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Vlerick Leuven Gent Management School

the Autonomous Management School of
Ghent University and Katholieke Universiteit Leuven

RESEARCH REPORT

INNOVATION IN THE ELDERLY CARE SECTOR: AT THE EDGE OF CHAOS

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- **Ondernemen.meerdan.ondernemen**, an online learning platform
- **Creativity Class** for young high-potentials
- **Flanders DC Fellows**, inspiring role models in business creativity
- **Creativity Talks**, monthly seminars on business creativity and innovation
- **Innovix,** online innovation management game
- **Flanders DC Academic Seminars:** research seminars on business creativity and innovation
- **TeamScan**, online tool

PREFACE

As researchers within the Healthcare Management team of the Vlerick Leuven Gent Management School, we were well aware of the challenges in the healthcare sector and more in particular in the elderly care sector.

Insight in existing innovative opportunities within this sector to respond to these challenges, however, was lacking. Thanks to the participation of several Flemish elderly care organization experts within the Flemish elderly care domain, and several researchers and governmental actors outside Flanders, we were able to gain insight in this very promising domain.

Via this research report, we would like to diffuse the identified innovative opportunities and their preconditions in and outside Flanders, as these are without exception inspiring initiatives.

Spreading these inspiring innovative opportunities and their preconditions, however, would not have been possible without the support of Flanders District of Creativity. As a result, we thank Flanders District of Creativity for giving us the chance to conduct this research project.

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SUMMARY

As the elderly care sector in an ageing society is characterized by several challenges (such as increasing and changing needs, personnel challenges and financial challenges), new policy strategies and rethought and restructured organizations and institutions are necessary. The elderly care sector is thus in need for innovation, but research in this domain is rather limited. Therefore, this study aimed to 1) define innovation in the elderly care context, 2) identify innovative opportunities in and outside Flanders, and 3) provide insight into preconditions for innovation.

Based on a literature review, a definition for innovation in the elderly care sector was developed, the so-called Elderly Care Innovation Framework. This framework consisted of four dimensions, namely the perceived innovativeness, the degree of elaboration, the degree to which the challenges in the ageing society are met, and the potential for diffusion. Initiatives with higher scores on these dimensions were considered more innovative initiatives.

Concrete examples of innovative opportunities were identified in different ways. A literature review revealed four main policy strategies, namely the decentralization strategy, the de-institutionalization strategy, the integration strategy, and the rationalization strategy. These strategies were also reflected in the innovative initiatives identified via a survey among researchers and governmental actors outside Flanders and via an innovation contest among elderly care organizations and an expert panel in Flanders. Remarkable was that several initiatives (both in and outside Flanders) referred to demand-oriented integration (i.e. better meeting elderly people's needs) or collaboration. The former was realized by providing better quality of care, better quality of life and increasing elderly people's independency, while the latter included information exchange initiatives, initiatives striving towards an improved care continuum, and partnerships with other sectors.

Preconditions for innovation were identified via a literature review, a survey among researchers and governmental actors outside Flanders, and case studies in the organizations of five innovative initiatives in Flanders. Based on the literature review, the complex adaptive system (CAS) theory – as opposed to theories based on a mechanic world view – was considered as an explanatory theory for innovation and change in elderly care organizations. This theory assumed that elderly care organizations are CASs, i.e. *'a collection of individual agents with freedom to act in ways that are not always totally predictable, and whose actions are interconnected so that one agent's actions change the context for other agents'*. CASs – which are based on self-organization – are assumed to result in continually emerging novel behaviour, order, progress, and innovation. The question was whether the CAS theory was able to explain the preconditions for innovation in the elderly care sector.

Researchers and governmental actors outside Flanders underlined the importance of individual agents and their interactions on the one hand and the importance of the internal and external environment on the other hand, which is in line with the CAS theory. However, the importance of self-organization – a key characteristic of CASs – was not mentioned. In the organizations of the five innovative initiatives in Flanders, a high degree of internal and external interactions and a medium degree of self-organization were found. We concluded that these organizations partially act as CASs. The agents, however, were not always able to totally adjust their behaviour to cope with internal and external demands, because of order-generating rules, top-down forces, procedures and regulations.

The organizations of the five innovative initiatives were thus situated between disintegration (total chaos) and ossification (total stability), which is also referred to as ‘the edge of chaos’.

As a result, the edge of chaos model can be considered as a feasible framework for explaining adaptive (and thus innovative) behaviour within elderly care organizations. Therefore, this model is at the basis of the managerial and policy recommendations at the end of this research report. These recommendations have to be considered as suggestions to encourage reflection and experimentation. Final goal of this research report and the recommendations is to stimulate organizations to move away from too much stability without ending up in total chaos and thus to find the edge of chaos.

'Les personnes âgées d'aujourd'hui ne sont plus les mêmes que celles d'autant'
(Pacolet et al., 2004, p. 44)

In the near future, the baby boomer generation will go into retirement and in the not too distant future, these pensioners will also become in need of care (Part I chapter 1). The care sector does not only have to be prepared for an increase in care demands, but also for changing care demands. This is not easy, as the sector is characterized by several other challenges as well, such as a high pressure of work and shortage of care personnel and financial challenges (Part I chapter 2).

As a result of the challenges in the ageing society, rethought and restructured elderly care organizations and institutions as well as new policy strategies are required in different countries, as ageing is an international phenomenon. The elderly care sector is thus in need of innovation, but research in this domain is rather limited. Therefore, this study aims to **define innovation in the elderly care context** (Part I chapter 3) and **provide insight into preconditions for innovation based on a literature review** (Part I chapter 4).

Via a literature review, a survey approach and case studies (Part II), this study aims to **identify current policy strategies** (Part III), and **innovative opportunities and their preconditions outside Flanders (Part IV)** and **in Flanders** (Part V). The gathered data will be compared with the insights of the Complex Adaptive System theory, which is relevant in contexts characterized by many interacting components, interactivity and complexity.

This research report will thus give insight in innovation in the elderly care sector and the applicability of the insights of the Complex Adaptive System theory in the elderly care innovation domain. Moreover, we will **formulate managerial recommendations** (Part VI) and **policy guidelines** (Part VII).

In sum, the theoretical insights and empirical data do not only respond to a gap in the scientific literature, they also are a source of inspiration for managers in elderly care organizations and governmental actors in the elderly care sector.

1. The ageing society

Medical and technological progress in several Western countries increased life expectancy (Schulz, 2004). In Belgium, for instance, the life expectancy in 2006 was 76.6 years for males and 82.3 years for females (Eurostat, 2008). Longer life expectancy, declining fertility and a decrease in birth rates led to population ageing (Stark, 2005; Cesaratto, 2006; European Commission [EC], 2006; World Health Organization [WHO], *n.d.*). Moreover, ageing is expected to become a universal trend in the coming decades, although there is diversity in terms of timing and speed. Developing countries are projected to experience ageing, but the most pronounced ageing trend can be found in developed countries (European Commission, 2002). In these countries, an explosive growth of 'old' elderly is even taking place (*i.e.* 'double ageing') (Grothe & Nijkamp, 1996; Stark, 2005).

In 2050, the percentage of older people (over 60) will for the first time in history exceed the percentage of children (under 14) (Hunter-Zaworksi, 2007). This evolution is confirmed by the old-age-dependency ratio; that is, *'the ratio between the total number of elderly persons of an age when they are generally economically inactive (aged 65 and over) and the number of persons of working age (from 15 to 64)'*. In Europe, this ratio was 25.9 percent in 2005 and will increase to 53.2 percent in 2050 (Eurostat, 2009b).

The lowest ratios can be found in the Netherlands and Northern Europe (including the United Kingdom), while the highest ratios are situated in Germany and Eastern and Southern Europe, followed by France and Belgium. Although there is differentiation within Europe, the old-age-dependency ratios remain very high. High ratios (and thus small native workforces) have an impact on the labour markets in Western countries (European Commission, 2006). The impact of the ageing society on the economy is extensively investigated (Pacolet et al., 2004). Moreover, the sustainability of the pension system and social security is questioned (Pacolet et al., 2004; Cesaratto, 2006). In Belgium, for instance, the High Council of Finance has a Study Group on Ageing since 2006 (Hoge Raad van Financiën, n.d.) and at the European level major attention is paid to the modernization of social security systems in the ageing societies (European Commission, 2006).
The ageing debate, however, should not be narrowed to a debate about the financial sustainability of the social security system. In the near future, the baby boomers will go into retirement, but in the not too distant future these pensioners will also become in need of care (Pacolet et al., 2004). Elderly care is important for people's welfare and daily life (Trydegård, 2003). According to Stark (2005), the organization and distribution of care deserve particular attention. In this research report, the focus will thus be on the provision of elderly care. The public debate on elderly care provision is often restricted to its budgetary impact (increasing health and care expenditures) and the sustainability of public-funded elderly care (Pacolet et al., 2004), but this research report will pay attention to both financial challenges and non-financial challenges in the provision of elderly care and more in particular to innovative solutions for these challenges.

In the following chapters, we will discuss the current elderly care provision system, the challenges in the provision of elderly care, and the interpretation and preconditions for innovation in the elderly care sector.

2. Challenges in the provision of elderly care

2.1. Elderly care provision systems

2.1.1. Responsibility for elderly care

In all countries, the responsibility for the provision of and payment for elderly care is – in accordance with other forms of welfare provision – divided between the four actors of Pijl's "welfare diamond". As shown in Figure 1, the four actors of the "welfare diamond" are 1) the family and the informal care sector, 2) the state or public sector, 3) the voluntary and non-governmental-organization (NGO) sector, and 4) the care market or private sector (Pacolet et al., 2004; Mestheneos & Triantafillou, 2005; Stark, 2005). The voluntary and NGO sector can also be described as the private not-for-profit sector and the care market or private sector as the private for-profit sector.

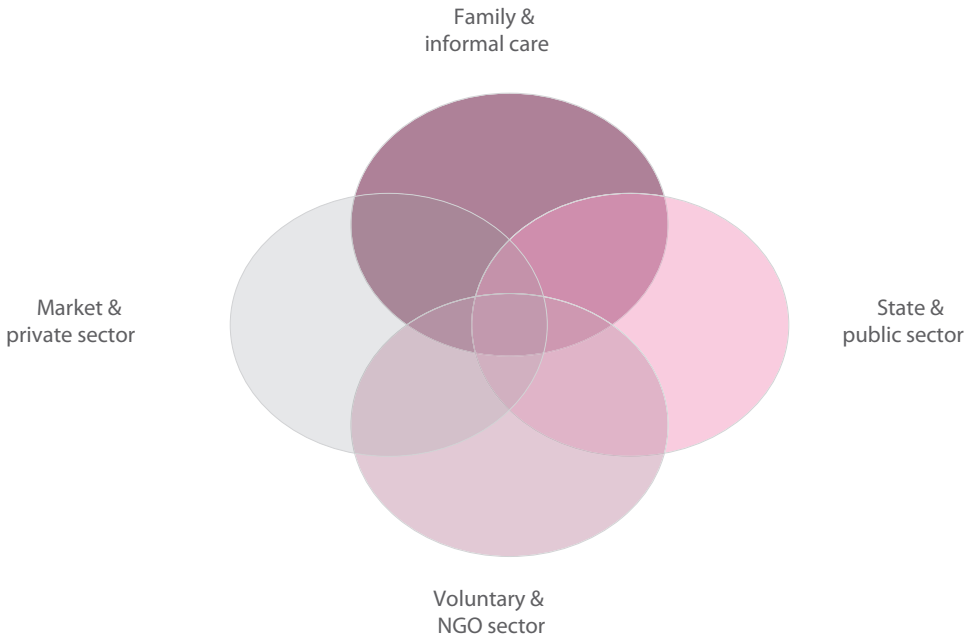

Figure 1. Welfare diamond.

The contribution of each actor in the welfare diamond, however, is different in different countries, depending on a mixture of factors such as tradition, legal responsibilities, health and social policy, national budgets and national wealth and demographic trends regarding fertility levels and life expectancy (Mestheneos & Triantafillou, 2005). In accordance with the contribution of the different "welfare diamond" actors, three types of welfare states can be distinguished in Western countries. These types correspond with the three types described by Esping-Andersen in his book 'The Three Worlds of Welfare Capitalism' in 1990.

