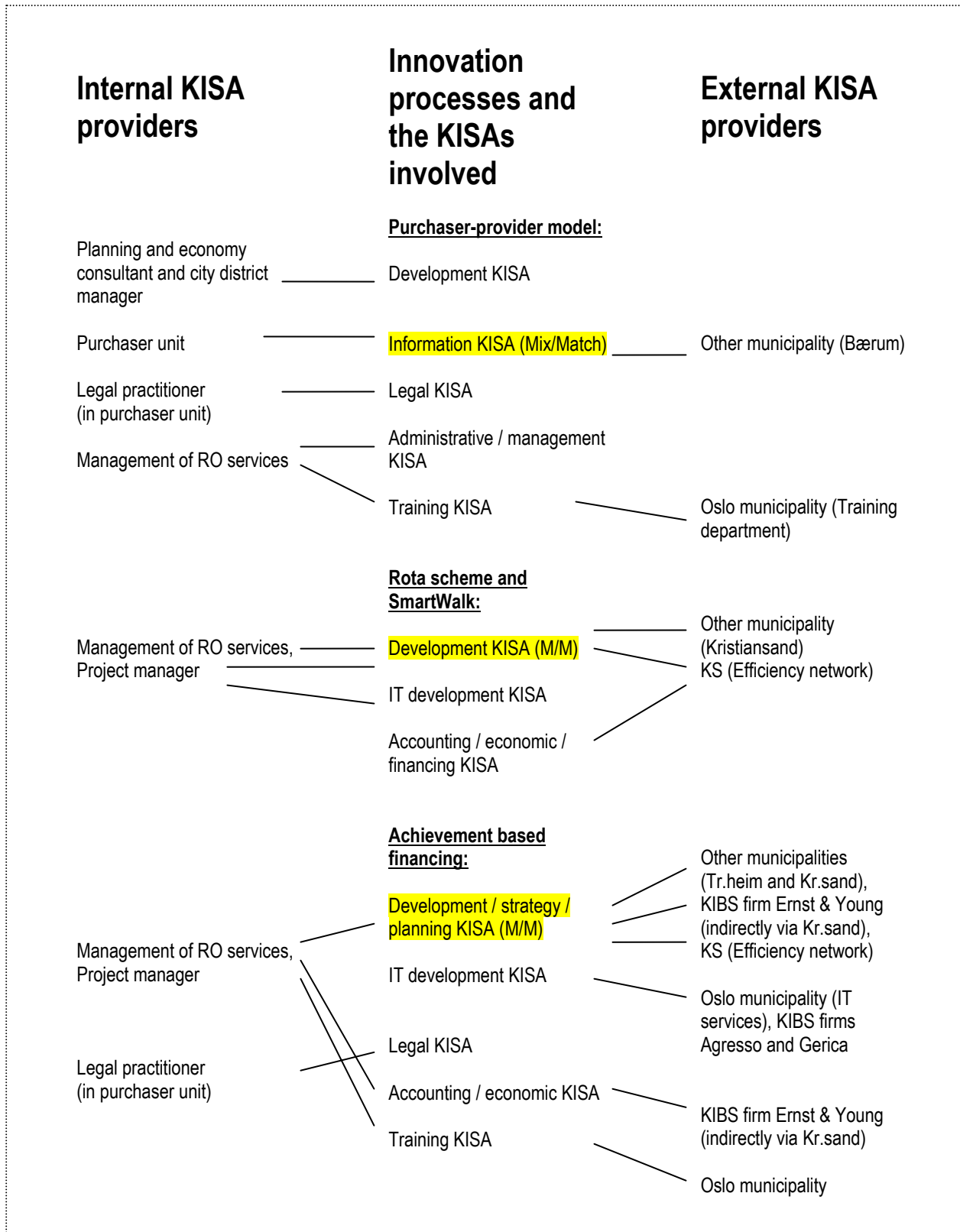
Knowledge-intensive service activities (KISA) may include the acquisition of service activities from external sources, but it also includes various forms of non-traded internal supply of service activities with an organisation. In this chapter we will present what internal and external KISA have been used in the process of developing and introducing the key innovative processes of purchaser-provider organisation, rota scheme organisation and SmartWalk as well as the planning and adaptation of an achievement based financing model in the public sector organisation of Manglerud/Østensjø city district in Oslo. We will also focus on what KISA are particularly important in relation to the mix and match of competences between internal and external KISA providers and the appurtenant interplay and common action needed to be able to provide these knowledge intensive service activities (KISAs).

As defined in section 1.1 KISAs are innovation services provided either internally or externally to a firm or organisation, with innovation services understood as services related to the development of an organisation and its patterns and objectives of innovation. Innovation services may be related to a variety of innovation activities in an organisation such as developing new (service) products or concepts, improving or creating new ways of producing the (service) products (also termed process innovation), new ways of delivering the (service) products, organisational or administrative innovation etc.

The reasons to provide particular knowledge-intensive service activities internally to organisations or firms or to acquire the KISA from an external provider vary between firms and organisations. In the private sector the transaction cost theory (Williamson, 1975, 1991) is often used to explain the propensity of firms to externalise or internalise such activities, however, the theory may also be used to explain the production or utilisation of internal and/or external KISA amongst public sector organisations. Certain activities are expected to be of core importance to the organisation in question and thus provided internally in the organisation. Other activities perhaps perceived less critical to the core activities of the organisation might be acquired through external suppliers. These issues will be the main focus of this chapter in relation to innovation in home based services for elderly in the city district of Manglerud/Østensjø.

Introductory we present a figure containing the innovation processes which have taken place in Manglerud/Østensjø since 1999 and the most important knowledge intensive service activities related to these development processes in the organisation of home based services for elderly in the city district (middle column). The lateral columns indicates either internal (left) or external (right) provision of the knowledge intensive service activity at hand. In some cases the KISA is provided in collaboration and interaction between internal and external providers.

Figure 6.1: The innovation processes, knowledge-intensive service activities involved and internal and external KISA providers partaking in the project life cycles of the identified innovation processes of Manglerud/Østensjø.



6.2. *Internal KISA*

Studying internal knowledge-intensive service activities in the setting of home based services for elderly is not an easy task. At a general level, the knowledge-intensive service activities (KISA) may be seen to be the sum of all contributions into the innovation processes chosen to be followed in this case study. The contributions are focused on developing practical solutions related to the renewal and restructuring processes of the city district in later years.

Internal KISA providers are defined as personnel providing knowledge intensive service activities and which are employed by the city district of Manglerud/Østensjø. This means that internal KISA providers are not delimited to employees in the particular area of home based services for elderly, but may include e.g. personnel in the purchaser unit of the city district. It does, however, not include personnel employed by the city of Oslo. These are regarded as external KISA providers.

Knowledge intensive service activities have traditionally been treated as activities directed towards private business firms, not public organisations, units or actors as in the present case study of home based care services for elderly. Some of the traditional KISAs considered in relation to private sector firms may perceivably not be relevant in relation to the service supply to elderly people living at home, but some of them may be. Based on experience from previous KISA mappings in private sector firms an adapted list of possible internal knowledge intensive service activities in public organisations is presented below. The potential internal KISAs related to innovation in home based services for elderly include:

- R&D services (focus on development work)
- Development / introduction of new IT systems (for internal use)
- Services related to information about the services offered etc.
- Legal service activities
- Administration / management activities (in general)
- Accounting and finance services
- Organisational development / team building
- Project management
- Training
- Recruitment
- Strategy / business development

Below we will consider the various internal KISAs utilised in the three distinct, but highly connected innovation processes chosen to be investigated in the city district of Manglerud/Østensjø.

Purchaser-provider model

Related to the implementation of the purchaser-provider model in Manglerud in 1999 mostly internal KISA have been identified and found relevant by the interviewees. The most important knowledge intensive service activities mapped and the internal providers of these KISAs are presented below. The internal providers include the RO management, planning and economy consultant and city district manager at the time, the purchaser unit in general

and the legal practitioner specifically. The KISAs provided include development KISA, information KISA, legal KISA, administrative/management KISA and training KISA.

Development KISA

In the process of developing, adjusting and implementing the purchaser-provider model in Manglerud quite some development work was undertaken. In general the interviewees enhanced that the city district to a large extent always has been process driven and heavily involved in development work. Continuous development work has been the strategy and focus of the city district management for many years. This attitude is reflected in the fact that it was the city district manager, together with a planning and economy consultant which were the “midwives” of the innovative processes of introducing the purchaser-provider model in Manglerud as the first city district in Oslo in 1999. Most of the development and preparation work was undertaken by these pioneers, and the executing, adjustment and implementation of the purchaser-provider model was undertaken in cooperation with the management team of the RO services of Manglerud.

A totally new purchaser unit had to be established and employed with new employees. The employees of this new unit were multi-disciplinary recruited by previously internal personnel. Additionally the provider units were reorganised according to “the small integration” principle. Previously the various provider units of home nursing and home help had been organised in separate pools of employees. Simultaneously to the introduction of the purchaser-provider model employees of the home nursing and the home helping units were merged, placed under common management and sub divided into joint working groups. The innovation process of introducing the purchaser-provider model involved extensive organisational development activities of the management team of home based services for elderly in the city district of Manglerud.

Information KISA

The newly established purchaser unit developed information material about the organisational renewal of the city district, another important knowledge intensive service activity in the process of introducing the purchaser-provider model. The purchaser unit utilised and learned from the experiences of another municipality in the Oslo area, Bærum⁴⁰, which had already introduced the purchaser-provider model, to work out information letters to the elderly users of home based services in the city district. It was important to inform the service users that their service assignments would be changed and that they would be approached in a different way than before. The new aspect of this way of organising the public service provision was that the users were to be approached by a purchaser unit and that this unit should evaluate the needs of the elderly (in cooperation with the service providing unit, particularly if changes in the needs of the elderly occurred). One of the innovative aspects of the new organisational model that the purchaser unit would be responsible for the assignments of the home based care services, not the traditional service providers.

⁴⁰ Bærum municipality introduced purchaser-provider organisation in 1996 (?)

Legal KISA

Due to the change in assignment procedures of the users of home based services the development team of the city district had to check the new model against existing legislation. In the newly established purchaser unit one of the first employees to be hired was a legal practitioner to take particular care of this knowledge intensive service activity internally in the purchaser unit.

Administrative/management KISA and Training KISA

One of the most important management tasks in the process of implementing the purchaser-provider model was the “de-learning” of employees in the system of home based services for elderly. Previously the responsibility of defining the needs of the elderly was in the hands of the managing trained nurses of the city district. When introducing the purchaser-provider model the trained nurses were restrained to manage the provision of services according to predefined orders only, and this required adjustments and adaptation amongst the providing unit employees, particularly the trained nurses. The trained nurses felt they were deprived of important tasks in their job. An important KISA of the RO management of the home based services for elderly was to de-learn and train the home based employees in their new roles as providers of services and at the same time the important role as collaborators with the staff of the purchaser unit.

The importance of information activities and training of the internal employees in relation to the implementation of the purchaser-provider model is supported by the information from the interviews with the municipality of Kristiansand. Training KISA seemed to be the most important knowledge intensive service activity conducted by the management of the innovation project of introducing purchaser-provider organisation in Kristiansand. In the aftermath of the process it seemed as if the process management had underestimated training KISA. This was particularly the case regarding training activities directed at “middle management” where, as in Manglerud, the resistance against the administrative and organisational innovation was the greatest.

In Manglerud the management team of the RO services, particularly the manager of the newly established purchaser-provider unit was very conscious about creating a positive collaborating environment when implementing the organisational innovation of the purchaser-provider model. It was considered to be of particular importance that the personnel to be employed in the new purchaser unit had to be very familiar with the tasks of the provider units of home based services for elderly and have the much needed credibility amongst the providers of the service system. Most of the employees of the purchaser unit were thus also recruited from within the service provider system itself. A formal cooperation agreement was developed between the purchaser and the provider units of home based services for elderly.

Rota scheme/ SmartWalk

Below the various internal knowledge-intensive services activities (KISAs) connected to the introduction of the rota scheme and the appurtenant development of the SmartWalk IT system are presented and the internal KISA providers of the system depicted. The providers of internal KISAs are mainly confined to the RO management team and the concomitant

project manager of the “innovation project” of developing and implementing the rota scheme and the SmartWalk. KISAs include development KISA, IT KISA, Information KISA and Accounting/economic KISA.

Development KISA

As emphasised in the innovation process of introducing the purchaser-provider model above there seems to be a general focus on development activities in the management of the home based services for elderly in Manglerud/Østensjø (RO management). The development KISA connected to the introduction of the rota scheme and SmartWalk was particularly connected to one person in the RO management team appointed to be responsible for development activities of the home based services section of the city district, in one way a “R&D” function of the home based services for elderly.

Due to her position and function as a development employee her task was to be in charge of the change processes to obtain the overall objective of increased amount of direct time spent with the elderly users of home based services. This person, with the assistance and backing of the RO management team, was responsible for developing, planning and executing the various innovation phases of the processes, the rota scheme itself as well as the IT based SmartWalk steering system (see below). First in the implementation phase the managers of the provider units became actively involved in the innovation process by taking the newly developed SmartWalk system into use.

IT development KISA

As introduced above the steering tool of SmartWalk was developed by the assigned development responsible person in the management team of the home based services in Manglerud/Østensjø. Basically the new and innovative creation of SmartWalk was to integrate the working lists of all employees of the range of home based services to elderly and the assignments of the individual elderly users of the city district to obtain the best possible allocation of resources to perform the home based services in an optimal way. The innovation itself was not technologically sophisticated. SmartWalk was a rather simple Excel based system, combining well-known variables of the home based service system in a new and innovative way, creating an incremental and reengineering innovation.

Achievement based financing

In the process of planning, developing and preparing to introduce a future model of achievement based financing in the city district of Manglerud mainly the RO management has been actively involved in providing the internal knowledge intensive service activities. The KISAs involved in the process so far include: development / management KISA, IT development KISA, accounting / economic KISA, training KISA as well as strategy / planning KISA. Additionally the legal practitioner of the purchasing unit has been involved in the provision of legal KISA.

Development / management KISA

Like in the other innovation processes followed in this study of innovation in home based services for elderly in Manglerud/Østensjø the RO management team has been the active development agent regarding the process of achievement based services. The process of

developing the idea of achievement based financing in Manglerud/Østensjø was triggered by the preceding processes described and analysed in this study, the introduction of purchaser-provider model, the challenges of dimensioning the right level of home based services, the time studies conducted as well as the deteriorating financing situation of the of the services to be provided to the elderly.

The input of ideas for the development of an achievement based financing model in Manglerud has been provided by external KISA providers (to be presented in a later section).

Legal KISA

In the development and adaptation process of the achievement based financing model in Manglerud/Østensjø the legal practitioner employee of the purchaser unit has been consulted in order to find out in what way the assignments of the elderly must be shaped and how the model will have to be practised when implemented.

Accounting/ economic KISA

One of the most important KISA of the actors participating in the innovation processes of improving and renewing the administrative organisation of home based services for elderly in Manglerud is economic competence and capability. Economic insight and knowledge is perhaps *the* most important competence in relation to controlling the costs of personnel in the area of local nursing and care services because more than 98 percent of the operating or production costs of the home based services in Manglerud may be ascribed personnel costs.

A local economic system has systematically been built up over the years in Manglerud and during this process the managers of the service provider units have been included and trained in using the system. This has born fruits in relation to economic competence build-up amongst employees with management responsibility of the provider units⁴¹.

This build-up of accountancy / economic KISA has been an important internal preparatory measure (KISA) making at least the management of the home based service and the provider units prepared to introduce achievement based financing as a principle for the future. The build-up of economic competences internally has prepared ground for a good understanding and evaluation capability of actual resources available internally (both human and financial) and of the pricing of internal services provided in Manglerud, both important input variables into the achievement based financing model.

Accountancy and economic knowledge about the actual achievement based financing model chosen by Manglerud has been provided by external providers (to be presented in a later section).

⁴¹ Related to the development of the local economic system Manglerud has e.g. removed the “grey” (unclear) positions much used in the public health system. All employees are now registered with a particular percentage position, and unclear employment positions have been eliminated. One result of this is that planning processes are more manageable and the use of substitutes and stand-ins is more efficiently utilized. The locally developed economic system of home based services in the city district of Manglerud has no counterpart in the aggregate city of Oslo.

Training KISA

The managers of the provider units have been trained by the development team (the RO management team) in both accounting and economy as well as how the model is to be used in practise.

Additionally the city district has carried out a management development training program where employees in management positions have been trained in their roles as leaders. The internal actors of the innovation processes are therefore thought to have a particular insight into the management of home based services for elderly, the challenges and possible solutions to organisational and managerial problems in the multi-provider system. This has been an internal training KISA provided by the RO management team.

6.3. External KISA

In this case study the definition of external KISA includes all knowledge intensive service activities utilised by Manglerud city district home based services provided by actors not employed by the city district itself. This means that employees of the aggregate city of Oslo are considered external KISA providers despite the fact that Manglerud is a part of the city of Oslo.

The list of possible external KISA (the activities) to be relevant in relation to innovation in home based services for elderly includes:

- R&D services
- Development / introduction of new IT systems (for internal use in the provision of home based services)
- Services related to information about the services offered etc.
- Legal service activities
- Administration / management activities (in general)
- Accounting and finance services
- Organisational development / team building
- Project management
- Training
- Recruitment
- Strategy / business development

As pointed out previously Manglerud is by outsiders⁴² considered to be a very renewal and innovation oriented city district compared to other city districts and local municipalities. Based on this pre-assumption one hypothesis of the case study was that it would perhaps be easier to identify examples of external KISA and their possible impact on innovation or innovation capability building processes of the internal organisation in Manglerud city district than in other less renewal oriented city districts or municipalities.

The external providers (the actors) of knowledge intensive services we considered to be of particular relevance in relation to innovation processes in the sector of home based services were:

⁴² Selection of case unit Manglerud was based on recommendations of persons in charge of the Efficiency Network directed by KS and the municipality of Oslo.

- Aggregate city departments (related to city districts such as in the case of Manglerud/Østensjø)
- Other municipalities (nationally and internationally)
- KS
- Ministries and other public departments and agencies
- KIBS firms
- Universities and colleges
- Research institutions
- Suppliers of equipment, material, components or data programs

In the processes of developing and introducing the purchaser-provider organisation, the rota scheme and SmartWalk as well as the planning of achievement based financing in Manglerud/Østensjø we, however, found out that a fairly limited number of the external actors mentioned above have been involved in providing knowledge intensive service activities into the innovation processes of the city district of Manglerud/Østensjø. Below we will elaborate on which external KISA have been important in the various innovation processes of Manglerud/Østensjø.

Purchaser-provider model

In the process of implementing the purchaser-provider model specifically there seems as if very few external knowledge intensive service activities have been requested and therefore also few external KISA providers have been involved in the development processes. The only external KISA providers emphasised to be important in this particular innovation process were other municipalities providing information and training KISA to the city district of Manglerud.

Information KISA

One of the very few examples of knowledge intensive service activities involving an external actor into the process of developing and implementing the purchaser-provider model in Manglerud was the information interchange with another municipality (Bærum) with more experience in practising the purchaser-provider model in relation to its local service provision than Manglerud. Bærum municipality was used by Manglerud as a reference and supplier of information when Manglerud was to develop information material about the new model to the employees and users of the home based services in Manglerud. In this process the internal actors of Manglerud purchaser unit and the relevant personnel in Bærum were engaged in an interactive process of providing information about the new model. An important mix and match of knowledge intensive service activities was part of this interactive collaboration in relation to information service activities, however on a rather superficial level.

Training KISA

As part of introducing the purchaser-provider model the employees of the newly established purchaser unit of Manglerud took part in a 10 days case handling course directed by the training unit of the city of Oslo. The external knowledge intensive training services provided by the employees of the training department of the city of Oslo was important for the purchaser unit in Manglerud to be able to develop the skills needed to implement the

purchaser-provider model in the city district in a best possible way. Efficient case handling combined with in-depth knowledge of the range of services in the system of home based services for elderly is part of the core competences of a purchaser unit. The training unit provided important KISA to the purchaser unit of Manglerud particularly related to efficient case handling.

Rota scheme and SmartWalk

Like in the innovation process of introducing the purchaser-provider model in Manglerud there were very few external KISA providers involved in the process of developing and implementing the innovation of rota scheme and SmartWalk. The knowledge intensive service activities involving external actors were development KISA and accounting / economic KISA and KS and other municipalities played the main roles as external KISA providers in this process here.

Development KISA

The initial idea of reorganising the home based services to elderly was inspired by efficiency improvement processes taking place in other municipalities. The main goal and objective was as presented earlier to increase the amount of *direct time* spent in the homes of the service users. The idea of increasing the direct user time was based on perceived “good practice” in other innovative municipalities regarding home based services for elderly. The ideal time distribution was as previously mentioned pre-set to be 60-40 (percent direct user time and indirect user time) for home nursing employees and 70-30 for home helpers. In order to achieve this goal quite some development work had to be done to adjust and reorganise the provision of home based services for elderly in Manglerud.

The knowledge intensive development activities undertaken while introducing the rota scheme and the appurtenant IT tool of SmartWalk was mainly in the hands of the internally employed development person in Manglerud. However, this internal development person was tightly connected to the development personnel of KS in this process, responsible for the Efficiency network project in which Manglerud at this time took active part.