The social democratic welfare regime (also known as a universal welfare regime or Scandinavian Beveridge oriented Welfare State), which can be found in the Nordic countries, is a highly egalitarian welfare regime, characterized by universalism and equality promotion (Rauch, 2007) and by redistributive taxes and generous welfare benefits, typically of a universal kind (Rice, Goodin, & Parpo, 2006). This type of welfare state is thus not only a social insurance state, but also a social service state (Trydegård, 2003). The role of the state and public organizations is thus crucial for people's welfare. The United Kingdom bears a resemblance to the Nordic countries, as the state guarantees some welfare benefits. Therefore, it is sometimes referred to as a Beveridge oriented Welfare State. However, the quantity of welfare benefits is considerably lower, as a result of which many people look for care provision in the private market. The United Kingdom can thus better be regarded as an example of the liberal welfare regime. In the liberal welfare regime (also known as the residuary welfare regime), people's welfare is promoted by the market and the private sector. Other examples are the United States and Australia (de Mooij, 2006). In Belgium, however, all actors have their distinctive role to play and welfare benefits are typically earnings-related and hence status-preserving. This regime is a corporatist welfare regime (also known as a conservative welfare regime or a Bismarck oriented Welfare State). Germany, France, Luxemburg and other countries of Continental Europe also exemplify this regime (Rice et al. 2006).

Each of the three types of welfare states especially depends on one or two "welfare-diamond" actors, but that does not mean that the other actors do not play a role. In the Nordic countries with an egalitarian welfare regime, for instance, there is a considerable amount of informal care (Trydegård, 2003). Moreover, there is some differentiation within the different types of welfare regimes. In a few of the Continental European countries (such as Greece and Spain), in which the welfare regime is classified as conservative, the family plays a very important role. As a result, the social system within these countries is significantly less funded and based on a continuing association between poverty and old age, resulting in *'low service provision limited to those who can pay or who lack alternative sources of care'* (p. 7) (Mestheneos & Triantafillou, 2005). Therefore, these welfare regimes are also called 'Mediterranean welfare regime'. The Nordic countries, typically characterized as egalitarian welfare regimes, don't form a coherent group either, although these are not split up (Trydegård, 2003; Rauch, 2007). Rauch (2007), for instance, states that *'only Denmark corresponded with the Scandinavian social service model. Both Sweden and Norway deviated significantly in childcare and elderly care'* (p. 264). Finally, some countries can be situated within different types. The Netherlands, for instance, combine a corporatist welfare regime and a social democratic regime and the welfare regime in the new member states in Central and Eastern Europe is a mixture between the liberal and the corporatist welfare regime (de Mooij, 2006). The different types of welfare regimes are presented in Table 1.

Table 1. Different welfare regimes

Liberal welfare regime	*eg.* United States, Australia
Combination of liberal and social democratic welfare regime	*eg.* United Kingdom
Social democratic welfare regime	*eg.* Nordic Countries
Combination of social democratic welfare regime and corporatist welfare regime	*eg.* The Netherlands
Corporatist welfare regime	*eg.* Continental European countries
Derivative of corporatist welfare regime	*eg.* Mediterranean countries

2.1.2. Forms of elderly care

In the elderly care sector, a distinction is often made between informal and formal elderly care provision. The former refers to care provided by family members and informal carers (eg. neighbours, friends…), while the latter refers to care provided by the other "welfare diamond" actors. Both formal and informal elderly care can be provided in cash, in kind and via intermediate forms (Pacolet et al., 2004). The formal elderly care provision in kind can be divided into residential, semi-residential and ambulant care. In Flanders, residential care refers to rest homes and service flats. Rest homes include 'rest homes for the elderly' (ROB – 'rustoorden voor bejaarden') providing a home, care and services for elderly people and rest and nursing homes (RVT – 'rust en verzorgingstehuis') with specific tasks to house elderly people in heavy need of care. Semi-residential care in Flanders refers to centres for short stay and day-centres. Flemish ambulant care refers to home care and home nursing, the initiatives for the co-ordination of home care (SITs), and family care providing a range of services (such as personal care, housekeeping and cleaning help) (Vlaams Agentschap voor Zorg en Gezondheid, n.d.).

Table 2 gives an overview of the different forms of elderly care. Two dimensions can be distinguished, namely the "who"-dimension (*i.e.* who provides elderly care?) and the "how"-dimension (*i.e.* how is elderly care provided?). The elderly care forms in Table 2 can be found in different countries, but the importance of each form varies among countries according to the elderly care provision system.

Table 2. Forms of elderly care.

HOW \ WHO		Formal care			Informal care
		public sector	private sector		family and informal sector
			for-profit	not-for-profit	
Help in kind	residential care				
	semi-residential				
	ambulant care				
Intermediate forms					
Help in cash					

2.2. Challenges in the provision of elderly care

Regardless of the type of welfare state, the ageing population confronts the elderly care provision systems in Western countries with several challenges. These challenges can be reduced to three main challenges, namely increasing and changing elderly care demands, shortage of caregivers, and financial sustainability. These three challenges will be described in the following sections.

2.2.1. Increasing and changing elderly care demands

The increased life expectancy leads to higher healthcare utilisation and more care dependency (Hutchison, 2002; Verloo, Depoorter & Van Oost, 2002; Schulz, 2004; Ten Asbroek et al., 2004). According to OPAN Cymru (2005), *'people aged over 65 years are known to make greater use of health, medical and social care services and to consume more public resources than other age groups'*

(p. 5). Especially in the group of 'old' elderly (the over-85-group), elderly care demands are rising. Increasing elderly care demands require a quick expansion of care provision (Stark, 2005). However, there is not only need for more care provision, but also need for other care provision - or as Pacolet et al. (2004) state *'les personnes âgées d'aujourd'hui ne sont plus les mêmes que celles d'autant'* (p. 44). Four categories of changes concerning elderly care demands can be distinguished.

Firstly, the number of people with Alzheimer or dementia is growing (Verloo et al., 2002). Secondly, changing family structures (such as decreased household size) complicate informal care (Mestdagh & Lambrecht, 2003), as a result of which more people end up in formal care circuits. Moreover, the foreign elderly, who are currently often cared for by their children, are also expected to appeal more to formal care circuits, because they are also ageing and will become more care dependent (Schellingerhout, 2004). Thirdly, expectations on elderly care rose, as a result of an increasing proportion of elderly people in the population, improved conditions of living, and medical technological advances during the 20th century (Hedman, Johansson, & Rosenqvist, 2007). The elderly have become more affluent and mobile (Hunter-Zaworski, 2007) and some elderly are in good health (Pacolet et al., 2004). Consequently, elderly people do not only expect healthcare, but also services in the field of transport, living, and welfare to have more autonomy and social contact (van Bilsen, Hamers, Groot, & Spreeuwenberg, 2004). Fourthly, there is a strengthening of the position of the elderly and their family, as they have become 'clients' instead of 'patients' (van Wijk, 2007). Some rest and nursing homes are adapting to higher quality expectations *'by offering a greater range of provision, decreasing the number of residents per room, improving comfort and improving the training of nursing staff'* (p.1-2), as well as by collaborating intensively with other facilities for the elderly and thus by separating the housing and service function (Meijer, Van Campen and Kerkstra, 2000). Responding to higher quality expectations, however, is difficult, as Eaton (2000) found out that quality of care is related to human resource practices (selection, wage benefits, turnover, and etcetera) and work organization (teams, training, etcetera), which cannot be guaranteed in every elderly care institution.

2.2.1. Shortage of caregivers

Increasing and changing needs can often not be met by relatives or friends (the so-called 'informal caregivers'), as work life and family are not easy to combine. Especially people of the 'sandwich generation' – who have to care for their ageing parents as well as for their children – are under pressure (Kibbe, 2003). Moreover, in different countries informal caregivers are decreasing their own quality of life, as pension systems are related to years in paid work (Stark, 2005). Therefore, formal caregivers have become more important in the elderly care sector. However, the (health) care sector - and especially the elderly care sector - contends with personnel shortage. Finding sufficient certified nurses is a problem within many rest and nursing homes, but other forms of elderly care are also dealing with limited personnel resources (Parys, De Coninck, De Jonghe & Meulemans, 2002; Declercq & Van Audenhove, 2004; Upenieks, Akhavan, & Kotlerman, 2008). According to Parys et al. (2002); the main causes of personnel shortage are insufficient intake and early departure, which are resulting from different factors. Firstly, a high percentage of the employees are working half-time and the sector is feminized. According to Moiden (2003), personal and work life balance is not guaranteed for nursing home personnel. Secondly, working in the elderly care sector is difficult (both physically and emotionally) and the workload is very high. In spite of the high workload, carers receive little emotional and financial support (Uhlenberg, 1997; Stark, 2005). Meijer et al. (2000) even argue

that the workload for personnel is still increasing due to increasing care-dependency of residents, the higher quality requirements and financial problems.

2.2.3. Financial sustainability problem

Several actors found growing expenditures in healthcare, as a result of the increased care dependency (Pacolet et al., 2004; Schulz, 2004; Studiecommissie voor de vergrijzing [SCvV], 2007). The increasing number of frail elderly people is believed to result in even larger expenditures (Saltman, Dubois & Chawla, 2006). Cesaratto (2006) particularly expects a growth in the costs of long-term care and medical assistance for the ageing population. In Belgium, for instance, the percentage share in healthcare (both long-term and acute care) in GDP in 2050 is estimated at 10.5%, which is an increase of 3.5% from today's percentage of 7% (Studiecommissie voor de vergrijzing [SCvC], 2007). According to reports of the Organisation for Economic Co-operation and Development (OECD) and the European Union (EU), however, increased costs are not only a result of increased healthcare and elderly care utilization, but also a result of inefficiency and ineffectiveness in the elderly care sector (Pacolet et al., 2004). Regardless of the causes, increasing costs are assumed to lead to problems with the financing and provision of elderly care in most European countries (Meijer et al., 2000). Stark (2005) confirms that economic conditions and resources are inadequate to deal with the increasing costs. A sustainability problem for public finance is thus impending (Schulz, 2004; Saltman et al., 2006). Nevertheless, affordable and qualitative care should be guaranteed according to the EU (Pacolet et al., 2004).

2.3. Conclusion

An overview of the challenges in the ageing society is given in Table 3, as well as a comparison with the challenges mentioned in reports of WHO, OECD and EC (see Appendix A. *'Overview challenges in an ageing society'*).

Table 3. Challenges in the ageing society.

MAIN CHALLENGES	SUBCHALLENGES LITERATURE REVIEW	WHO, OECD, EC
Increasing demands	Higher healthcare utilization and more care dependency	Need for more health and care services: need to ensure accessibility
Changing demands	More Alzheimer, dementia,…	More chronic diseases, disability and fall incidents
	Decreasing number of informal caregivers due to changing family structure (especially foreign elderly)	Decreasing number of informal caregivers due to changing family and work patterns
	People expect healthcare and services in the field of transport, living, and welfare to have more autonomy and social contact	Demand for maximization of social participation, functional capacity, autonomy and independence
	Higher quality expectations	Demand for high-quality services
	Feminization of old elderly	Feminization of the elderly
	More poor elderly	
Personnel challenges	Personnel shortage due to difficult working conditions and feminization in the sector	Personnel shortage as a result of early retirements and high turn-over due to difficult working conditions
	Need to find certified nurses	Need for trained and qualified personnel
Financial sustainability	Larger expenditures in healthcare and long-term care	Growing costs in healthcare and long-term care
	Need for more effectiveness and efficiency	Need for more effectiveness and efficiency
	Ensuring affordable care	Ensuring affordable care

This table shows that the challenges mentioned in the literature review correspond to those mentioned by the WHO, the OECD and the EC. Therefore, this research report will focus on three challenges, namely 1) meeting increasing and changing elderly care demands, 2) finding a solution to the personnel challenges, and 3) guaranteeing the financial sustainability of elderly care. The question is how the elderly care sector can respond to these challenges, both at the sector level and the organizational level. This will be discussed in the next chapters.

3. Need for innovation in the elderly care sector

As a result of the challenges in the ageing society, rethought and restructured organizations and institutions in the elderly care sector and new policy strategies are required in different countries (WHO, 2000; Kressley, 2005), as ageing is an international phenomenon (Saltman et al., 2006). Moreover, there is evidence that innovation and substantive policy reforms will enable countries to successfully manage the economics of an ageing population (WHO, 2002). Saltman et al. (2006) confirm that significant additional (policy) innovations are required for efficient and financial sustainable elderly care. Several actors recognize thus the need for innovation, but there are few studies on innovative opportunities in the elderly care sector and uncertainty about the definition of innovation in the elderly care sector. Therefore, a framework will be presented to catch innovation in the elderly care sector in all its diversity.

3.1. Perceived innovativeness

Innovation can be defined as *'an idea, practice or object that is perceived as new by an individual or other unit of adaptation'* (Rogers, 1995; p. 35). Innovation is thus based on 'new ideas', which can refer to improvement of existing ideas, translating ideas of other contexts to the elderly care sector, or radically new ideas. These ideas can be related to services (*i.e.* service-related innovation), organizational factors or the establishment (*i.e.* organization-related innovation), or the institutional environment (*i.e.* institutional or policy innovation). More information about this typology is retrieved in Outline 1.

An interesting framework for the perceived innovativeness is the framework of Wheelwright and Clark (1992) (see Figure 2). This framework consists of two dimensions, namely the degree of change in the product and the degree of change in the manufacturing process, which can be translated to respectively the degree of change in the service and the degree of change in the organization's processes. This framework can be used to map different initiatives and projects. The five types of projects and initiatives are:

- derivative projects range *'from cost-reduced versions of existing products to add-ons or enhancements for an existing production process'* (p. 73)
- breakthrough projects refer to new products and services
- platform projects have more product and process changes than derivative projects but less than breakthrough projects
- research and development is *'the creation of the know-how and the know-why of new materials and technologies that eventually translate into commercial development'* (p. 74)
- alliances and partnerships are formed to pursue any type of project.

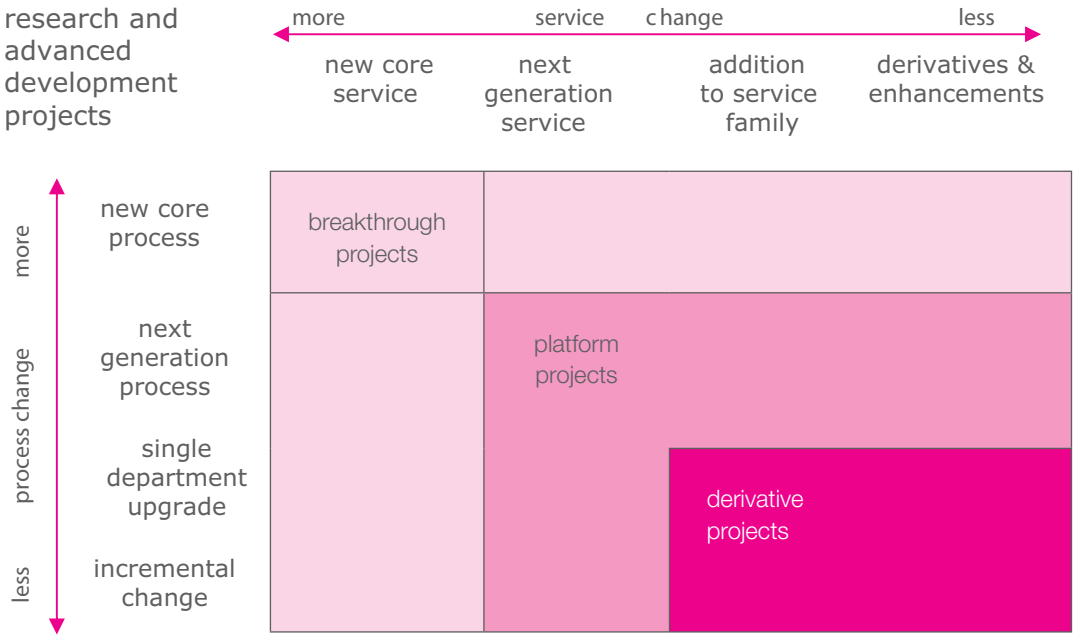

Figure 2. Five types of initiatives and projects (adapted from Wheelwright & Clark, 1992).

The 'newness' of an innovative initiative – as Rogers (1995) also pointed out – cannot be detached from perception. Therefore, the first dimension is the perceived innovativeness or perceived newness of initiatives.

3.2. Degree of elaboration

Evans and Dean (2003), however, go one step further. According to these authors, innovation starts with creativity (*i.e.* the ability to discover new ideas), but also includes *'the practical implementation of useful new ideas'* (p. 112). Van Bruystegem, Dekocker, Dewettinck and Baeten (2007) confirm that innovation refers to successfully implementing creative ideas. Martins and Terblanche (2003) add that the result of innovation is change. This interpretation of innovation can also be found by Devos, Van De Woestyne and Van den Broeck (2007), who defined innovation as the implementation of new ideas, products, procedures or services, which is a result of creating new ideas, products, procedures or services and a condition for change. In this research report, innovation will also be conceived as a gradual concept, going from ideas (creativity) over try-outs, concretization and implementation (innovation) to evaluation (change) (see Figure 3).

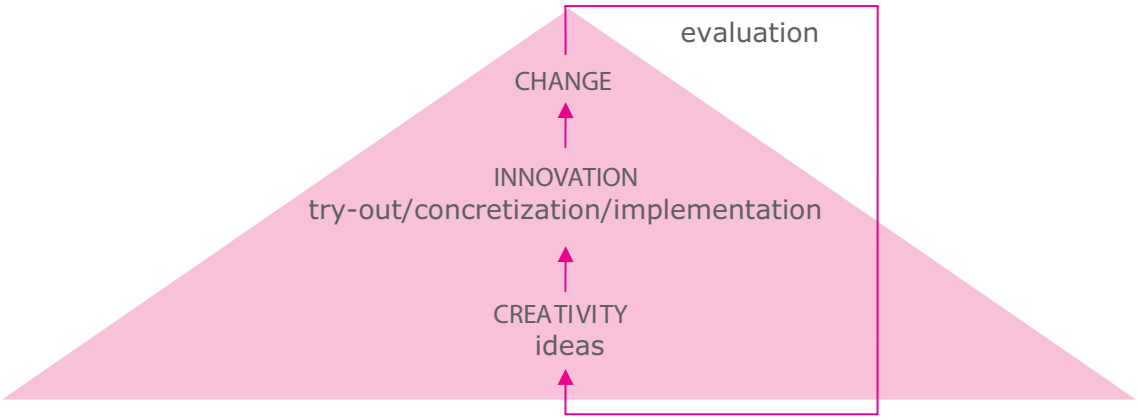

Figure 3. Degrees of elaboration.

In general, a lot of ideas are generated in organizations, but only a few ideas are actually concretized or implemented and even less implemented ideas result in change and evaluation. More elaborated initiatives are thus considered as more innovative. Therefore, the degree of elaboration of new ideas, products, procedures or services is the second dimension of innovation.

3.3. Expected attributes of innovation

In a service setting not only "novel" but also "useful" is an important and necessary characteristic for qualifying an idea as creative (Madjar & Ortiz-Walters, 2008). In general, innovation can be seen in relation to the worldwide economic competition, as this competition increases the pressure on companies to increase flexibility and rapidity and to introduce new technology and innovation (Reimann, 1999; Maguad, 2006). The Advisory Committee on Measuring Innovation in the 21st Century Economy (2008), for instance, defined innovation as

> *'the design, invention, development and/or implementation of new or altered products, services, processes, systems, organizational structures, or business models for the purpose of creating new value for customers and financial returns for the firm'* (p. i).

Innovation in function of creating value for customers and financial returns for the firm can also be found in the elderly care sector, but the motivation is different. Innovation in the elderly care sector does not refer to the worldwide economic competition, but to the challenges in the ageing society. Expected attributes of innovation in the elderly care sector are responding to 1) increasing and changing demands (*cf.* value creation for the customers), 2) personnel challenges, and 3) financial challenges for the organization and the government (*cf.* financial returns for the firm). These attributes refer thus to different stakeholders: 1) clients and family, 2) personnel, 3) management, and 4) government.

According to Declercq and Van Audenhove (2006), innovation has become more important in the elderly care sector, as improving existing activities is not sufficient anymore. As a result, quality is not longer an 'order winner', but an 'order qualifier', while innovation and flexibility have become

'order winners' (Rahman & Sohal, 2002). Schrijvers, Oudendijk and de Vries (2003), for instance, describe healthcare innovations as *'a change in the delivery of care, consciously chosen by existing organisations with the object of improving the performance of care delivery'* (p. 2) and Marcellis (2006) refers to the ability to develop new products and services responding to the elderly people's demands and new methods and procedures meeting financial and personnel challenges, without losing quality. Hee-Jae and Pucik (2005) conclude that innovation in the elderly care sector is not able to do without quality.

Innovation is thus expected to respond to the challenges in the ageing society without losing quality. The degree to which challenges are met is the third dimension of innovation. Both small-scale and breakthrough innovations are included. Today, several initiatives are focussing on better meeting elderly people's needs without considering the costs of these new initiatives or the implications for the care personnel. Moreover, several initiatives are established without taking into account the existing care supply, which results in overlap and thus inefficiency. Therefore, the more challenges that are responded by an initiative, the more innovative the initiative is.

3.4. Potential for diffusion

Innovative initiatives, however, do not only have to be useful in relation to the context (cf. challenges in the ageing society), but also in relation to the current situation within elderly care organizations. This refers to the potential for diffusion of initiatives, i.e. the degree to which innovative initiatives are translatable to other elderly care organizations. Underlying assumption is that isolated initiatives have less power to deal with the challenges in the ageing society than initiatives which can be translated to other organizations.

3.5. The Elderly Care Innovation Framework

In short, the innovativeness of initiatives within the elderly care sector can be judged on the basis of 1) the perceived innovativeness, 2) the degree of elaboration, 3) the degree to which the challenges in the ageing society are met, and 4) the potential for diffusion of the initiative. Combining these four dimensions results in a new multidimensional framework: the 'Elderly Care Innovation Framework'. This framework can be used as a guide to evaluate the innovativeness of initiatives in the elderly care sector.

OUTLINE 1
INNOVATION TYPOLOGIES

According to Djellal and Gallouj (2006), innovation typologies or types are *'classification of innovations according to a specific scheme'* (p. 40). Goal is to organize the diversity in innovations. According to Adams (2003), typologies cannot only be based on the degree of newness (*cf.* the degree of innovation), the attributes of an innovation (*cf.* challenges in the ageing society), but also on the functionality or domain of application. Most typologies (including our typology) are based on the functionality or domain of application.

In general, a distinction is often made between technological process and product innovations and organizational or administrative innovations. The former refer to new products, services and new elements in an organization's production process or service operation, while the latter constitute the introduction of new management systems, structures, business concepts, administrative processes, staff development programmes, or networking (*eg.* Damanpour, Szabat & Evan, 1998; Devos et al., 2007). According to Walker (2006), there are not only technological process and product innovations, but also non-technological process and product innovations. The non-technological product innovations are thus a new type of innovation, while the non-technological process innovations correspond with organizational or administrative innovations, as this type includes innovations in structure, strategy, administrative processes, and management practices. Working across boundaries, networking, and partnerships, however, was not included. These innovations were labelled as 'ancillary innovations', which are innovations in interaction with users and other organizations (Walker, 2006).

In this research report, we brought all enumerated types back to product and service-related innovations (including technological and non-technological innovations) and organization-related innovations (including technological and non-technological innovations). This is in line with an existing typology of Madjar and Ortiz-Walters (2008) in the services sector, by which service-related innovations refer to services characterized by novelty and usefulness, while organization-related innovations refer to making novel and useful changes and improvements to the establishment. Moreover, this distinction can also be retrieved in the existing elderly care innovation typologies, which are very rare.