Due to the financing situation of this particular development and innovation task the labels “internal” and “external” KISA get a bit blurred. Thus, by assistance and effort of KS the internal development person in Manglerud received external financing (from KS) for developing the organisational and administrative innovation of the rota scheme and SmartWalk in Manglerud. The capacity of the internal KISA person was seconded from her regular activities to this particular development function by external financing through KS. Although the development processes were executed by an internal (but externally financed) KISA provider KS did interact closely with this person and acted as external advisors and consultants to the internal KISA person. A mix and match of KISA was evident in the development process.

Accounting / economic / financing KISA

KS must therefore be said to have played an important part in the development activities of the rota scheme and the Smart Walk process, not only as facilitator of external financing making the development effort possible, but also with in depth competence in areas such as economy and planning of development activities as well as general systemic competence.

The Efficiency network responsible person of the city districts in Oslo was an important source of knowledge and provider of essential external knowledge intensive service activities (KISA), and thereby contributed in a positive way to the development of the organisational and administrative innovations in Manglerud.

Achievement based financing

The planning and development process of achievement based financing is still in progress in Manglerud/Østensjø. The development process has consisted of many phases so far, and external actors and KISAs, however rather few, have played important roles in the various phases of the process. Of the many processes which have led to the planning and development of an achievement based financing model adapted in Manglerud, the cooperation with Kristiansand as well as the participation in the efficiency networks managed by KS are the most evident. In the efficiency networks KS has played a central role as an external KISA provider to Manglerud, particularly connected to development and strategy / planning KISA⁴³.

In addition to the consultants of KS (seconded from Oslo municipality) external actors in the process of planning and developing the local model of achievement based financing in Manglerud has particularly involved the municipality of Kristiansand. Through its close cooperation with Kristiansand municipality Manglerud has been interactively involved with the external private sector consultants hired by Kristiansand municipality in relation to the process of developing their model of achievement based financing. The KIBS firm was deeply involved in the whole development process and contributed with general development and project management KISA, as well as with important in-depth knowledge about accounting and economic modelling to Kristiansand and thereby indirectly to Manglerud.

Other external KISA actors in the process of preparing achievement based financing in Manglerud to be enhanced is the municipality of Oslo, contributing with IT development KISA as well as indirect input of knowledge intensive service activities provided by software firms responsible for the software tools used in the sector of home based services for elderly. The municipality of Oslo has also provided training KISA important for the development processes in Manglerud.

Development / strategy / planning KISA

As previously emphasised Kristiansand municipality has already developed a model of achievement based financing in relation to a set of public services, initially starting up with home based services. Kristiansand municipality has acted as an invaluable example and illustration model for Manglerud in their planning, development and adaptation processes of a similar system, contributing with important KISA into the development processes of Manglerud.

⁴³ The KS responsible actors in the efficiency network have been seconded from the city of Oslo, Department for Services and Development (Service- og Utviklingsetaten) (now termed Department of Development and Competence (Utviklings- og Kompetanasetaten)). The Department for Elderly and the City Districts, the department under which Manglerud normally belongs, has not at all been actively involved in the efficiency network development processes and has never been a fruitful external KISA partner in the development, renewal and innovation processes of Manglerud.

To be able to understand the KISA contribution of Kristiansand a short introduction to the innovation processes there is necessary. The start-out situation in Kristiansand was that of great difficulties in the beginning of the 1990s. A new city district reform was introduced in 1993, but the effects of this reform did not materialise sufficiently and the city district system was later abandoned. The municipality then initialised what was termed “The delegation project”, delegating more authority to the individual department units of the municipality. In 1999 Kristiansand wanted to introduce the administrative and organisational innovation of purchaser-provider model, separating administration and the provision of the home based care services. The municipality did not, however, want to introduce the innovative model unless the purchaser function was totally accountable. This accountability was later secured by a principle decision made by the city council (the local politicians) to introduce both the purchaser-provider model and an accompanied model for achievement based financing. At first reluctant to the renewal processes, the employee representatives of the labour organisations later supported and took active part in the innovation processes of developing the achievement based financing model for Kristiansand.

The municipality did, however, need an external “midwife” to develop and implement the innovative ideas of the purchaser-provider model and the achievement based financing system. Kristiansand therefore engaged the business consultancy firm Ernst&Young (previously Andersen) to take active part in the innovation process. Ernst&Young was responsible for carrying out the entire project of Kristiansand and contributed significantly in all parts of the project. From the very beginning Kristiansand emphasised that they wanted a simple system, a system they could easily maintain by themselves after the implementation process was finished.

As emphasised previously Manglerud contacted Kristiansand to learn from their innovation experiences, particularly related to the challenges of internal pricing of services, and possibly to take actively part in the ongoing project and assimilate and adapt the lessons into the Manglerud setting. To be able to join the project actively Manglerud needed financial support from the city of Oslo. An application for financing was, however, denied and Manglerud could not participate as an active partner in the project as the city district originally wanted. Despite the lack of specific project financing Manglerud did take part in internal project meetings together with Kristiansand and Ernst&Young, as well as in external learning arenas and forums where the achievement based financing approaches were discussed, to be able to get closer to their own goals and objectives of introducing the innovative model of achievement based financing in home based services for elderly in Manglerud. Although put on the side line officially, Manglerud did cooperate closely with Kristiansand and Ernst&Young regarding knowledge intensive development activities to be adapted and used in the particular Manglerud setting within the municipality of Oslo.

Because of the rejection of project financing from the city of Oslo Manglerud brought the development ideas and experiences acquired through the indirect participation in the Kristiansand innovation project into the Efficiency network of KS. KS employees (seconded from Oslo municipality) have contributed significantly to the further development of the ideas of introducing achievement based financing in the city district of Manglerud and strategic planning for the realisation of these innovative thoughts.

The current status of the innovation project of developing a model of achievement based financing in the city district of Manglerud is that the project has obtained support from the city of Oslo. In February 2004 it was decided that Manglerud/Østensjø, together with two

other city districts in Oslo, are defined as pilot city districts to develop the innovative ideas further. The tasks of the pilot city districts are to develop a specific model of achievement based financing which is adapted to the particular criteria and delegation system of the city of Oslo, different from the systems in operation in the municipalities which have already introduced achievement based financing.

IT development KISA

Related to the preparation and adjustment of the innovative model of achievement based financing the knowledge-intensive service activities of the IT department of Oslo municipality have been utilised. The city district of Manglerud use the general software of Agresso⁴⁴ for accountancy keeping as well as the nursing and care information system of Gericca⁴⁵ to keep track of the users of home based services to elderly (IT system for Nursing, Rehabilitation and Care Services). The two systems are, however, not sufficiently compatible, and the external and aggregate IT resources of the city of Oslo work to solve these problems together with the external KIBS firms Agresso and Gericca. The city district of Manglerud/Østensjø does not, however, participate actively in the collaboration with these external software KISA providers. As all other city districts in Oslo Manglerud/Østensjø make use of the central IT resources of the aggregate city of Oslo, but in a more passive way.

Accounting/economic KISA

In terms of knowledge intensive service activities (KISA) Ernst&Young contributed specifically to the innovation process of Kristiansand with their in-depth competence in the area of accounting, introducing and refining the much used tool in private firms, ABC (Activity Based Calculation). Kristiansand was very conscious about the fact that introducing a purchaser-provider model would depend heavily on pricing the home based services provided correctly, and the ABC calculation model was a very helpful tool in the development of a model suited the provision of these services.

In the process of developing the calculation model the external KISA providers Ernst&Young were very sensitive to inputs from the internal actors taking part in the development processes. The innovation processes included the whole organisation and consisted of the management of the health and social services in Kristiansand as well as the employee representatives. A key question in the development process was to define the cost drivers of the model. In the process of defining such cost drivers a fruitful and important interaction and mix and match of knowledge and competences of the external and the internal development actors (KISA actors) was evident in the Kristiansand process.

One of the largest tasks executed by the external KISA provider was the process of “cleaning the data” of Kristiansand. To be able to price the home based services provided it was crucial to be able to rely on the data determining what services are in fact provided, the time spent on preparation and execution of the tasks, transportation etc. Introductory investigations showed that the basic data about the service production in Kristiansand municipality were infested with serious accounting errors and needed to be controlled, systematised and accounted for in a proper manner in order to price the home based services correctly. Compared to Kristiansand Manglerud had already conducted these preparations in

⁴⁴ http://www.agresso.com/norway/home.asp?f=norway/overview_home.asp

⁴⁵ http://www.respons.no/html/gerica_1.html

a series of renewal and efficiency creating processes in terms of time studies, administrative innovation and reorganisation processes such as the introduction of the rota scheme and SmartWalk.

If the project had continued at that time Manglerud would most probably have wanted to engage private KISA actors in the field of “cleaning” account data of the city district. However, now Manglerud would not have wanted to do that due to internal competence development in the mean time.

Training KISA

Because the city district since February 2004 has got the status as pilot city district within the city of Oslo (together with two other city districts) to develop and adapt the achievement based financing model to the particular criteria and delegation system of the city of Oslo Manglerud/Østensjø expects more training resources related to the introduction of the financing model to be devoted from the aggregated training unit of the municipality of Oslo.

6.4. The use of KISA in home based services

In this section we will recapture and discuss the findings of the case study mapping of innovation processes and the use of KISA in health and social care services according to the most important research questions of this KISA study, namely

- How and why firms use or not use KISA
- When firms use KISA

In the mapping of innovation processes and use of internal and external KISA we have been focusing on the concrete work activities that have been undertaken, the development of these activities and the processes of interaction between various actors to produce improved home based services for elderly. In the Norwegian case study we have followed not just one development process, but a series of three intertwined renewal and innovation processes undertaken.

This KISA case study of innovation processes in home care services for elderly in Norway one of the contributions into the larger OECD KISA study. To be able to compare the results of the various national case studies undertaken in the health (and social) care sector, as well as comparison of the use of KISA between the very different sector studies of the project, it is desirable to discuss the main findings according to three chosen perspectives, namely i) the value network perspective ii) the life cycle perspective and iii) the business model perspective. Below we will use the depicted perspectives in relation to the main findings of this Norwegian case study of home based services for elderly.

The value network perspective relates to the process of interaction between the actors in the production of better home based services for elderly. Important questions are how the health and social care professionals interact in networks with other actors in order to perform their main activity of providing and improving the home based services for elderly, how and why the cooperation has been undertaken and whether barriers of such cooperation exist (why no KISA cooperation)?

Included in the life cycle perspective is to take a particular look at the life cycle of the projects or processes undertaken. What particular phases do the development processes contain and at which point in these processes are KISA particularly important for innovation to occur?

From the discussion of the business model perspective, below it seems as if this perspective is not a particularly relevant one in connection with innovation and innovation capability building through the use of KISA in publicly provided home based services for elderly. The background of the business model perspective is to be found in relation to private sector firms, and was particularly developed and utilised by the Finnish KISA team regarding various types of business models present amongst software firms in their first KISA case study (Forssén et al, 2003). The main objective of applying the business model perspective is to investigate whether various business models may be an explanatory factor for different use of internal and external knowledge intensive business activities.

The challenge of applying the business model perspective on the second KISA case study is that the unit of analysis is no longer firms in the private business sector, but organisations within the public sector. The business model concept may not seem to fit in this setting. However, public sector organisations are also “doing business”, and the way they undertake their main activity or their main “business”, the organisation and responsibility of providing the main activities, may vary.

In the case of health and social care services for elderly living at home there various “models” that can be envisaged. One possible model is solely municipality provided home based services for elderly, another is municipality supervised home based service which are privately provided and a third possible model is a combination of municipal home care providers and private home care providers. In the case study of Manglerud/Østensjø chosen in the Norwegian case study the main way of organising the provision of the home based care services is that the municipality of Manglerud/Østensjø is responsible for the organisation and the provision of the home based services.

In Norway there are no examples of municipalities which have chosen the second business model of solely private provision of home based care services for elderly. However, at present there are municipalities and city districts in Oslo which are trying out the third model presented, where municipal and private home care providers are combined. This business model is tightly connected to the innovation processes of “freer user choice”. Examples of city districts in Oslo which have experimented with this type of business model are the city districts of Nordstrand and Lambertseter (Oslo Kommune, 2002).

Since the KISA case study has been fairly limited in scope, focusing on one city district in Oslo, with one particular business model, it is at this point in time not possible to compare whether differing business models regarding home based services for elderly will make an impact on the provision of internal KISA, the use of external KISA and the possible innovative interaction between the actors and mix and match of internal and external knowledge intensive service activities.

What may, however, be indicated is that there may even be important differences even amongst municipalities and city districts which have the same kind of business model, and that there are perhaps other and more decisive explanatory factors in the use of KISA. In our

case study we have mainly focused on Manglerud/Østensjø, but have also included important interviews with the municipality of Kristiansand, which has acted as an external KISA provider for Manglerud/Østensjø. The business model of Kristiansand is identical to the one in Manglerud/Østensjø, with solely municipality provided home based services for elderly, but as has been emphasised in the mapping in the previous section, the utilisation of Manglerud/Østensjø and Kristiansand differ. Kristiansand to a large extent use and integrate external KISA actors in large innovation processes related to the provision of health and social care services as this is not a commonly used strategy in Manglerud/Østensjø. One possible explanation for the differing strategies is the governing structure in the city of Oslo. The city districts of Oslo may have less autonomy in relation to radical development processes and the appurtenant financing situation of such innovation than “independent” municipalities such as Kristiansand. The use of external KISA actors, particularly in terms of private consultants (KIBS), is not a cost free affair, and may require particular funding outside regular frame budgets.

The use or non-use of KISA (how, why and why not?)

As pointed out introductory in this section the main focus when considering innovation processes and the use of internally and externally provided KISA in relation to home based services for elderly are the collaboration relations and interacting processes taking place amongst relevant actors. In the production of home based services for elderly of course many activities are of crucial importance, but for renewal thinking and innovation processes in the sector the knowledge intensive service activities and its specific providers are considered to be of particular importance.

Much of the above has focused on mapping the actual innovation processes, what KISAs, either provided internally or externally, have been of importance and in what part of the innovation life cycle, or project phase, knowledge intensive service activities have played decisive parts. Below we will discuss the interactive processes of producing KISA in cooperation between internal and external KISA actors.

The internal and external actors cooperate in value networks to improve the system and range of home based services to elderly. However, it is important to enhance that most KISAs relevant in the innovation processes and enhanced by the interviewees of this case study, particularly in Manglerud, involve internal personnel and competences. We will firstly consider why this is the case.

In the case study of Manglerud there seems to be a strong belief in internal development resources and capabilities. Some of the interviewees emphasise the importance of systemic competence which render possible the creativity of renewal and innovative thinking within home based services for elderly. This particular systemic competence may contribute to explain why private sector consultancy firms (KIBS) to a rather limited degree are used as development or innovation partners in home based services for elderly in particular and perhaps in the public sector more generally. The framework conditions in the public sector as such and relevant sub sector in question, the culture of the sector, the particular sets of rules and regulations to comply with and how to manoeuvre in the system is a vital competence needed to be able to renew and implement innovations. External KIBS firms may have strong competences related to innovative processes and how to assist and facilitate private firms to innovate (Miles, 2003), but may not necessarily hold the relevant systemic competence needed to successfully facilitate innovation processes in public sector

organisations. Therefore internal KISA personnel in the home based services for elderly may be of particular importance to the innovation processes in this sector.

Reasons or motives to provide the KISAs internally (internalisation) include:

- Strong belief in internal development resources
- Externals lack systemic competence
- Financial restrictions

Another explanation for using internal KISA in development and innovation processes is that there are limited resources reserved to conduct these kinds of activities unless the project is particularly financed as a “development” or “pilot” project with dedicated project funding. Financial restrictions may explain why most of the external KISA suppliers utilised in the innovation processes in home based services for elderly in Manglerud are other city districts, municipalities and other public organisations such as KS. These KISA suppliers provide inestimable competence and knowledge (KISA) into the innovation processes of Manglerud because they possess the systemic competence of the health and social care sector, but they are also practically cost-less. Private sector KIBS firms are rather expensive to use and may lack the systemic competence.

The overall attitude thus seems to be that of relative self-support in terms of new ways of doing things and how to put the innovative ideas out in practise. However, when there is an evident lack of internal competence to develop the innovative processes in a desired direction, the management of the development or innovation processes of home based services to elderly in Manglerud are not reluctant to seek competence and knowledge from externals.

Some of the most important reasons to involve external KISA providers related to innovation processes in home based services for elderly seem to be:

- The lack of internal competence in the organisation
- Access to important experience and expertise
- Wish to be quality checked by externals

The mapping of external KISA shows that the most evident and naturally KISA to be performed in a mix and match of service activities between internal and external KISA actors seems to be in relation to development KISA. The study of Manglerud shows that their external sources to innovation and most important input of external KISA comes from other municipalities and KS. The cooperation is characterised by uncoordinated personal contact between the personnel responsible for the common development or innovation processes in the municipalities. The employees of the municipalities visit one another and create an environment for mutual learning and knowledge and competence transfer between the organisations. As emphasised previously the Efficiency network organised by KS is an arena for fruitful cooperation between municipalities and city districts in Norway. In this setting municipalities and city districts are coordinated in groups by KS to engage in development work of similar kinds. The focus is put on benchmarking, good practise and mutual learning amongst the municipalities.

Related to the particular cooperation with particular KS personnel a network of persons engaged in the same kinds of development processes seems to have evolved. The rather closed network consists of persons who are particularly interested in the area of introducing

New Public Management innovations in Norwegian municipalities and city districts. This includes the innovation areas of this case study like the introduction of purchaser-provider organisation, achievement based financing, increased or “freer” user choice in relation to public services, competition processes in general.

Manglerud did not engage in a direct cooperation relationship with any private sector KISA providers in any of their innovation processes in this case study. However, indirectly through their cooperation with the municipality of Kristiansand related to the development of a model of achievement based financing Manglerud got access to these external knowledge intensive service activities. The interview with Kristiansand revealed some of their first hand experiences related to the cooperation with a private sector KIBS firm.

When cooperating with external KISA providers (here private sector consultants) Kristiansand has certain requirements to the results of the interaction. Firstly, when the project is completed and finished the competence and knowledge produced in the mix and match of KISA should always be left behind in the organisation. The motive of engaging an external provider of knowledge intensive service activities is always to internalise the competence to increase future innovation capabilities internally. Secondly Kristiansand always aims to be very explicit in their service orders and concrete in defining what they want to achieve by engaging the external KISA provider. The municipality never orders standardised services.

The external KISA suppliers always participate very actively in the development or innovation process. The consultants take part in all project meetings and are integrated closely into the process. In the particular process of introducing purchaser-provider model and achievement based financing the KISA suppliers conducted development KISA in close cooperation with the internal KISA participants, and hardly ever worked by themselves, other than preparations for the process meetings.

The use or non-use of KISA in various phases of innovation processes (when?)

In the KISA project the main focus of attention relates to innovation processes, and in the Norwegian health and social care case study we have chosen to follow a set of development projects and the use of KISA in these innovation processes. In the three development processes in Manglerud/Østensjø we have previously identified the phases of the processes as well as the use of internal and external knowledge intensive service activities and the actors providing these activities.

Related to the introduction and implementation of the purchaser-provider model mostly internal KISA have been identified and found relevant. The internal providers include the RO management, the planning and economy consultant and the city district manager at that time as well as employees of the purchaser unit. The knowledge intensive service activities they provided into the innovation process were development KISA, legal KISA as well as administrative/management KISA. In interaction with external KISA providers a mix and match of KISA occurred including training KISA and information KISA. The external KISA provision cannot be considered to have played an important part of any of the phases of the innovation process of developing and implementing the purchaser-provider model in Manglerud.

The internal KISA providers, however, contributed significantly in all the phases of the project life cycle. The city district manager and the planning consultant were particularly active in the development phase of the idea. The RO management was active KISA providers from the beginning to the execution and implementation of the final model adjusted to the particular local settings of Manglerud, providing systemic and more general KISA into the innovation process. Related to specific sub tasks (or sub processes) other more specific actors were included to provide KISAs like training and legal KISA.

Considering the project life cycle of the organisational innovation process introducing the rota scheme and the development of SmartWalk the process was also rather inward-looking considering the KISA actors involved. The internal KISAs important for the innovation process were again development KISA and information KISA provided by the RO management, but also IT development for internal use as well as accounting or economic KISA particularly provided by the internal “development person” of Manglerud city district. All the internal KISA personnel were involved at all stages of the innovation project life cycle.

Like in the other innovation processes above the RO management team has been the active development agent regarding the entire innovation process of introducing achievement based financing. The RO management has provided development KISA, accounting/economic KISA, training KISA as well as strategy/planning KISA. The ideas for introducing the achievement based financing model has, however, been provided by external KISA providers. The innovation process of introducing the achievement based financing model is still in the development phase. The external KISA providers which have been involved so far, including KS and Kristiansand, contributed significantly in at least the early phases of the project life cycle (since the project is still in the development phase). Whether the use of external KISA providers will increase or decrease in the project phases yet to come is still not possible to evaluate.