Herzlinger (2006), for instance, distinguishes three types, namely customer focused innovations, technological innovations, and innovation in business models. Customer-focused innovation refers to service-oriented innovation, as examples are the way in which consumers buy and use healthcare. Innovation in business models refers to integration of healthcare activities. Both horizontal integration (bringing different players into a single organization) and vertical integration (bringing different treatments under one roof) are possible. This type rather leans to organization-related innovation. Technological innovations can be categorized as service-oriented and organization-oriented, as new drugs and medical devices (*cf.* service-related innovation) as well as diagnostic methods and drug delivery systems (*cf.* organization-related innovation) were included.

Djellal and Gallouj (2006) derived six innovation targets in the elderly care sector, by which most innovation targets can be brought back to one of the two types. Service-related innovation targets are 1) service innovation, 2) innovation in forms of assistance and 3) innovation in residential provision. Innovations in the domain of care workers are more organization-related innovation targets. Examples are innovations focussing on the care giver burden, such as assessment instruments, the formation of support groups, the introduction of specific training sessions, the establishment of caregiver support centres, holiday respite facilities, and general respite arrangements for family care givers belong here. Technological innovations, which received a good deal of attention in the literature, include tangible and intangible technologies and medical and non-medical technologies. These innovations can be service- or organization-related.

Djellal and Gallouj (2006), however, add an interesting innovation type, namely innovations in the institutional environment. These innovations can be both demand-related innovations (such as the service cheques and the service voucher) and innovations on the supply side in order to improve the quality (such as training institutes, the status of approved personal service). As a result, we add innovations in the institutional environment, as the government plays an important role in the elderly care sector. The three derived innovation types are thus 1) service-related innovations, 2) organization-related innovations, and 3) institutional or policy innovations.

Like several other innovation typologies (*eg.* Totterdell, Leach, Birdi, Clegg & Wall, 2002; Walker, 2006; Djellal & Gallouj, 2006), our final typology refers thus to the most relevant actors in the elderly care sector, namely the elderly and their relatives (cf. service-related innovation), the caring personnel and the organization (*cf.* organization-related innovation), and the government and regulatory institutions (cf. policy innovations). It is self-evident that this elderly care innovation types cannot be seen apart from each other. Innovative initiatives can thus be situated within different innovation types. Moreover, Adams (2003) argues that *'the typologies operationalised in innovation research appear not to have a foundation of scientific derivation'* (p. 41) and the same goes for the new elderly care innovation typology. Therefore, the new elderly care innovation typology should be considered as an aid to classify elderly care innovations and not as an indisputable and fixed typology for innovation in the elderly care domain.

4. Preconditions for innovation

In this chapter, a framework for classifying conceptual approaches to innovation and change in the healthcare sector will be introduced. It will be demonstrated that there is a paradigm shift in thinking about organizational change, management and innovation in the healthcare domain (*eg.* Goes, Friedman, Seifert & Buffa, 2000; McMillan, 2007). As complex adaptive systems perfectly fit with the paradigm shift, this theory will be further explored.

4.1. Innovation and change in the healthcare sector

According to Goes et al. (2000), healthcare organizations have undergone great changes over the last two decades. These authors wanted to know how healthcare organizations change. Therefore, they developed a framework for classifying conceptual approaches to change and investigated how change in healthcare has been conceptualized. Organizational change theories are classified in three dimensions: 1) *level of change* or the point at which change is modelled (change within organizations versus multi-organizational industry or population-level events), 2) *type of change* (incremental, continuous or first-order change versus radical, discontinuous or second-order change), and 3) *mode of change* (change prescribed or driven by a deterministic logic versus more generative novel and voluntaristic change). Based on these three dimensions, eight categories of organizational change theories can be derived. An overview of these categories can be found in Table 4 and in Outline 2.

Table 4. Theories of organizational change in healthcare (Goes et al., 2000).

Category	Level of change	Type of change	Mode of change
Adaptation	Organization	First-order	Deterministic
Life cycle	Organization	Second-order	Deterministic
Evolution	Industry	First-order	Deterministic
Chaos	Industry	Second-order	Deterministic
Teleology	Organization	First-order	Voluntaristic
Transformation	Organization	Second-order	Voluntaristic
Social construction	Industry	First-order	Voluntaristic
Revolution	Industry	Second-order	Voluntaristic

OUTLINE 2
MODES OF CHANGE

DETERMINISTIC MODE OF CHANGE

Within the **adaptation theory,** management is conceptualized as an adaptive and largely reactive task, which brings the organization back into alignment as fit with the environment fluctuates. A classic example of the adaptation theory is the structural contingency theory, which dominated the 1960s and 1970s, but this approach was replaced by resource dependency theory as dominant perspective on adaption. Research on organizational change in healthcare was traditionally viewed from this perspective, but in recent years less attention has been paid to this perspective. Moreover, good research on outcomes and the translation of outcomes into management practices are rare (Goes *et al.*, 2000).

According to the **life cycle theories**, managers' tasks shift to *'facilitating the inexorable metamorphosis of an organization between distinct phases of development, demarcated by periods of uncertainty and instability'* (p. 149). In the healthcare domain, however, few examples of these theories were found (Goes *et al.*, 2000).

Within the **evolution theory,** organizational changes are selected and retained at the population level on the basis of the survival of the fittest principle. Some evolution theorists argue that *'evolutionary pressures build slowly and incrementally through a process of blind organizational variation, environmental selection and retention at the population level'* (p. 149), but institutional evolution theorists state that *'organizations conform to institutional pressures through processes of isomorphism and normative adaptation'* (p. 149). Several studies in the healthcare domain focused on the relationship between health policies at the federal level and individual and collective responses to these policies. Most of these studies, however, illustrated that despite policy changes healthcare organizations and systems only change incrementally. In recent years, however, incremental changes have lost in favour of more radical changes. Especially hospitals respond to environmental pressure for change as a result of interaction with internal and external stakeholders, including employees, owners, communities, regulatory agencies, and etcetera. The institutional theory argues that institutional forces (such as industry rules, patterns of professional socialization and other public and professional control systems) drive change in healthcare organizations and favour incremental change. Nevertheless, population studies and practitioner attention are lacking (Goes *et al.*, 2000).

In the **chaos theory**, change is considered as unknowable, which means that changes seem unordered but maintain a deeper implicit order. This order is only discernable if a larger perspective is adopted. This theory is characterized by growing popularity but few empirical studies used the chaos notions. According to Goes et al. (2000), McDaniel provides the most articulated exposition of this approach in the healthcare domain. McDaniel argues that change processes in the healthcare sector have become more quantum, complex, chaotic, and unknowable, which complicates management in healthcare organizations. Healthcare organizations, however, *'must put more effort into sense-making and paying attention to system changes, and invite diversity to complicate rather than simply themselves. They must also build the capability and skills for experimenting and learning in real time, and develop a collective mind that recognizes and incorporates social and business interrelationships into management and change processes'* (p. 160). This approach, however, is more frequently used in practitioner-oriented healthcare literature than in academic literature, perhaps because this approach is not really 'researchable' (Goes *et al.*, 2000).

VOLUNTARISTIC MODE OF CHANGE

The **classical teleological approach** is strategic management, which Mintzberg viewed as *'a craft of identifying novel opportunities for change that will better position the organization for success'* (p. 150). In the healthcare domain, however, there are few empirical studies of benefits of strategic planning, although this approach has traditionally been popular in healthcare, both for practitioners and researchers (Goes *et al.*, 2000).

The **transformation theories** view transformation as *'frame-breaking changes initiated by visionary executives who lead the organization to a strategic and spiritual rebirth'* (p. 150). In the healthcare domain, some transformational models were introduced (such as the reengineering approach as transformation after the total quality management (TQM) and continuous quality improvement (CQI) movement). However, little attention was paid to effects of transformations in the literature (Goes *et al.*, 2000).

Within the **social construction perspective**, change is viewed as *'a collaboratively generated and conceptualized event, taking place at an incremental space'* (p. 151). Processes of symbolic interaction and communal agreement can thus result in credibility of new ideas and organizational forms and dominance over time. This theory considers organizational change in health care as an incremental, voluntaristic process that originates at the multiform or industry level, but driven by collective agreement on the need for and nature of change. An example is the TQM/CQI movement, as well as the movement towards interorganizational structures, alliances, networks, and integrated systems. The popularity of this approach is growing, but so far there is little empirical work (Goes *et al.*, 2000).

The **revolution theory** is less common. An example is Schumpeter's notion of creative destruction, by which collective actions of organizations lead to revolutionary pressure for change within an industry or sector. The revolutionary approach to change is retrieved in the healthcare sector. An example is the movement towards fully integrated health networks, because new competitive forms and new competitive domains emerged. Revolutionary changes, however, can also refer to restructuring health policy. Goes et al. (2000) conclude *'revolutions may be underway, there is much less agreement in where it will go'* (p. 169). This approach is thus the least researched and understood, but probably the most promising.

Goes *et al.* (2000) conclude that there is considerable theoretical and empirical attention for deterministic models of organizational change, but there also is a growing practitioner interest in voluntaristic approaches to studying and managing healthcare organizational change. There is thus a shift from organization-driven, incremental, and deterministic approaches to more system-driven, radical, and voluntaristic approaches to change (see Table 5).

Table 5. Paradigm shift in the domain of organizational change in healthcare (Goes et al., 2000).

Classic paradigm	New paradigm
Organization-driven	System-driven
Incremental changes	Radical changes
Deterministic approaches	Voluntaristic approaches

> *'There is a growing belief and some empirical evidence that healthcare organizations are dramatically transforming themselves for the new millennium, by widening their focus towards the larger ecology of the health care system and its role in professional and regional communities and society. While the trigger for this revolution may have been environmental demands for greater efficiency, accountability, and outcome effectiveness, there is much to suggest that the rules of this revolution are being written from within'* (Goes *et al.*, 2000, p. 171)

This shift in thinking about change and innovation in the health care sector corresponds with a general shift in thinking about management, change and innovation. This will be discussed in the next section.

4.2. Traditional versus modern, dynamic management views

According to Brunes (2005), thinking about change is characterized by a shift from a planned approach to an emergent approach of change. The former focused on improving the operation and effectiveness of the human side of the organization through participative change programmes, while the latter paid attention to the cultural and political processes within the organization. This shift fits with the shift from a traditional view to a modern, dynamic view on management, innovation and change, as described by McMillan (2007). Characteristics of both views are presented in Table 6. Each of these views will be further described in this section.

Table 6. Two views on management, innovation and change (adapted from McMillan, 2007)

Traditional view	Modern, dynamic view
'an item on the agenda'	*'like breathing in and out'*
Discrete events	Permanent change
Change is about control	Change is uncontrollable
Resistance to change	Responses to change
Linear	Non-linear
Disruptive	Continuous
Incremental	Revolutionary and incremental
Calamitous	Full of opportunities
Controllable	Uncontrollable
Abnormal	Normal
Predictable	Unpredictable
Cause and effect	Turbulent
An event	About learning

4.2.1. Traditional view on innovation and change

Examples of the traditional view on change are Kurt Lewin's Force Field Analysis, Lewin's Freezing and Unfreezing Model, and The Seven-S Framework Model of Pascale, Athos, Peters and Waterman. Examples of traditional models for strategic change are the strategy-structure performance model of Chandler, the market-product positioning theory of Porter and the resource based view. All these models fall back on the key concepts of classical management, namely planning, organizing, forecasting, coordinating, and controlling. These classical management principles grew up after the Industrial Revolution and are based on the classical science principles, which are rationality, reductionism, pure objective reality, scientific truth, empirical evidence, quantitative measurement and logic and linear thinking. Classical science and management are underpinned by a mechanistic view of the world, also known as the Newtonian-Cartesian paradigm. This paradigm grew up in the 16th and 17th century during the Scientific Revolution and assumes that the universe can be compared with a predictable clockwork and humans with machines. The focus of this paradigm is thus on order, stability, control and manipulation (McMillan, 2007).