All things considered it seems as if Manglerud/Østensjø to a large degree use internal KISA resources in all parts of their innovation project phases. External knowledge intensive service activities are mostly used in the idea and development phases of the projects, and to a less degree in the implementation phases of the renewal and innovation processes.

7. The role of public policy

7.1. *Policy instruments targeting the health and social service sector*

One of the common steps of this OECD KISA project is to map general government policies and programs related to the case study in question, in this part project the health and social service sector with particular focus of the area of home based services for elderly. The specific focus of the mapping is to identify what sector specific measures are enhancing the supply, quality and demand of knowledge intensive service activities in the health and social service sector in general and, if possible, targeting home based services for elderly in particular. The main question is whether government innovation or modernisation policies have recognised and targeted KISA in this sector and supported their development⁴⁶.

Introductory white papers, action plans and action programs related to health and social care services in general and thereby home based services for elderly more specifically are presented.

White papers, action plans and action programs

White paper no 50 (1996-1997) Action plan for old age welfare services: Safety – respect - quality⁴⁷

In 1996 national government introduced an action plan for old age welfare services in Norway. The main objective of the action plan was to improve local government's ability to deal with the growing need for nursing and care services due to the growing proportion of elderly in the population. The demographic developments required a strong build-up of capacity, both regarding personnel and physical buildings, and repair and quality improvement of the existing building mass of the nursing and care services.

The original goals of the action plan were to increase the personnel with 12.000 new (wo)man-labour years and the building or repair of 24.400 care homes and nursing home places. Later the action plan was extended with another 9.000 care and nursing homes. In 2001 the goals of the government was that all local municipalities that apply for funding should have the opportunity to build up a 24 hour service equivalent of 25 percent of the population 80 years of age and above (either in nursing homes, homes for the elderly or care homes), that the local municipalities (within 25 percent of total coverage) should have the opportunity to secure a satisfactory single-room coverage and essential repair/replacement of old institution buildings. Additionally the single-room coverage in nursing homes and homes for the elderly should be well above 90 percent for the country as a whole within the end of the expansion in 2005.

Considering the pre-set goals the action plan for old age welfare services has shown very positive results. The total public investment of the action plan has been about NOK 28

⁴⁶ The data in this paper is based on the web sites of the various agencies responsible for the policies or programs in question and phone calls to persons responsible for the programs.

⁴⁷ St.meld.nr.50 (1996-1997) "Handlingsplan for eldreomsorgen: Trygghet – respect – kvalitet"
<http://odin.dep.no/sos/norsk/publ/stmeld/030005-040010/index-dok000-b-n-a.html>

billion, and the running expenses increased from NOK 500 million in 1997 to NOK 3,7 billion in 2001.

The action plan for old age welfare services has been succeeded by a new development program for increased quality and simpler and more user-friendly arrangements in the care services in Norway.

White paper no 45 (2002-2003) Better quality in the local community nursing and care services⁴⁸

As a follow-up of the action plan for old age welfare services the government has presented a white paper focusing on the quality of the services offered to the elderly. Investigations show that the quality is generally good, but there are differences between the local municipalities. Failure in basic routines, executive work and meeting the demand of psychosocial services is often held as the most important shortcomings. The nursing and care services seem to have much to gain from strengthening management functions, competence build-up and improved recruitment. At the same time regulations and payment arrangements must be coordinated and simplified.

In the white paper the government holds that in a modern society the answers to the challenges depicted are flexible and individual solutions. This requires i) that the care services are offered on the basis of actual needs, independent of where you live, ii) individual plans and specified individual assignments as well as iii) harmonising the health and social legislation.

The white paper depicts various initiatives to improve the quality and to introduce simpler arrangements related to the nursing and care services provided at the local municipal level:

- **Quality development**
There will be a systematic effort to improve the quality of the care services offered, developing quality indicators, user surveys and publishing of results. An agreement is made with KS to assure locally based quality development in this process (see below).
- **Coordinated regulation and better legal protection**
There will be a number of efforts to achieve coordinated regulation and improved legal protection of the individual.
- **Improved management and better organisation**
One of the efforts to improve management and organisation of care services offered is the 2003-2007 development work focusing on quality and management led by KS (named "Good with People", see below).
Another effort is to test new organisational solutions of care services in the local government setting. The Directorate for Health and Social Affairs will establish an "experience bank" where local municipalities may get assistance and help regarding new organisational solutions of care services.
As a follow-up measure of the initiative plan on electronic co-acting (samhandling) in the health and social sector, named "Si@"⁴⁹, the government will initiate a new plan where electronic co-acting in the nursing and care sector more specifically is an important priority area.

⁴⁸St.meld.nr.45 (2002-2003) "Betre kvalitet i de kommunale pleie- og omsorgstenestene"

<http://odin.dep.no/sos/norsk/publ/stmeld/044001-040006/index-dok000-b-n-a.html>

⁴⁹ Means "Say: ah!"

- **Employment, recruitment and competence enhancement**
The government emphasise the need for increased recruitment of enrolled nurses and care workers. The needs of the individual must steer the resource effort and employment in the sector.
- **Improved medical follow-up**
Since the introduction of the measure of permanent medical practitioner (introduced in June 2001) there has been a positive development in the medical practitioner coverage in the local communities in Norway. At the moment the coverage is considered satisfactory. There is, however, a need for improved medical assistance in nursing homes.
Additionally the government will map the medical services of users of nursing and care services focusing on economic consequences of different solutions. The future organisation of these services will be considered.
- **Service based self-payment**
The government wants to develop a simpler financing and user-payment arrangement in the nursing and care sector.
- **National strategy for quality**
The Directorate for Health and Social Affairs together with The Norwegian Board of Health shall develop a quality strategy for the social and health services for the period until 2013.

Quality development

As previously presented the “Municipality networks for renewal and efficiency improvement” is a concrete cooperation project between KS and the Ministry of Local Government and Regional Development (KRD). The budget of the project in 2002 was about NOK 6 million. Additionally The Norwegian Association of Local and Regional Authorities funded the development of tools for measuring quality separately. The Efficiency improvement networks have a number of prioritised objectives:

- Contribute to improvement of the services of the participating local municipalities
- Contribute to efficiency improvement in the participating local municipalities
- Work out national indicators to measure the quality and efficiency development of services taking place in the local government sector
- Make the local municipalities capable of comparing themselves with themselves over time

In each network four to eight local authorities compare themselves with one another, learn of the good examples and start improvement efforts in their own local municipality and their activities. By the means of management tools productivity and quality is compared and analysed.

Improved management and better organisation

The priority program “Good with people” is a 4 year project on management and quality development within the health and social sector in the local municipalities. The focus of the project is on user dialogue and empowering the employees of the sector. The responsible authorities are the Ministry of Social Affairs, The Directorate for Health and Social Affairs and KS.

The project will contribute to improved management and higher quality of the services offered within the health and social sector. The ambition of the “Good with people” project is that 50 percent of the Norwegian local municipalities (220) are to participate in the project within the 4 year project period. The target group of the project is on the one hand the direct management in municipalities, people which daily play a direct role towards employees and

users in the health and social sector. On the other hand the project targets working groups or teams responsible for carrying out activities and tasks which the local municipalities have chosen to work with in this “Good with people” project.

In the “Good with people” project the local communities will get resources in the form of competence. The project will provide the local municipality with counselling services (KISA) e.g. by carrying out dialogue conferences to map what the municipalities wish to use this project for, help defining improvement areas and activities, evaluate working methods for use in the project etc. The project will also offer various working methods e.g. to establish and manage networks of local municipalities, development workshops, cooperation with the efficiency networks etc. The project will coordinate competence and resource environments with the participating local municipalities and assist as process leaders and supervisors both for the participating local municipalities and the resource environments participating in the project.

The Ministry of Social Affairs will finance the project with NOK 8 mill per year, in addition to the self-financing of the local municipalities and KS.

Si@ (ICT initiative plan)

In the Si@ initiative plan the Norwegian government sketched efforts for electronic co-acting in the health and social sector for the period 2001-2003. The objective of the initiative plan is to stimulate an electronic co-acting strengthening and making the cooperation between various spheres and levels of government more efficient, improving the contact with patients, persons in need of nursing and clients, as well as strengthening the quality of the services offered. In this context “Electronic co-acting“ means cooperation and information collection by the means of information technology and suitable infrastructure for communication.

The plan did not include the development of IT within individual operations or activities in the sector. The plan included national initiated efforts and initiatives only, however the visions and objectives of the plan applied to the health and social sector as a whole. Several priority areas were presented in the plan:

- **A national health network**
Such a network would bind service providers together through a physical infrastructure and support basic and common services
- **Electronic commerce in the health and social services**
Over the national network and other infrastructure the service providers could co-act by sending standardised electronic messages e.g. as references and epicrisis, intercepted by electronic patient journals and other end systems
- **Tele medicine**
The health network should also be used for telemedicine consultations (Tele medicine means that IT is used for transfer of patient information related to medical diagnosis and treatment)
- **Public services**
The public could to a higher degree co-act with health and social services via Internet and other infrastructure.

Network cooperation – “Freer user choice”

The Ministry of Local Government and Regional Development (KRD) has in cooperation with KS initiated a network cooperation related to freer user choice where 11 local municipalities partake. The municipalities have either already established freer user choice initiatives for its inhabitants in specific service areas (some municipalities have included home based services for elderly) or they are considering the possibility to establish such arrangements.

Medical and health related research programs

Above a series of policies and measures initiated by central government were presented. Quite a few of the specific development programs were managed by KS. There are, however, other actors responsible for programs and measures related to research and development activities in the health and social sector.

The Research Council of Norway has got increasingly more responsibility to administer the research funds of the ministries, among others the funds for research related to innovation in the public sector.

Within the area of medical and health related research in particular the Research Council has made the following strategic priorities:

- Medical technology
- Food and health
- Cancer research
- Age research

This priority setting shows that the Research Council of Norway in a rather direct way target the focus area of elderly people and wish to enhance research and development work in this research field. Whether the research projects funded in fact focus on home based services for elderly and more specifically innovation and innovation capability building through the use of knowledge intensive service activities in the prioritised age research is, however, not possible to evaluate from this overall priority setting. Below we will take a closer look at the various research programs possibly relevant for this case study of KISA in public nursing and care services with particular focus on home based services for elderly.

Research programs:

- FIFOS (Research for renewal and innovation in the public sector)
- Research program Health and society
- Research program Health services and health economics
- Research program ICT in medicine and health
- The welfare program

FIFOS (Research for renewal and innovation in the public sector) is a strategic effort in the period 2002 to 2006 on research for innovation and renewal activities in the public sector in Norway. As the national policies described before depict modernization, efficiency improvement and simplification in the public sector are high prioritized political goals. FIFOS is a thematically broad and cross sector effort to address substantial approaches related to the effort of reforming the public sector. The health sector will be specifically prioritized in FIFOS. The total budget of the strategic effort (2002-2006) is about NOK 73 million.

The aim of FIFOS is to have a long-term perspective and to contribute to the design of common solutions of tomorrow. The effort is to be able to trigger action and alteration will within the public sector of today. Research connected to management reforms and organizational development through the use of new technology will be a central theme.

The research of FIFOS may be operationalised at three main levels of the public sector. These levels are:

- The organization of the public sector as a whole
- The organization of the public sector at an institutional level
- The organization of the task solutions of the individual public operations/activities

The research program **Health and Society** has a program period from 2001 to 2004. The budget of the program is about NOK 56, 8 million in the 5 year period. The program is to contribute to build up and spread knowledge about societal (economic, political, social and cultural) conditions affecting illness and health, as well as to develop instruments in the health encouraging and illness preventive efforts. The program Health and society aims to understand that influence development trends that may have an impact on preventive medicine and on the use of health services. The key target groups of the program is the government administration and treatment systems and contact with volunteer and public organizations such as patient and information organizations, as well as with the general public is an essential aspect of the program's activities. Activities under the auspices of the program may be divided into three concepts: Health-promoting and disease prevention work, cultural perspectives and participation

The program identifies three main scientific challenges:

- To describe key parameters of good health and social welfare, given the development of society today
- To identify and describe areas of special importance to health and social welfare in which there is a lack of empirical knowledge and
- To learn about prudent, effective ways to run health-promoting and disease prevention work

The research program **Health Services and Health Economics** has a program period from 2001 to 2005. The budget of the program in the 5 year period is about NOK 70, 7 million. The need for and standards applied to health services are accelerating at a pace equal to that of technological development, new improved treatment opportunities, changing demographics and other conditions. Health services and health economics research is highly diverse, making it difficult to draw sharp lines of delimitations. Health services research is primarily concerned with the general parameters applying to the organization and administration of various health services, often including a multi-disciplinary angle of approach. The main objective of the program is to stimulate health services research. The program will concentrate on a few main topics: Health economics, mental health work and the organization and administration of health services. The target group for the research results is heterogeneous. In addition to researchers of the field, it includes politicians, the public health administration, healthcare providers, patients and the general public.

The research program **ICT in Medicine and Health Services** has a program period from 2001 to 2005. The budget of the program is about NOK 41, 2 million in the 5 year period. The program is to give a substantial contribution to a better public health service through development and use of information technology (IT) solutions and IT products based on existing and future user needs. The program shall contribute to competence enhancement and innovation to Norwegian industry.

The target groups of the program are threefold; users, industry and health service management. In this setting “users” are health personnel executing their profession, patients and the public in general (related to preventive health services). “Industry” and “suppliers” includes producers contributing to the development and production of equipment, products and solutions for the health service system where information technology and/or information methods constitute a substantial part of the product. An important additional component of the “supplier” segment may be the service suppliers of knowledge and user competence connected to the build-up and management of the Norwegian public health services (“the consultancy market”) where the market demands both user competence and appurtenant IT solutions. The ICT in Medicine and Health Services research program is to contribute to enhance the opportunity of Norwegian industry as suppliers of both products and services at a national and international level through supporting innovation, development and competence build-up.

The health service management consists of central health government, national, regional and local administration and regulatory bodies, e.g. The Norwegian Board of Health. The responsible ministries (the Ministry of Health and the Ministry of Social Affairs) have communicated that information technology is a central instrument by which to achieve health political objectives.

There are three main themes in the ICT in Medicine and Health Program. The first is treatment-oriented information systems which focus on electronic medical records and collateral images. The second main theme involves ICT facilitated networking and cooperation (telemedicine). The last main theme refers to planning and control systems, focusing on the development of various types of indicators and systems for managing shared health data.

The last possibly relevant research and development program administered by the Research Council of Norway is **The Welfare Program**. The program period of the Welfare program is from 1999 to 2004 and the budget is about NOK 251, 8 million. The program is financed by the Social and Health Ministries, the Ministry of Children and Family Affairs, the Ministry of Labour and Government Administration and the Research Council of Norway.

Chosen thematic focus areas of the research program are:

- Social security and public assistance
- Care services
- Physically disabled people

7.2. *The use of policy instruments by the case study organisations*

Since May 2002 Manglerud has participated in the national program “Municipality networks for renewal and efficiency improvement” managed by KS. The particular network of Manglerud has consisted of three other Oslo city districts where the focus has been efficiency improvement, quality development and the degree of services coverage in the city districts. In the Efficiency network project Manglerud has focused mainly on home based services and nursing homes.

Of all the programs and measures identified in this mapping exercise the city district of Manglerud seems to be aware of and actually use a rather limited range of possible public financing sources to support development and innovation projects in the city district. Apart from participating in the Efficiency network managed by KS the city district was aware of the possibility of applying for particular project financing directly from various relevant ministries, however, had not applied for such funding themselves. One barrier mentioned for not utilising this possible financing source was resistance from the aggregate city of Oslo.

The strategy of finding innovation and development project financing outside the regular programs and pre-defined projects is the more utilised by the municipality of Kristiansand. Kristiansand has applied and actually received funding for internally initialised development projects from a variety of funding sources. The municipality has got financing from various ministries directly, for instance from the Ministry of Foreign Affairs, the Ministry of Labour and Government Administration, the Ministry of Local Government and Regional Development and the Ministry of Children and Family Affairs, as well as from underlying departments and directorates like the Norwegian Agency for Development Cooperation and the Directorate for Health and Social Affairs. Additionally Kristiansand has got development or innovation project funding directly through KS as well as from the regional commissioner (the chief administrative officer of a Norwegian “fylke” or region). The regional commissioner does, however, have rather limited resources at his/her disposal⁵⁰.

⁵⁰ Kristiansand finds it strange that the ministries do not delegate more development or innovation funding to the district commissioner and his/her administration since they to a much larger degree than central government have in-depth knowledge about the region at hand and the actual situation in this particular region.

Summary

Altogether it seems as if central government in their overall policies and particular modernisation projects have made quite some efforts to target renewal and improvement processes in the nursing and care services at local municipality level. National government has through a set of policies and particular innovation projects recognised that knowledge intensive service activities such as management and organisation of nursing and care services, provided either in institutions or in the homes of elderly, are of vital importance to achieve improved public services and innovation in the health and social care sector. The focus of the projects is on innovation capability enhancement through the build-up of competence inside the public organisations. What have been termed external KISA suppliers in this KISA case study, e.g. KS, is extensively used as a competence resource in these national innovation projects. In this way the national projects may be said to target and support both the demand for and the supply of internal KISA related to innovation in the sector of home based services for elderly.

Of the publicly funded research and development programs administered by the Research Council of Norway there are also quite some interesting and relevant programs identified in relation to the KISA case study. Firstly the thematically broad FIFOS measure focuses particularly on research connected to public sector management reforms and organizational development through the use of new technology. The program thereby target important knowledge intensive service activities in the public sector as such, although not particularly the health and social care services or home based services for elderly. Secondly the research program Health Services and Health Economy targets knowledge intensive service activities in health and social care sector in particular. Not unlike the FIFOS measure the program focuses on KISA related to improved organisation and administration of health services. Thirdly, the research program ICT in Medicine and Health Services focuses on KISAs in terms of ICT facilitated networking and cooperation as well as planning and control systems for managing health data.

The two first mentioned research programs, FIFOS and Health Services and Health Economy, targets the development of rather similar kinds of knowledge intensive service activities internally in the public sector organisations, most often provided by the internal management of public services. In other words, these programs target the internal supply of KISA in public sector organisations. The last mentioned research program, ICT in Medicine and Health Services, is not only targeting the internal ICT related KISA activities in public organisations, but perhaps to a larger degree seeks to involve and stimulate the external provision or supply of knowledge intensive service activities. Main target groups of the program are suppliers of ICT solutions and appurtenant services as well as providers of services (consultants) with particular knowledge and user competence related to the build up and management of Norwegian public health services in combination with IT solutions.

8. Policy implications: the role of KISA for innovation and innovation capability building in home based services for elderly

Below we will reconsider the main findings of the KISA health and social care study with specific focus on home based services for elderly in order to develop relevant policy implications from this case study. The focus is on how innovation activities occur in home based services for elderly, the use of both internal and external knowledge intensive service activities, and its possible influence on innovation activity and the building of innovation capabilities in the sector. Thus, the ultimate goal of the KISA project is to come up with new ideas to public policymaking using KISA as a means to obtain increased renewal and innovative activities in within health and social services in general and related to home based services for elderly in particular. This section briefly sums up key results from the case study before discussing some tentative policy implications.

8.1. Main findings

Innovation characteristics

This case study focusing on innovation and the use of KISA in home based services for elderly in the Norwegian city district of Manglerud indicates that traditionally the actors of the system seem not to have had a very conscious relationship to renewal and innovation activities. The services offered to elderly at home have been executed very much in the same manner by tradition without particular needs of change and innovative thinking. However, less available financial resources for the provision of nursing and care services later years has created a somewhat more innovation or renewal related culture in the sector. A general view in the sector seems to be that a high degree of adjustment and adaptation ability at all levels of the sector now prevail, upholding a great tolerance for change amongst the actors of the system. Characteristic of the innovation processes followed in this case study of home based care services in Manglerud/Østensjø is, however, that new ideas, the innovations or renewal activities, seem mostly to originate at management levels.

One of the main barriers of innovation in home based services for elderly at local level seems to be the hampering factor of political split regarding planning processes and longer-term priority setting at the local government level (city district/municipality politicians). Home based services for elderly is subjugated a bureaucratic assignment system and many actors must come to agreement in order for renewal processes to take place. Another hindrance to innovation in home based services to elderly are the many rules and regulations that must be taken into account in this area of activity. Rules and regulations often contradict and over-rule one another and creating barriers to innovation and renewal activity in home based services for elderly.

Also at the service level there seems to be certain barriers for innovation, many of which held to be connected to the stock of employees of the home based services for elderly. One of the hampering factors at the service level pointed out by interviewees of the managerial level of the home based services is the fact that the service providing employees are often very focused on executing their specifically assigned service tasks and are therefore not

really directed or focused on improvement or innovation activities that might renew the service provision in particular and the system of home based services in general.

Another important impeding factor pointed out in relation to innovation in home based services for elderly is the general lack of skilled employees in the positions needed within the system. A related but contradictory factor pointed out is that profession conflicts is prevalent within this sector and that this may be a barrier to innovation in it self.

The use of internal and external KISA

In the KISA project the main focus of attention relates to innovation processes, and in the Norwegian health and social care case study we have chosen to follow a set of development projects and the use of KISA in these innovation processes.