4.2.2. Modern, dynamic view on innovation and change

As uncontrollability, unpredictability, turbulence and non-linearity characterize the **modern, dynamic view on change,** this view is not based on a mechanic view of the world but on an organic view of the world. An organic world view considers organizations as human social systems, which are less rigidly controlled, less rule-bound, more flexible, and more adaptive. Moreover, organizations are open to their internal and external environment. Management thus relies on the use of information and advice to achieve results. An example of this modern, dynamic view on change is the learning organization of Peter Senge. A learning organization is *'an organization founded on the notion that through learning it is able to adapt and transform itself in order to meet its own needs and the needs of its employees'* (p. 90). Attention has to be paid to the organization's capacity for learning. Moreover, learning is as important as achieving strategic goals. Learning is even *'a necessary and valuable part of the process [of change]'* (p. 91). The focus is thus on the ongoing and underlying patterns and movements for change. Examples of modern, dynamic models for strategic change are Quinn's logical incrementalism and the deliberative versus emergent strategies of Mintzberg and Waters. The logical incrementalism departs from a step-by-step introduction of change, because it is crucial to create awareness and commitment. The traditional top-down approach is thus blended with a more participative approach. Mintzberg and Waters also combine traditional approaches with more dynamic approaches, as they argue that organizations need both deliberative strategies (*i.e.* strategies with clear direction unfolded in the way that was planned) and emergent strategies (*i.e.* strategies arising as a result of environmental change). Strategy is then *'a pattern in a stream of decisions'* (p. 4) (McMillan, 2007).

4.2.3. Conclusion

According to McMillan (2007), traditional management ideas are often guised as modern management ideas, as a result of which there is potential to think differently about change and adaptation. As the complexity theories – which serve as an umbrella label for a number of theories characterized by dynamic, non-linear, complex thinking – provide a new way of thinking about change and adaptation (Burnes, 2005), these theories deserve particular attention. Complexity analyses and approaches to organizational change are even expected to be more functional than the dominant linear

approaches (Glor, 2007). Moreover, complexity theories are *'increasingly being seen by academics and practitioners as a way of understanding organizations and promoting organizational change'* (Burnes, 2005, p. 74). Complexity theories consider organizations as dynamic, non-linear systems with unpredictable outcomes. As these characteristics are incorporated in the theory of complex adaptive systems, this theory will be discussed in the next section.

4.3. Complex adaptive systems in the healthcare sector

4.3.1. Complex adaptive systems: what's in a name?

According to McMillan (2007), the theory of complex adaptive systems (CASs) perfectly fits in the modern dynamic view of management, innovation and change. A CAS is *'a collection of individual agents with freedom to act in ways that are not always totally predictable, and whose actions are interconnected so that one agent's actions change the context for other agents'* (Plsek & Greenhalgh, 2001; p. 625). Stacey (2007) confirms that CASs are characterized by a large number of agents behaving according to their own interaction rules and in relation to the other agents. The CAS theory is thus an agent-based approach (Burnes, 2005), which emerged in sciences of biology, physics, and mathematics. From the early 90s, however, complexity science also reached the nursing, medical, and the management and business literature (*eg.* Holden, 2005; Glor, 2007; McMillan, 2007). According to Tan, Wen, and Awad (2005), for instance, *'health care and services delivery systems are typically large and complex with many interacting components, including patients, doctors, nurses, medical suppliers, health insurance providers, and health care administrators'* (p. 40). In the next section, we will successively discuss the importance of individual agents and their interactions, the importance of internal and external environment, self-organization, and organizational adaptability, as these are key characteristics of CASs.

4.3.2. The importance of individual agents and their interactions

The importance of individual agents in CASs is in line with previous research stating that innovation depends on individuals' creativity. Creativity at the individual level is then related to domain-specific knowledge, the capacity for creative thinking, and motivation, by which intrinsic motivation has a more positive effect on creativity than extrinsic motivation (Amabile, 1997, 1998 in Devos et al., 2007). Innovation and creativity, however, do not only depend on the individual's creativity. The composition and the magnitude of teams formed by individuals also have an impact on creativity and innovation, by which homogeneous, too small and too large teams restrict innovation (West & Anderson, 1996 in Devos et al., 2007). At the organizational level, creativity depends on the working environment and innovation on the organizational structure, the organizational climate, the available resources and the remuneration policy. At the process level, innovation is stimulated by clear and feasible goals, communication, participation, the quality of the supervisor-employee relationship, leadership of the project leader, training and education, task orientation and conflict management (Devos et al., 2007). The preconditions for creativity and innovations are presented in Figure 4.

Figure 4. Preconditions for creativity and innovation (adapted from Devos et al., 2007).

Previous research also demonstrated that innovation does not only depend on the degree of creativity within the organization, but also depends on the capacity for change. According to Declercq and Van Audenhove (2006), innovation presupposes two types of change, namely cultural change and structural change. Structural change is not possible without cultural change and vice versa. Cultural change can only be achieved by learning, which is facilitated by everyday practice and reflection on this every day practice in consultation with colleagues. Bouma (2008) states that change capacities originate in combined actions among different actors and are thus determined by the organizational culture, which refers to the shared values and beliefs, the goals, habits and rules, and the manifestations of the organizational culture. The key success factor for organizational change, however, is the human being. People make or break change and innovation (Bouma, 2008). Mars (2006) admits that innovation and change require commitment of the involved actors, although this can be preceded by resistance. Commitment of the involved actors can be increased by participation, which is *'active involvement in change processes'* (Bouma, 2008, p. 61). Active involvement in change processes, however, requires motivation.

Motivation of the involved actors can be encouraged by the availability of good examples, a safe atmosphere with attention to personal goals and open communication, clear goals and frameworks without discouraging autonomous behaviour, differentiation and positive feedback for those who are performing well. Motivation of individuals can result in participation, but group processes should also be considered (Bouma, 2008). Binnewies, Ohly and Sonnentag (2007) admit that personal initiative and communication among persons are crucial. Personal initiative is important for continuing engagement in the creative process and idea creativity, but sharing knowledge and expertise via communication with each other can be regarded as a useful resource for working on creative solutions. According to Windrum and García-Goñi (2008), complex interactions between patients, service providers and policy makers determine the direction, timing, and success of innovations. On the one hand, a low participation degree decreases the chance of success; on the other hand, a too

high participation degree doesn't enable the introduction of change and innovation either, because too many actors have to confer on modifications and changes. Ideally, the motivation of the involved actors is characterized by heterogeneity (Bouma, 2008).

The focus on individual agents and interactions among individual agents in previous research is thus retrieved in the CAS theory. The CAS theory, however, goes a step further and argues that not only the internal environment, but also the external environment is important.

4.3.3. The importance of the internal and external environment

In the CAS theory, agents and the systems to which these agents belong constantly learn and adapt to changes in their internal and external environment (McMillan, 2007). Firstly, there is a continual change and response to the constant energy flow in the system (Cilliers, 1998). Actions of one agent, for instance, change the context for other agents in the system (Henriksen, Selander and Rosenqvist, 2003). As a result, CASs cannot be reduced to their components. Behaviours and phenomena have to be studied as whole entities, systems or patterns (Glor, 2007). Small local changes in a CAS, however, do matter, as these can lead to unpredictable and major effects some time later. This is known as the butterfly effect (Cilliers, 1998; Arndt & Bigelow, 2000; Plsek and Greenhalgh, 2001; McMillan, 2007). Secondly, agents and systems are embedded in the context of their own histories and in other systems. Organizations, for instance, are influenced by their customers, suppliers and competitors, as well as by macro-influences, such as political, juridical, economic, socio-cultural, technological and ecological influences (Bouma, 2008). As a result of these influences, organizations exist in a complex and usually dynamic environment (Brooks, 2003).

CASs are thus nonlinear and unpredictable systems, which constantly have to revise and change their structures and anticipate the future. Continuous learning and adaptation to the internal and external environment are thus crucial for organizations to 'survive'. According to the CAS theory, there are no central controlling mechanisms, but emergent properties (i.e. the ability to adapt and transform spontaneously to changes in circumstances). Moreover, the different agents are able to undergo spontaneous self-organization (McMillan, 2007), which will be discussed in the next section.

4.3.4. Self-organization in complex adaptive systems

Self-organization is *'the process by which people mutually adjust their behaviors in ways needed to cope with changing internal and external environmental demands'* (Cilliers, 1998). Individual agents in CASs organize themselves without external influence (Solow & Szmerekovsky, 2006). There is thus no overall blueprint or external determinant of how the system develops, but only a pattern of behaviour emerging from the local interactions of the agents (Burnes, 2005). Self-organizing systems are thus non-linear systems with internal feedback loops, which are constantly in need for energy to renew themselves and open to their environments to exchange energy. Moreover, self-organizing systems are highly responsive and interconnected webs of feedback loops, which are very sensitive to initial conditions (*cf.* butterfly effect) (McMillan, 2007). Holden (2005) confirms that a CAS is characterized by much information exchange, feedback loops, and adaptation. Higher levels of self-organization provide 1) conditions that allow people to create and recreate meaning of events, 2) positive feedback (feedback that moves a system away from its present position), 3) opportunities for reflection and evaluation of performance, 4) opportunities for higher-order learning that changes

beliefs as opposed to simply knowing facts or rules, and 5) creativity, (Anderson, Issel & McDaniel, 2003). Plsek and Greenhalgh (2001) confirm that self-organization results in continually emerging novel behaviour, order, innovation, and progress (Plsek & Greenhalgh, 2001).

4.3.5. Innovation and change: a matter of adaptability

According to the CAS theory, innovation and change depend thus on the degree to which organizations are acting as CASs and thus on the organization's adaptability. Glor (2007) measured the capacity of organizations to change and adapt effectively to their environment (organizational adaptability) by the degree of variety, reactivity, and self-organized emergence. Glor (2001; 2007) explored whether the adaptability of organizations is influenced by the organizational patterns. Organizational patterns are defined as *'manifestations of the dynamics taking place within an organization'* (p. 35). An overview of these patterns and their characteristics is given in Table 7. The consequences of organizational patterns on the organizational adaptability are shown in Table 8.

Table 7. Composition of organizational patterns (adapted from Glor, 2001; 2007)

	Organizational pattern factors		
Organizational patterns	Individual motivation	Organizational culture (group, social)	Magnitude of challenge
Reactive	Extrinsic	Top-down	Minor
Imposed	Extrinsic	Top-down	Major
Active	Extrinsic	Bottom-up	Minor/medium
Necessary	Extrinsic	Bottom-up	Major
Proactive	Intrinsic	Bottom-up	Minor
Continuous	Intrinsic	Bottom-up	Numerous, of all magnitudes
Buy-in	Intrinsic	Top-down	Minor
Transformational	Intrinsic	Top-down	High

Table 8. Consequences of organizational patterns on organizational adaptability (adapted from Glor, 2001; 2007)

Organizational patterns	Variety	Reactivity	Self-organized emergence
Reactive	Low	Low	Medium
Imposed	Low	Low	Low
Active	Medium	Low	Low
Necessary	Medium	Medium	Low
Proactive	Medium	medium	Low
Continuous	High	High	High
Buy-in	Low	Medium	Medium
Transformational	Medium	Medium	Medium

Table 8 shows differences in adaptability among the patterns. The continuous change pattern was assessed as *'supporting adaptation and change better than the other patterns'* (p. 43). The proactive, necessary, and transformational organizational patterns were considered as having *'some but less capacity to support change'* (p. 43). The buy-in, active, reactive, and imposed organizational patterns were the least adaptive patterns. Change is thus most likely to occur in organizations where individuals are intrinsically motivated and the culture is non-hierarchical, while change is least easily in environments with extrinsically motivated individuals and top-down organizational culture. Glor (2007) argues that her model needs to be empirically tested, but her insights are in line with the importance attached to individual motivation and organizational culture (see 4.3.2. 'The importance of individual agents and their interactions').

4.3.6. Complex adaptive systems at the edge of chaos

The complexity theory is often considered as a synonym of chaos theory, but chaos is only a part of the complexity (*eg.* Burnes, 2005; Brown, 2005; Holden, 2005). Ultimately CASs seek to exist at the edge of chaos. The edge of chaos is situated between ossification characterized by too much stability and disintegration characterized by too much instability. Therefore, organizations have to balance between their own sense of order and their own instability and thus between stability and chaos (Burnes, 2005; McMillan, 2007). Figure 5 shows an organization as a CAS existing at the edge of chaos in relation to strategy.

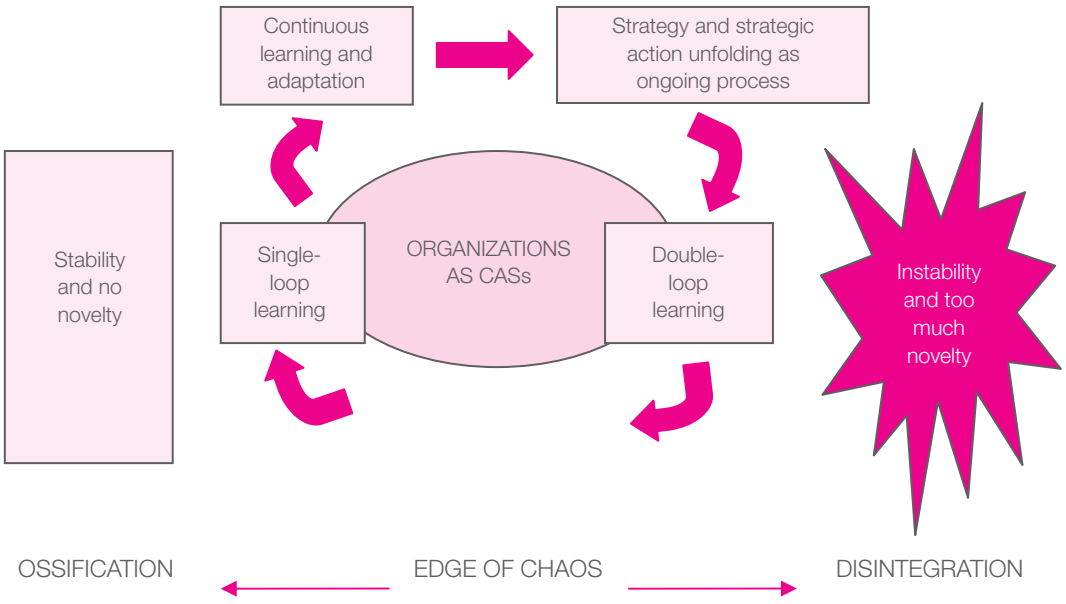

Figure 5. Complex Adaptive Learning Model of Strategy (adapted from McMillan, 2007).

Stacey (2007) even goes a step further and argues that too stable systems ossify and die and too instable systems get out of control and destroy themselves. The former situation is labelled as 'stable equilibrium', while the latter situation is characterized as 'explosive instability'. Only systems at the

edge of chaos – which are referred to as 'systems with bounded instability' – are able to survive (Burnes, 2005). This bounded instability can be achieved by self-organization based on simple order-generating rules, which provide 1) direction pointing, 2) boundaries, 3) resources, and 4) permissions (Plsek & Wilson, 2003; Burnes, 2005). Moreover, creativity, growth, and useful self-organization are at their optimal when CASs operate at the edge of chaos (Burnes, 2005).

4.4. Conclusion

In this chapter, it was argued that there is a shift in thinking of management, change and innovation. Gradually, it is acknowledged that the machine world view has to make way for a more organic world view, as a result of technological, social, ecological and economic changes. As the CAS theory recognizes and incorporates principles of a more organic world view, it will be further investigated whether this theory can also explain the capacity for innovation and change in the elderly care sector. Moreover, several authors consider this theory as a very promising theory, but empirical evidence is scarce (Arndt & Bigelow, 2000; Burnes, 2005).

PART II

METHODOLOGY

1. Research questions

As there is hardly any research on innovation in the elderly care sector, this Flanders DC research-project aimed to explore

1. **which policy strategies can be derived in the ageing society**
2. **which innovative initiatives can be taken to respond to the challenges in the ageing society**
3. **which preconditions for innovation exist in the elderly care sector.**

These questions were answered based on three studies, whose methodology will be discussed here. Final goal was to formulate managerial and policy recommendations and guidelines to support innovation in the elderly care sector.

2. Study 1: policy strategies

Based on a literature review, we investigated which **policy strategies** can be derived in the ageing society. As ageing is an international phenomenon, we investigated policy strategies in different countries representing the main types of welfare states. The social democratic welfare regime was represented by the Nordic countries, the liberal welfare regime by the United States, and the corporatist welfare regime by Flanders. For each of the strategies, the link with the challenges in the ageing society was made explicit.

3. Study 2: innovative opportunities outside Flanders

As the literature on **innovative opportunities and preconditions for innovation in the elderly care sector** was rather limited, it was very difficult to gain insight into innovative initiatives in other countries and to gather best practices. Therefore, we decided to gather information via researchers and governmental actors in different countries, as we expected these actors to have a better overview of innovative initiatives within their country. Again, the focus was on researchers and governmental actors in countries representing the different welfare regimes.

Per welfare regime, one country was selected in which one research unit was selected. Selection criteria were the availability of an English website, their expertise in the elderly care domain and eventually in the domain of innovation in the elderly care sector. Within the selected research units, we asked the researcher who was most familiar with the topic to participate (cf. snowball sampling). If the selected research unit was not willing to participate, another country within the same welfare regime was selected. All participating researchers are presented in Table 9. As shown in this table, no research units were found in the Southern European welfare countries and there were no respondents of research units in the corporatist welfare regime.

Several governmental departments per welfare regime type were addressed. Via the procedures mentioned on the websites of the governmental departments responsible for the elderly care institutions, we asked for contact information about experts in the domain of elderly care and innovation and contacted these (cf. snowball sampling). This was again a very time-consuming process, but the respondents in the governmental departments represented all welfare regimes as shown in Table 9. Moreover, only one of the addressed governmental departments did not answer our request.

The researchers' and governmental actors' opinion about innovative initiatives and their preconditions was gathered via a survey, as this is an appropriate way to explore motives, experiences, values, norms, preferences, opinions and other subjective facts (Segers, 1999). Survey data can systematically be gathered via oral or telephonic interviews or via written or electronic questionnaires. As researchers outside Flanders were involved and as researchers' and governmental actors' time was expected to be precious, data were gathered via a survey by e-mail. The survey for researchers in the elderly care domain consisted of two parts. The first part referred to innovative initiatives and was based on the Elderly Care Innovation Framework; the second part to the preconditions of these innovative initiatives (see Appendix B). The questions are shown in Table 10.

Table 9. Respondents of the survey in the elderly care domain

WELFARE REGIME	COUNTRY	RESEARCH UNITS		GOVERNMENTAL DEPARTMENTS	
		Selected research units	Function of respondent	Selected governmental departments	Function of respondent
Liberal welfare regime	U.S.A.	Centre for Gerontology & Health Care Research of the Brown University	Professor and Chair Department of Community Health & Senior Scientist	Senate Special Committee on Aging	Policy advisor
Combination of liberal and social democratic welfare regime	United Kingdom	Faculty of Health & Life Sciences of the University of the West of England	Principal lecturer with a focus on older people in care homes	Department of Health	Customer Service Centre
Social democratic welfare regime	Sweden	Research Group E-Health Network of the Linköping University	Associate professor		
	Denmark			National Board of Social Services	Head of the Senior Citizen Services section
	Norway			Royal Ministry of Health and Care Services	Deputy Director General
Combination of social democratic welfare regime and corporatist welfare regime	The Netherlands	Academic Centre Chronic Care of the Tilburg University	Senior Researcher and Manager Elderly Care	Ministry of Public Health, Welfare and Sports	Information Service
		Department Health Policy and Management of the Erasmus University Rotterdam	Head of the Healthcare Management section	Netherlands Board of Healthcare Institutions – Research & Development Department	PhD Researcher intramural care and care for the elderly
Corporatist welfare regime	Germany			Federal Ministry of Health	Deputy Head of Division
	Luxemburg			Ministry of Social Security	Medical counsellor
Derivative of corporatist welfare regime	Greece			Ministry of Health & Social Solidarity	Director
	Portugal			Mission Unit for Continuing Integrated Care	National coordinator

Table 10. Questionnaire survey.

The innovation concept	What does innovation mean in the elderly care sector?
	What is the added value of innovation in the elderly care sector?
Description of the innovative initiative	Which are concrete examples of innovative initiatives within your country?
Innovation type	To which aspects of the organization does this initiative refer?
Expected attributes	Why is this initiative introduced?
	Which attributes are expected?
Degree of elaboration	To what extent is this initiative elaborated within the organization?
Perceived innovativeness	Why is this initiative innovative?
Preconditions for innovation	What are the preconditions for innovation in the elderly care sector?
	What are the preconditions to make this initiative successful within other elderly care organizations or countries?

4. Study 3: innovative opportunities in Flanders

Innovative opportunities in Flanders and their preconditions were identified via a case study approach. The case studies were preceded by an innovation contest and expert panel. The innovation contest, the expert panel and the case studies will be described here.

4.1. Innovation contest and expert panel

Goal of the innovation contest was to gather information on innovative opportunities from the perspective of elderly care organizations and thus to gain insight in the perception of innovation (*cf.* which are innovative opportunities in the elderly care sector?). Elderly care organizations in Flanders were invited to submit a poster on an innovative initiative within their organization with information on several topics. Per topic one or more guiding questions were derived (see Table 11).

Table 11. Required information on the poster

Description of the innovative initiative	Which innovative initiative is taken within the organization?
Innovation type	To which aspects of the organization does this initiative refer?
Expected attributes	Why is this initiative introduced?
	Which attributes are expected?
Degree of elaboration	To what extent is this initiative elaborated within the organization?
Perceived innovativeness	Why is this initiative innovative?

The call for posters was announced via a flyer and sector-related websites. The required information on the poster referred to the different dimensions of the Elderly Care Innovation Framework. An expert panel consisting of different elderly care actors was called in to evaluate the innovativeness of the initiatives on the basis of their situation within the Elderly Care Innovation Framework, after the initiatives were checked for fulfilment of the requirements. The criteria are presented in Table 12 and the members of the expert panel and guidelines can be found in Appendix C.

Table 12. Selection criteria for the innovation contest

Fulfilment of the requirements	➢ Respecting deadline ➢ Giving all the required information
Innovativeness of the initiative	➢ Dimension 1: perceived innovativeness ➢ Dimension 2: expected attributes ➢ Dimension 3: degree of elaboration ➢ Dimension 4: potential for diffusion

The different dimensions were scored for all initiatives. Perceived innovativeness was scored individually, while the other dimensions were scored in group. On the basis of their scores, each expert made its top 3. All initiatives mentioned in the experts' top 3 – five initiatives in total – were considered as 'innovative initiatives' and further investigated via a case study approach. This method of case selection is in accordance with the recommendations of Yin (2009), who argues that the selection of cases and the screening criteria are ideally based on a theoretical framework.

4.2. Case studies

Davey (1991) defined a case study as *'an in-depth, longitudinal examination of a single instance or event: a case. They provide a systematic way of looking at events, collecting data, analyzing information, and reporting the results'.* Units of analysis were the innovative initiatives. As five innovative initiatives were involved, the design type was a multiple case design. This case study design costs time and resources, but conclusions are considered as more persuasive (Yin, 2009). The case studies were both exploratory and explanatory.

An exploratory case study approach was used to gain more insight in the five selected innovative initiatives. The first question for the initiators of the selected initiatives was: **'how new is this initiative within the organization?'**. We assumed that CASs can generate both derivative and breakthrough initiatives. The framework of Wheelwright and Clark (1992) – which was described in Part I 3.1. 'The Elderly Care Innovation Framework' – was used to map the selected initiatives. The second question was **'how was this initiative evaluated by the involved actors'**. Involved actors were 1) the initiators of the initiative, 2) the elderly and their relatives, 3) employees not involved in the development of the initiative, and 4) the organization's management. In each of the five Flemish cases, these questions were answered on the basis of a document analysis of the submitted posters and semi-structured interviews with 1) the initiators, 2) minimum three employees, and 3) minimum three users (elderly people and/or their family members). An overview of the questions is presented in Appendix D. We assumed that more positive evaluations would be found in organizations acting as CASs.