Related to the introduction and implementation of the purchaser-provider model mostly internal KISA have been identified and found relevant. The internal providers include the RO management, the planning and economy consultant and the city district manager at that time as well as employees of the purchaser unit. The knowledge intensive service activities they provided into the innovation process were development KISA, legal KISA as well as administrative/management KISA. In interaction with external KISA providers a mix and match of KISA occurred including training KISA and information KISA. The external KISA provision cannot be considered to have played an important part of any of the phases of the innovation process of developing and implementing the purchaser-provider model in Manglerud. The internal KISA providers, however, contributed significantly in all the phases of the innovation project of introducing the purchaser-provider model.

Related to the innovation process of introducing the rota scheme and the development of SmartWalk the process was also rather inward-looking considering the KISA actors involved. The internal KISAs important for the innovation process were again development KISA and information KISA provided by the RO management, but also IT development for internal use as well as accounting or economic KISA particularly provided by the internal “development person” of Manglerud city district. All the internal KISA personnel were involved at all stages of the innovation project life cycle.

Like in the other innovation processes above the RO management team has been the active development agent regarding the entire innovation process of introducing achievement based financing. The RO management has provided development KISA, accounting/economic KISA, training KISA as well as strategy/planning KISA. The ideas for introducing the achievement bases financing model has, however, been provided by external KISA providers. The innovation process of introducing the achievement based financing model is still in the development phase. The external KISA providers which have been involved so fare, including KS and Kristiansand, contributed significantly in at least the early phases of the project life cycle (since the project is still in the development phase). Whether the use of external KISA providers will increase or decrease in the project phases yet to come is still not possible to evaluate.

All in all it seems as if Manglerud/Østensjø to a large degree use internal KISA resources in all parts of their innovation project phases. External supply of knowledge intensive service activities are mostly used in the idea and development phases of the projects, and to a less degree in the implementation phases of the renewal and innovation processes.

The external providers of knowledge intensive services used in relation to innovation processes in the sector of home based services were rather limited, and mostly free of cost. In relation to the innovation processes Manglerud/Østensjø cooperated particularly with other municipalities, KS (indirectly also with the Ministry of Local Government and Regional Development) and the aggregate city departments of Oslo. Due to lack of funding Manglerud/Østensjø only indirectly cooperated and acquired knowledge through private KIBS firms consultants (particularly in relation to the development of the achievement based financing model). The use of other providers of possibly important external KISA into the innovation processes related to home based services for elderly (such as e.g. universities and colleges, research institutions, suppliers of various kinds) was in this case study almost non-existent.

Policies and measures

Altogether it seems as if central government in their overall policies and particular modernisation projects have made quite some efforts to target renewal and improvement processes in the nursing and care services at local municipality level. National government has through a set of policies and particular innovation projects recognised that knowledge intensive service activities such as management and organisation of nursing and care services, provided either in institutions or in the homes of elderly, are of vital importance to achieve improved public services and innovation in the health and social care sector. The focus of the projects is on innovation capability enhancement through the build-up of competence inside the public organisations.

Of the publicly funded research and development programs administered by the Research Council of Norway there are also quite some interesting and relevant programs identified in relation to the KISA case study. The thematically broad FIFOS measure focuses particularly on research connected to public sector management reforms and organizational development through the use of new technology. The program Health Services and Health Economy focuses on KISA related to improved organisation and administration of health services. Thirdly, the research program ICT in Medicine and Health Services focuses on KISAs in terms of ICT facilitated networking and cooperation as well as planning and control systems for managing health data. In various ways the chosen programs of the Research Council of Norway seem to target very relevant KISA user groups, both related to the supply and demand of internal KISA in the public sector (mostly focusing on management, administration and organisational innovation activities and capability building) as well as suppliers of external KISAs (ICT development and consultancy services such as development of public sector management).

8.2. Policy implications

The ultimate goal of the KISA project is to come up with new ideas to public policymaking. In this sub section, we present a tentative framework for organizing discussions of policy, and discuss some more specific policy proposals. This framework was also used while discussing policy instruments related to the first case study of this KISA project, the software sector, and will also be used while discussing policy implications of the third KISA case study of the Norwegian aquaculture sector.

At first we must emphasise that the objective of policy targeting KISA, provided either internally or externally, is to improve the innovation capability, competitiveness and efficiency of private firms and public organisations. The focus on knowledge intensive service activities is not an aim in itself; it is a mean to achieve the objective of more innovation, competitiveness and so on. The means should be to stimulate KISA inside all types of firms and organisations, based on the idea that KISA are central ingredients in the innovation processes of these firms and organisations.

Such arguments lead to the framework in Figure 7.1 (below) as a point of departure for discussing policy issues. The target groups are providers of knowledge intensive services in general, or KISA inside firms or organisations. That is, policy may stimulate the *users*, in this case municipalities or city districts, to demand and utilise such services in their innovation processes providing home based care services to elderly. Another group to influence are then the *producers* of knowledge intensive services of relevance to innovations in home based care services in order to improve the supply and quality of these services.

Table 7.1: A framework for discussion of policy implications from the KISA software study

Targets of policy tools	Stimulate supply and quality of KISA	Stimulate networking	Stimulate demand for KISA
Internal KISA in all types of firms and organisations	Stimulate KISA internally in firms and organisations	Support cooperation between internal users and providers of knowledge intensive services	Stimulate / support the demand for internal KISA from internal users of knowledge intensive services
External KISA providers to all types of firms and organisations	Create favourable conditions for the development of independent providers of KISA	Support cooperation between external providers and internal users of knowledge intensive services	Stimulate demand of firms and organisations for external knowledge intensive services

The figure distinguishes between supply-side and demand-side policy categories, and also introduces a policy category aimed at stimulating networking and cooperation between producers and users of KISA.

Supply-side policy includes the creation of favourable conditions for the development of the knowledge intensive services in general. Supply-side policy may also include stimulating producers of knowledge intensive service activities inside municipalities or city districts in relation to the provision of home based care services for elderly, as KISA are seen to be important in innovation processes of all types of organisations.

Demand-side policy, on the other hand, includes supporting the use of both internal and external knowledge intensive services of municipalities or city districts in their innovation processes related to home based services for elderly. Increased use of such services is seen to be important to enhance innovation processes and to build innovation capability.

Thirdly, network policy consists of bringing together providers and users of knowledge intensive services, so that an interactive mix and match of activities may occur and give impetus to mutual learning and possible innovation on both sides.

Supply side

This health and social care study indicates that Norwegian city districts and municipalities may procure KISA from both internal and external sources. Therefore the KISA supply side measures may on the one hand be directed towards encouraging further development and strengthening of various forms of *internal knowledge intensive service activities* in organisations related to home based services for elderly. On the other hand supply side tools could target specialised KISA suppliers as such, and improve the conditions for providers of *external suppliers of knowledge intensive services and activities*. However, as a general point of view we maintain that it should not be the task of the public to support the external supply of KISA suppliers explicitly. An implication for policy involvement should rather be to create incentives and framework conditions for strengthening internal KISA in itself and for internal actors to become possible demanding customers of external KISA.

In order to support the supply of *internal KISA* to enhance innovation and build innovation capability in home based services for elderly policy may target the following areas:

- Strengthen the focus on knowledge intensive services in relation to management and organisational development activities of health and social care services for elderly at home.
- Inclusion of the more practical level of the system of home based health and social care services for elderly (in order to stimulate more bottom-up innovation).

Strengthen the focus on management and organisation KISA in health and social care services

Traditionally measures to strengthen internal innovation activities in private sector firms have focused on various research and development (and more general innovation related) programs as well as indirect support through favourable tax treatment of R&D expenditure. The first KISA part project on the Norwegian software sector recommended expanding the range of KISAs to be stimulated and supported in the sector, focusing not only on research and development activities, but also to include KISAs such as marketing, sales and training activities. These were KISAs emphasised to be of particular importance to future innovation and innovation capability building by Norwegian software firms.

Measures to strengthen general innovation in public sector organisations have been different from those targeting private sector firms. Public sector organisations most often do not undertake internal research and development activities as the term is most often used in relation to private sector (manufacturing) firms and public and private research organisations. However, as this case study has shown, quite a lot of “development work” is nevertheless undertaken to obtain change and innovation in the sector.

The internal development work in the nursing and care service sector includes a whole range of KISA and competences which are not easily sorted out specifically and thereby not easily supported directly by public measures. As the mapping of public policies and measures shows, there are, however quite some initiatives already taken to underpin and support development activities in public health and social care services. The measures support the supply particularly of internal management, administrative and organisational KISA in public sector organisations. The impression from the in-depth interviews indicates that these existing public measures to a rather satisfactory degree targets the actual needs of the municipalities and city districts involved in development and innovation activities within

home based services for elderly. Future measures to strengthen and build innovation capability in relation to home based care for elderly should keep focusing on management and organisational KISA. This implies that the efficiency network type of measures already in place, which in a very successful way seem to support the internal supply of knowledge intensive service activities in city districts should be continued and strengthened.

One internal KISA mentioned to be of particular importance for future innovation activity enhancement, but which is still too weakly developed is accounting or economic KISA. Acknowledging that the supply of economic KISA is of vital importance for future innovation in the sector is most probably connected to the trends of introducing market incentives into the public sector as such and the sector of providing home based services for elderly.

Implications for policy would be to stimulate measures for further development of KISA internally in city districts and municipalities, particularly connected to management, organisational and economic KISA. One particular measure would be to support specific training of internal management and key personnel in city districts and municipalities in new and innovative ways of organising and administering home bases services for elderly.

A public measure traditionally aimed at private sector firms to enhance knowledge intensive service activities is the FRAM program. The program supports basic learning in SMEs, particularly within the areas of management and the building up of company strategies with the objective of making firms more competitive. The FRAM program helps firms to develop a strategic action plan of development activities to be accomplished. In between 8 and 10 firms meet and discuss results and experiences within all areas of the value chain, but with a particular focus on management. The FRAM measure could be used as a model of how to support and stimulate the improvement of the same kind of KISA activities in public sector municipalities and city districts, namely management, administration and organisational KISA. This would strengthen the internal supply of KISA in order to build innovation capability and stimulate increased innovation related to home based services for elderly.

Inclusion of the more practical level in the service system of providing home based care for elderly

Another important finding related to the supply of internal KISA in home based services for elderly is the fact that the development work almost always is undertaken by the management level, making innovation a rather top-down activity. To stimulate the development of internal KISA measures which aim to include more of the organisation in the innovation efforts of the municipality or city district could be introduced. It would also be important to include and challenge the more practical or professional employees from all levels of the system of home based services for elderly. This would strengthen more bottom-up innovation processes in the system of home based services for elderly.