An explanatory case study approach was used to investigate the preconditions to realize the selected initiatives. This approach assumed that the context contains explanatory variables, but that there are no clear boundaries between the phenomenon (in casu the innovative initiative) and the context (Yin, 2009). According to Yin (2009), a theory to support pattern-matching is required. Using complex and multivariate explanatory theories is recommended, but rival theories can be used as well. In this study, the CAS theory – as opposed to theories based on a mechanic world view – was considered as explanatory theory for innovation and change in elderly care organizations. Whether organizations were acting as CASs or not and more in particular the questions **'which was the role of different elderly care actors?'** and **'how adaptable is the organization?'** were investigated via a group interview with the initiators and semi-structured interviews with the other elderly care actors (see above).

The semi-structured interviews consisted of a few questions regarding the role of different actors. Attention was paid to the degree to which actors external to the organization had an impact on thinking out, implementing and evaluating innovative initiatives (cf. system-driven initiatives) and the degree to which employees were involved in thinking out, implementing and evaluating innovative initiatives (cf. bottom-up approach) (see Appendix D). The group interviews focused on the four dimensions of adaptability, namely continuity of change, variety, reactivity and self-organized emergence. Measure for the continuity of change was the frequency of new initiatives and changes within the organizations. Measures for variety were 1) the number of ideas considered in planning change or choosing interventions, 2) variability of ideas one from another, 3) proportion of staff involved in idea development, and 4) participation in internal and external networks. Measures for reactivity were 1) individual motivation, 2) organizational culture, 3) group (unit) support of change agents, and 4) communication. Measures for self-organized emergence were 1) the ease of approval for implementation, 2) the ease of implementation, 3) the ease of integration, 4) fate, and 5) social impact (Glor, 2007). Based on these measures, fourteen propositions were developed and put forward to the initiators (see Appendix D). The results of the interviews and group discussion were interpreted by means of dichotomies (see Table 13). We assumed that organizations acting as CASs were more likely to come to innovative initiatives.

Table 13. Dichotomies used for analysis and interpretation of case study data

ROLE OF DIFFERENT ACTORS	
Mechanic world view	CAS theory
➢ Organization-driven initiative ➢ Top-down approach	➢ System-driven initiative ➢ Bottom-up approach
ADAPTABILITY OF THE ORGANIZATION	
Mechanic world view	CAS theory
➢ Discrete, disruptive events ➢ Low variety ➢ Low reactivity ➢ Low self-organized emergence	➢ Permanent, continuous change ➢ High variety ➢ High reactivity ➢ High self-organized emergence

According to Yin (2009), a case study is especially interesting when the focus is on variables and not on data. This was certainly the case, as there were more variables than data points. There was chosen for a one-time data collection based on document analyses of the innovative initiative and (group) interviews with the different involved actors, as data triangulation increases the validity of the research method (Yin, 2009).

4.3. Innovation contest

The innovation contest, however, is also on the look for the 'most innovative initiative' within the elderly care sector. Based on the results of the expert panel and the case study results, the 'most innovative initiative' was indicated. The submitters of this initiative (*in casu* The Digital Bridge) were rewarded by free participation for three employees in the Healthcare Management Day in 2009.

As ageing is an international phenomenon, we investigated current policy strategies in Flanders (cf. corporatist welfare regime), the Nordic countries (cf. social democratic welfare regime), and the United States (cf. liberal welfare regime). Four strategies were derived, namely a decentralization strategy, a de-institutionalization strategy, an integration strategy, and a rationalization strategy. Each of these strategies will be described and the link with the challenges in the ageing society will be made explicit.

1. Decentralization strategy

In European countries in the 70s, the central government's role was limited to that of goal-setter, facilitator, and mediator, while the local government achieved more autonomy to develop activities (the so-called 'autonomization' of the local governments) (Johansson & Borell, 1999). According to an OECD report in the 90s, *'the central government concentrates on overall guidance and accreditation, leaving to decentralised authorities the task of determining the real needs of their communities'* (Jacobzone, 1999; p. 12). Elderly care responsibilities are thus decentralized within all types of welfare states. This will be illustrated by the Flemish case, the Nordic European case, and the American case.

1.1. Flanders

The Flemish government developed the idea of 'local social policy', by which the local governments have autonomy to outline their local policy. The local policy, however, is expected to contribute to 1) accessible, client-oriented services, 2) participation of citizens in the local social policy, 3) continuity and collaboration, and 4) a co-ordinating local government (Cel Lokaal Sociaal Beleid, 2007). Furthermore, the Flemish government subsidizes local governments (based on the Decree of 30 April 2004) to develop and implement a local elderly policy document, as well as initiatives to support policy participation of elderly people (Juriwel, 2004).

1.2. Nordic countries

In Finland, the use of local financial resources depends on local political decisions and not on the state's decision making. The principal idea is to better meet the local needs (Pietiläinen & Vanhala, 2000). In Denmark, local authorities at the municipality level are in charge of the supply of elderly care (*i.e.* housing offers, home care and practical help) and its service level. In this country, however, general regulations oblige the municipalities to deliver certain fundamental services to the elderly. In this way the municipalities' autonomy is indirectly reduced (Hougaard, Kronborg & Overgård, 2004). The same goes for Sweden, although elderly care responsibilities have always been relatively decentralized in international comparison. Despite the decentralization of elderly care responsibilities to the municipality level via the Care of the Elderly Reform in 1992 (also known as the Ädel reform), the role of the central government did not weaken. Via framework laws with compulsory parts and economic incentives, the government indirectly steered towards diversification and rationing at the

municipality level and towards specialization and rationalization at the county level (Johansson & Borell, 1999; Andersson & Karlberg, 2000; Rae, 2005). In 2000, there was even a re-centralization via the Max-Fee Reform to have less variation in fees among municipalities, as this variation led to differences in terms of coverage, costs and accessibility (Trydegård, 2003).

1.3. United States

In the United States, most care systems are highly decentralised. The central government supplements local funding, but the responsibility is at the local level. In the United States, help via Medicaid (*i.e.* the health program for individuals and families with low incomes and resources at the central level) is only available for elderly people with very few assets, but *'ceilings on the assets which can be retained by those seeking help with their care needs vary substantially'* (p. 13). Equity at the local level is thus undermined by large variations in resources (Jacobzone, 1999).

1.4. Link with the challenges in the ageing society

Decentralization enables regional differentiation within countries (Jacobzone, 1999; Le Bihan & Martin, 2006). On the one hand, the ability to differentiate among regions increases the ability to meet with citizen preferences (Klitgaard, 2005). The identification of regional needs and the optimization of the fit between supply and demand can only be achieved at the local level. On the other hand, large variations in resources among regions may undermine equity at the local level, especially if formal long-term care insurance schemes at the national level disappear (Jacobzone, 1999). Responding to financial challenges and not to increasing and changing needs is then the core of the decentralization strategy. Therefore, the decentralization strategy can also be considered as an indirect rationalization strategy of the central government (see below). The power of the central government is thus not necessarily diminished by decentralization. On the contrary, Johansson and Borell (1999) state that the decentralization strategy goes hand in hand with the development of indirect steering forms. Not only rationalization may be the goal, but also encouraging collaboration in local interorganizational networks in order to better meet the needs of the elderly and to avoid costs resulting from inefficiency (Johansson & Borell, 1999).

2. De-institutionalization strategy

Traditionally, elderly people and their relatives had a choice between staying at home and going to a nursing home. Today, the supply of elderly care has become more diverse. The wide range of elderly care forms in different Western countries can be categorized into three groups, namely residential (intramural) care, semi-residential (transmural) care and ambulant (extramural) care. In most countries, the new forms of elderly care are situated in the group of semi-residential and formal ambulant care. Therefore, differentiation can be understood as de-institutionalization in these countries. In this context, we also mention the Southern European countries, as de-institutionalization is out of the question in these countries. In this section, the trend towards de-institutionalization in Flanders, the Nordic countries and the United States will be discussed, and this will be confronted with the elderly care system in Southern European countries.

2.1. Flanders

According to Djellal and Gallouj (2006), several Central European countries went through a movement from institutions over intermediate forms of provision or institutions to domiciliary support services. In Flanders, for instance, there are currently residential care forms (nursing and rest homes and service flats), but also semi-residential care forms (centres for short-stay, day-care centres…) and ambulant forms of elderly care (family care providers, home nursing, volunteer aid…) (Vlaams Agentschap voor Zorg en Gezondheid, n.d.). Declercq and Van Audenhoven (2004), however, point out that this differentiation is relatively new. Only since the Decree on the Elderly (1985), attention was paid to the development of home care and other intermediate forms of care (such as service flats and day care centres). In 1998, the Home care Decree went a step further by enlarging the supply of home services and by ameliorating the financial accessibility. Since 1999, home care and informal care are facilitated by diminished personal contributions (also known as the Flemish care insurance), and since 2001, there are benefits for non-medical help or services given by home carers or informal carers to people with serious care needs.

2.2. The Nordic countries

Since the 1970s, the Nordic countries emphasized the importance of considering individual care needs. Therefore, the elderly care policy intended to enable independent living, even where care needs increased. Since the 1990s, there were several efforts to reduce the demands for publicly provided care by encouraging informal care, and there were attempts to restructure the publicly provided elderly care, among which intensification of home care and new services alternatives. The Ädel Reform in 1992 in Sweden, for instance, was the starting point for a demedicalization in elderly care institutions and an increased home care supply, especially for elderly persons with high care demands as this was expected to reduce costs (Andersson & Karlberg, 2000; Trydegård, 2003; Rae, 2005). In Denmark, elderly people with permanent or temporary limited physical or cognitive skills have a right to receive help in their home and about 20 percent of the elderly receive professional home care (Dahl & Eriksen, 2005). Additionally, a general policy of providing sheltered housing with support from professional services was put in place, which has led to a considerable reduction in the number of elderly people in institutions (Djellal & Gallouj, 2006).

2.3. United States

In the 1940s, the first modern nursing homes were developed in the United States. In the 1950s, the Hill-Burton Act encouraged the government to provide public money for nursing homes. Since 1965, the government paid all long-term care costs for disadvantaged elderly people via Medicaid (see above). However, Medicaid-funded care resulted in excessive costs and nursing homes were characterized by poor quality and dehumanization. Instead of reforming nursing homes by greater governmental regulation, several cost-effective, non-institutional alternatives for nursing homes were developed by both the government and the market (Uhlenberg, 1997). Today's alternatives are home care, assisted living, adult day services, group homes, hospices, rehabilitation, the adult day health care, comprehensive care management, etcetera (Arfin, 1999; Fassler, 2006). Since 2006, home care by service providers is also paid by the government via Medicare (i.e. the social insurance program for people who are 65 or older) (Uhlenberg, 1997).

2.4. Southern European countries

In Southern European countries (such as Greece, Spain, Italy and Portugal), care provided by the family continues to be regarded as the preferred form of provision for the elderly (Djellal & Gallouj, 2006). As a result, the de-institutionalization has not really been carried through. In Spain, for instance, most parents move in with their children. These families are called 'modified extended families'. Local authorities only shoulder the responsibility for disadvantaged elderly people. The role of the market is negligible, as few Spanish people can afford this kind of care. According to Stark (2005), however, the current Spanish system based on the family is unsustainable. On the one hand, people without family are disadvantaged. On the other hand, the system is not maintainable in the future, as Spanish women will be forced to work according to the employment goals set by the European Union.