One of the factors emphasised as a barrier to innovation in the home based service for elderly in this case study was the lack of qualified personnel. Some of the informants held that for the sector to be able to function properly and be focused on renewal and innovation activities it is an imperative that positions are held by professionals, mostly related to the professions engaged in the practical provision of home based services to elderly. However, innovative ideas and innovation activity might not have to be related to professionals only. Renewals and innovation might arise from all actors of the system, and therefore it is

important to actively include all employees of the system, regardless of professional qualification, to create new solutions and generally enhance innovation activities in home based services for elderly.

Measures to include the whole organisation in proactive renewal thinking and activity could be to focus more on advance training and in-depth information activity of all actors of the system. Another measure could be to build stronger incentive structures (e.g. positive “reward systems”) internally to stimulate a wider range of actors of the system to take active part in innovative thinking and developing new and improved solutions in relation to the provision of home based services for elderly.

Demand side

Demand side policy tools may stimulate the general demand for knowledge intensive services as external input into firms and organisations. One specific demand side policy measure for promoting KISA in municipalities and city districts is

Funding of internal innovation and KISA related competence build-up

The case study shows that the city district to a large extent relies on internal competence and KISA in relation to the innovation processes studied. The most used external KISAs are cost free flow of knowledge from other municipalities and city districts as well as KS. The city district has on various occasions felt the need to use other, more specialised external KISA providers because of the lack of internal competence (in economic and accounting in particular). The KISA needed is offered by external providers, but the city district has been hindered from using this external source of KISA due to the financing situation of such development processes. Manglerud has experienced unfortunate delays in some of their innovation processes because they could not obtain the relevant KISA through external private sector KISA providers.

Outsourcing of the KISA activity to an external provider like a KIBS firm or a research institution would have been possible in a different funding situation of development processes. However, if a strict outsourcing strategy is chosen the activity would be executed, but the internal organisation would most probably not acquire the skills and competence to develop internal innovation capabilities in this area any further.

Another possibility may be to purchase knowledge intensive services from an external KISA supplier with the intention of acquiring the particular skills through interactive learning activities. This has been the strategy of Kristiansand in all their innovation projects. The use of external KISA providers should always result in organisational learning internally.

Implications for policy would be to grant city districts and municipalities particular earmarked funding for internal innovation activities and KISA related competence build-up. The city districts or municipalities should themselves be allowed to choose the strategy of how to strengthen the innovation and knowledge intensive service activities, that is whether to outsource parts of the KISA to external actors or to engage in interactive learning processes with external providers of the KISAs needed. Such a measure would strengthen the internal supply of KISA and thereby create more demanding potential customers for external providers of KISA.

However, the lack of use of external KISA may not only be ascribed to limited financial resources. The lack of use of external KISA providers is also explained by the fact that these externals cannot contribute sufficiently because they do not have the required knowledge about the sector. Another argument is that the internal organisation is afraid of becoming too reliant on the competence of these externals and therefore will be very vulnerable in future internal innovation capability building. The lack of use is not only a matter of limited financing, but perhaps just as much a matter of attitudes of the internal KISA providers. More extended use of external input into innovation processes, as experiences from the interviews show, will most probably contribute positively into most innovation processes of the sector. Policy measures should then perhaps focus on connecting internal and external KISA, so that internal KISA get first hand experience with the use of external KISA providers. Such measures are presented in more detail below.

Stimulate networking

Both supply side and demand side policy measures in various indirect ways stimulate cooperation between producers and users of knowledge intensive services. Some measures may, however, focus particularly on creating networks amongst producers and users of KISA.

Possible networking measures for promoting extended use of KISA may be:

- Proactive broking (in a narrow and broad sense)
- International networking
- Exchange of KISA personnel

Proactive broking

The mapping exercise related to the use of various external KISA providers in innovation processes in home based services for elderly showed that neither Manglerud nor Kristiansand had been collaborating (extensively) with e.g. KISA providers such as research institutes. The interaction with external KISA providers in the innovation processes was confined to other municipalities and KS (Manglerud) and private KIBS consultants (Kristiansand). To enhance future innovation in the sector one possible and very interesting way indicated by several interviewees would be to extend cooperation between Norwegian municipalities or city districts and research institutions.

In the first KISA study we sketched a possible policy measure to support proactive broking between firms and external providers of KISA services, particularly R&D institutes. The measure is named TEFT⁵¹ and the main objective of the program is to increase contact and interaction between less R&D intensive small and medium-sized enterprises (SMEs) and large polytechnic research institutes in Norway. The idea of the program is to develop the ability of firms to become frequent customers of research institutes. To achieve this objective county-based attachés function as brokers, organisers, facilitators or coaches in the innovation processes of the firms.

The idea of the TEFT program could be used as a model to stimulate cooperation and innovation activities between public sector organisations and e.g. KISA providing research

⁵¹ Technology diffusion from research institutes to SMEs (see Isaksen and Remøe (2001)). Now part of a research program called MOBI.

institutes in relevant fields of the public sector organisation, here related to nursing and care services in general, and home based services for elderly in particular.

There are various dimensions included in the TEFT instrument which may be interesting also in the setting of public sector organisations. The brokers may have a diagnostic and evaluating function in the public sector organisation and assist the organisation in identifying innovation needs and help pointing out KISA areas which are particularly important to develop internally to increase innovation activity and build innovation capability.

Additionally brokers may assist municipalities and city districts to locate and contact suitable external KISA providers to cooperate with in innovation processes, including universities and colleges, research institutes, public organisations (other than KS and the ministries), relevant networks, private KIBS firms etc. Thus, the case study has shown that city districts and municipalities use much time and resources to locate external sources of important knowledge and competences when this is lacking internally in the organisation.

An alternative and broader approach to the proactive broker idea would be to strengthen the role of the public support system in creating functional and permanent networks of firms and public sector organisations. One could think of a more broad scoped KISA network program where the objective would be to bring together various types of firms and organisations that are engaged in different types of knowledge intensive service activities⁵².

The focus of the network program would be on the exchange of experiences related to KISA amongst the network participant organisations. The network could focus on how to cooperate and learn from each other by communicating good practises from various settings. The objective of the network would be the building of innovative capacity in the participating firms and organisations. One possibility would be to seek already existing value networks or clusters to develop these learning arenas for knowledge intensive service activities.

As this case study has shown one of the most important public measures or programs used by the city district of Manglerud in relation to innovation in home based services for elderly has been the Efficiency network managed by KS. As has been emphasised this program consists of a number of networks consisting of municipalities and city districts collaborating on development issues of various kinds. In terms of participating actors the Efficiency network is thus more limited than the KISA network program suggested above. One possibility would be to combine the suggested KISA network program with the good experiences of the existing Efficiency Network program. The focus should still be put on interactive learning through communication of good practise, particularly KISA practise important to enhance innovative behaviour of the participating actors, as well as benchmarking. The main focus should be interactive learning and innovation, not only on efficiency creation, and the program could therefore suggestively be termed "Innovation Networks".

A third and possible way of broking activity could be to use e.g. KS (or another suited national actor) in a much more extensive way than is used today as an objective "experience intermediary" of innovation and KISA practice from all its member municipalities. The

⁵² The planned VIOS program of the Research Council of Norway might be able to have such a function.

broker function should not be proactive, but instead in a rather objective way communicate both good and bad experiences from innovation activities and projects in the public sector. The experiences could be put on the web site of KS as a sort of “idea bank”, where municipalities could acquire knowledge about good and bad experiences from innovation projects related to home based services in other Norwegian municipalities and city districts and find relevant internal contact persons of these innovation projects directly on the web.

International networking

Both Manglerud and Kristiansand emphasised that when seeking information about a new idea or possible innovation project, they often ended up contacting innovative municipalities both nationally and abroad. A common point of view was that “the gun powder does not have to be invented in every municipality or even in every country each time”. The innovation strategy may just as much be to adjust and adapt from other actors’ innovation experiences and thereby build capacity internally to be able to perform and develop renewals and innovations inside the organisation at a later stage.

However, the international dimension is more complicated than seeking knowledge and experience developed by other Norwegian municipalities. The scope internationally is very wide, and it takes a lot of resources to seek relevant information and cooperation partners outside the country.

Thus, a possible task of the support system could be to arrange international network cooperation between KISA providers internally in Norwegian municipalities and external providers of KISA in municipalities abroad in the areas of nursing and care in general, and home based services for elderly in particular. The most obvious KISA network cooperation partners would perhaps include municipalities in the Nordic region, since the public sectors are relatively comparable in these countries. However, networking and interactive collaboration with EU partners could also be a valuable source of new knowledge and inspiration. Collaboration with EU partners would perhaps also open up new funding possibilities of innovation projects internally in Norwegian municipalities and city districts.

Exchange of KISA personnel

Another possible measure to stimulate cooperation between internal and external providers of KISA in the nursing and care service sector is to encourage exchange arrangements of KISA personnel between local municipalities and e.g. KISA providing organisations like KS, research institutions and relevant ministries. Internal KISA employees with particular competence from innovation processes in municipalities or city districts could promote and “sell” their competence and knowledge about local innovation related to nursing and care services to the external organisations. In this way they would contribute in spreading the KISA competence acquired locally and make visible local innovation activity. This could be a dynamic working method to spread internally developed KISA knowledge and would lead to mutual learning effects between internal and external KISA providers.

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Appendix 1:

Participants in the innovation processes and interviewees of the in-depth case study in Manglerud

Purchaser-provider model

Else Berit Momrak
Manager of purchaser unit

Rolf Gundersen
One of two managers for the home based services in 1999
At present manager of Abildsø Bo- og Rehab

Inger Johanne Saxrud
One of two managers for the home based services in 1999
At present section manager of all home based services at Manglerud

Lene Haugen (economy consultant) and Marit Langfelt Ege (city district manager) were in charge of introducing the model, however did not work in Manglerud any more and were not possible to reach for interviews in this case study.

Reorganisation of provider activities (rota scheme and SmartWalk)

Gry Røste
Development function
At present manager of Manglerud Nevrohjem

Inger Johanne Saxrud
One of two managers for the home based services
At present section manager of all home based services at Manglerud

Anne Marit Rennemo
Managing trained nurse of one of the home based service units

Helle Andersen
Managing trained nurse of one of the home based service units

Solveig Nyhamar
PRO/RO manager in Manglerud (manager of nursing, rehabilitation and care services)

Achievement based financing (ISF)

Gry Røste
Development function
At present manager of Manglerud Nevrohjem

Solveig Nyhamar
PRO/RO manager in Manglerud (manager of Nursing, Rehabilitation and Care services)

External KISA providers

City of Oslo / KS

Sigbjørn Iversen
Consultant in the Development and Competence Unit, Oslo municipality
At present engaged as project supervisor in the Efficiency Network of KS

Kristiansand Municipality

Lars Dahlen
Manager of Health and Social services in Kristiansand municipality

Arild Rekve
Consultant in the staff of the manager of health and social manager