2.5. Link with the challenges in the ageing society

In different Western countries, de-institutionalization in the elderly care sector is encouraged based on three motives. Firstly, a more differentiated supply of elderly care is expected to meet the increased and changed needs of the elderly. As a result, the de-institutionalisation strategy is in line with the shift from supply-driven care towards more demand-driven care, although several authors state that a good understanding of elderly people's needs is lacking. According to the needs analysis of Van Bilsen et al. (2004), for instance, the elderly care sector does not need to create new initiatives, but needs to reorganize the existing initiatives, as these are not yet demand-driven. Stark (2005) confirms that the structures organizing care have adapted badly to the new demands. Secondly, semi-residential and ambulant forms of elderly care are believed to be less expensive than residential care. The de-institutionalization strategy encloses thus a desire to decrease elderly care expenditures. However, budgetary constraints are now shutting the door to put home care and care services into practice (Declercq & Van Audenhove, 2004). The dilemma between providing budgetary resources for residential and formal care versus providing budgetary resources for informal care lives thus on. Finally, the focus on informal care can be seen in the light of personnel shortage. However, today's generation of young adults has, for the most part, moved away from their parents, which increases the need for institutional care for ageing parents (Declercq & Van Audenhove, 2004). Moreover, informal care or volunteer aid is not easy for working people (Shea, 2001), especially not if labour-market options pay better (Stark, 2005).

3. Integration strategy

Despite the increased differentiation within the elderly care sector, the supply of elderly care is characterized by overlap and, more important, by lacunas (eg. Geirnaert, 2000). Moreover, healthcare delivery and finance are very fragmented (Gross, Temkin-Greener, Kunitz & Mukamel, 2004). Therefore, the elderly care supply is neither demand-oriented nor cost-effective. In order to solve these problems, several European health systems strive towards integration of care (Delnoij, Klazinga & Glasgow, 2002). Integrated care is often defined as *'the methods and strategies for linking and co-ordinating the various aspects of care delivered by different care systems'* (Evers, Paulus & Boonen, 2001; p. 1), but this concept has different names *(eg.* seamless care, transmural care, case management, care management and networking) (Leichsenring, 2004). Two types of integration strategies can be distinguished, namely supply-oriented integration and demand-oriented integration. The former refers to the integration of different elderly care organizations within care forms (horizontal integration) or between care forms (vertical integration). The latter focuses on linking or tailoring supply structures (in terms of type, time and number of delivered services and products) to specific features of care demand (Paulus, van Raak, van Merode & Adang, 2000).

3.1. Flanders

In Flanders, the government intended to create a care continuum in the diversity of elderly care organizations, by which residential care was the end point. Goal was to avoid that elderly people end up in forms of elderly care taking place at a higher level than necessary and thus to increase cost-effectiveness. Residential institutions, however, are obliged to clarify their target group (ROB versus RVT), but not to target only people in heavy need of care. Therefore, a more compulsory policy with objective admission- and discharge criteria for each form of elderly care is needed to realize the care continuum (De Prins, 2002).

This supply-oriented continuity idea, however, does not necessarily respond to demands of the elderly. A more demand-oriented interpretation of integration is needed to guarantee that elderly care forms and services are geared to one another from the elderly people's point of view. In that context, stimulating collaboration between (elderly) care organizations is interesting. In Flanders, there are yet sectoral and intersectoral consultative structures at the local level. The former are established to gear all activities within a sector to one another (eg. initiatives for the co-ordination of home care), while the latter stimulate information exchange and collaboration among different sectors. Both consultative structures are expected to get rid of overlap and lacunas (Vlaams Agentschap voor Zorg en Gezondheid, n.d.). In addition, the Home care Decree and the Flemish Fund for Infrastructure for Personal Well-being (VIPA) enable collaboration among (elderly) care organizations. However, integrating healthcare institutions ('cure') and welfare institutions ('care') is difficult, because 'cure' and 'care' fall under different authorities (Belgian government versus Flemish government). Moreover, the current policy remains supply-oriented. Little attention is paid to link the supply and elderly people's demands and even a system to 'assess' objective and subjective needs is currently lacking. Demand-oriented care integration has thus not yet become current in Flanders, although more initiatives are developed in that direction (De Prins, 2002).

3.2. Nordic countries

In Finland, good results were achieved by networking among various elderly care organizations at the local level and by co-operation between municipalities (Pietiläinen & Vanhala, 2000). In Sweden, interdependency and complementarity among elderly care organizations also gained importance after the Ädel Reform in 1992, even when organizations had separate financing (Andersson & Karlberg, 2000). Stark (2005) confirms that local governments were strongly encouraged to implement interorganizational networks. Further, guidelines for specific administrative activities and standardization, IT-systems, and chains-of-care were developed (Andersson & Karlberg, 2000). Chains-of-care have their origins in the general quality improvement efforts and not in the rationalization of operations, although reduction of costs can be enabled by chains-of-care. Developing chains-of-care in collaboration with the patient is the next challenge in Sweden (Åhgren, 2003). As *'every individual with a need for assistance has a formal right to it, provided by the local authority and paid for according to means testing of the old person or couple'* (p. 20), there is already an elaborated needs assessment system in Sweden to decide on the allocation of social services (Stark, 2005). As a result, matching needs and supply is near.

3.3. United States

In the United States, publicly funded care is only provided for poor elderly. Therefore, screening systems were developed to evaluate whether people have a right to publicly funded care (Van Gameren & Woittiez, 2005). Reducing costs is the main goal of assessing needs in the United States. Local Area Agencies on Aging (the so-called AAA) were developed to make the elderly care provision more clear and to provide information on a wide range of elderly care services without recommending a specific home-care agency. Specific advice is given by private information and referral services (Gleckman, 2004). At the end of the twentieth century, two programs were developed to integrate acute care and long-term care, as the fragmented supply was not meeting people's need. The Social Health Maintenance Organization (SHMO) offers limited community and nursing home care, but has had limited success till here. The Program of All-Inclusive Care for the Elderly (PACE) has successfully integrated acute and long-term care service at lower costs than traditional fee-for-service care and elderly people had not to leave their community. However, both programs are designed to respond to the needs of low-income seniors who were eligible for both Medicare and Medicaid in managed care programs. Therefore, the non-Medicaid-eligible market will probably not be interested due to high costs. Additionally, start-up costs for health systems are also high, by which only large health systems can develop integrated care programs (Gross et al., 2004). In addition, Klein (2005) states that there is *'a growing number of local professionals who specialize in monitoring and arranging the health care of seniors on behalf of family members who - for a wide range of reasons - cannot handle the job themselves'* (p. 43). These professionals are called 'care managers' or 'case managers'. According to Long (2002), many case management models exist, but these can be categorized in two groups, namely an interrogative model and a patient advocacy model. The former focuses on *'intense oversight with expected cost reduction'* (p. 53) and thus not necessarily meets the needs of the elderly, while the latter relies on *'a brokering arrangement for services in the best interest of the patient'* (p. 53), even if this is cost increasing. A combination of both models is the consolidation case management model. Long (2000) argues that *'the decision-making process in this model may be thought of as consensus building among the providers that compose the team (…) the group's*

decision could reflect a position of any point along the continuum of a strong interrogative approach to a strong patient advocacy approach' (p. 55). In accordance with the model, case management responds thus to the financial challenges, increasing and changing needs, or both.

3.4. Link with the challenges in the ageing society

The goal of the supply-oriented strategy is to increase efficiency and cost-effectiveness. Financial challenge in the elderly care sector can thus be met by this strategy, although different insurance schemes and administrative procedures for different types of care often discourage integration among elderly care organizations (Delnoij et al., 2000). Moreover, supply-oriented integration can respond to increasing and changing needs, as overlap and lacunas are eliminated. But this type of integration is not necessarily demand-oriented. Other strategies were used to match elderly people's demands and the elderly care supply. Most of these integration strategies, however, stimulate interventions not occurring at a level higher than necessary (*i.e.* the subsidiarity principle), by which needs assessment plays an important role. These strategies are especially cost reducing and not necessarily demand-oriented. Demand-oriented strategies are rather exceptional (except for private for-profit initiatives) and most of these demand-oriented strategies are restricted to a select group (eg. certain regions, certain target groups, etcetera). Furthermore, the degree to which integrated care is developed at the micro level and the actual forms it takes on the intermediate level of organizations seems to be affected by characteristics of the health care system at the macro level (Delnoij et al., 2000). Finally, financial challenges render demand-oriented strategies more difficult, as optimally meeting elderly people's needs is often cost-increasing. According to Paulus et al. (2000), investments have to be made in the short run, but in the long run integrated care is expected to increase efficiency and will thus respond to both financial challenges and increasing and changing demands.

4. Rationalization strategy

All above mentioned strategies can be interpreted as indirect rationalization or efficiency-increasing strategies. However, there is also direct rationalization. In several countries, publicly funded elderly care and especially nursing homes suffered serious cutbacks as a result of financial problems and economic pressure (Meijer et al., 2000; Stark, 2005). Rationalization in the elderly care sector paves the way to (further) privatization.

4.1. Flanders

The Flemish elderly care sector, for instance, is characterized by a lot of public and non-profit organizations, but the number of private organisations is increasing, although most activities of private organisations are financed by the health insurance (Pacolet et al., 2004). Since the 90s, the Flemish government acknowledges that only publicly funded care will not be able to respond to increasing and changing needs. An increasing number of elderly people appeal already to private care, sometimes from necessity, but also voluntary (De Prins, 2002). According to Annemans (2006), the only way to maintain publicly funded care is to increase its efficiency and cost-effectiveness (Annemans, 2006).

4.2. Nordic countries

The Nordic countries, which have the largest publicly financed and organized care sector for the elderly among the members of the European Union, are also rationalizing. In Sweden, for instance, municipalities are planning further cutbacks in institutional care in the years to come (Rae, 2005). Moreover, the Nordic countries contracted out an increasing part of care work to private agencies (Stark, 2005), although private providers account for only fifteen percent of the market (Rae, 2005). In Denmark and Finland, elderly people have been offered the choice between public and private providers via systems of citizen free choice, but their impact was also rather small (Pietiläinen & Vanhala, 2000; Green-Pedersen, 2001; Hansen, 2005). Besides privatization of service providers, there is also a privatization of financing (due to increased fees for services) and a privatization of the work organisation (due to market-inspired organisational models) (Dahl & Eriksen, 2005). The former is privatized by higher fees and income-related user fees, and the latter by New Public Management (NPM) thinking with market-oriented terminology and organization, stressing financial incentives, productivity, efficiency and quality control and greater financial responsibility for activities (Trydegård, 2003). In Denmark, for instance, several models to assess efficiency and to detect efficiency improving opportunities were introduced. According to the Multi-directional Efficiency Analysis (MEA), for instance, the improvement potential in Danish elderly care institutions was situated in the utilization of staff (especially administrative staff) and operational expenditures (Hougaard et al., 2004). In short, privatization of service provision is currently quite limited, but the market logic gradually penetrates the elderly care sector in the Nordic countries.

4.3. United States

In other countries the elderly care market is growing and evolving and elderly care providers at the luxury end of the market can offer investors particularly attractive yields. Sunrise Senior Living, for instance, prides itself on being the largest 'senior living provider' in the world, with more than 400 communities in the United States, Canada, Germany and the UK (Jenkins, 2005). In the United States, however, privatization is not new, as public care has always been restricted to individuals and families with low incomes and resources (Uhlenberg, 1997; Baackes, 2007).

4.4. Link with the challenges in the ageing society

The rationalization strategy within the publicly funded elderly care sector clearly responds to the financial challenges within the elderly care sector, but personnel challenges and changing needs are seldom solved by rationalization strategies. By contrast, privatization can meet increasing and changing demands by better value for money, better quality, and customer choice (Abrahamson, 2002; Rae, 2005), although this is not necessarily guaranteed. Declercq and Van Audenhove (2004) state *'it remains a fact, however, that care must be accessible and affordable for all. Health care and the provision of social services are such valuable commodities that society is not at liberty to submit it (completely) to the laws of the market'* (p. 61). Jørgensen and Bozeman (2002), however, argue that the rise of privatization and contracting out is not only due to the rationalization strategy, but also to erosion in faith in the government. According to Lamm and Blank (2005), a rational, transparent, and workable framework within which rationing decisions can be made is necessary.

5. Conclusion

In this chapter, several strategies were discussed. Remarkable was that the enumerated strategies were found in the different types of welfare states, although their interpretation varied. Most strategies, however, were at least partial rationalization or efficiency-increasing strategies (although their goals were not always achieved), while the other challenges (*in casu* personnel shortage and increasing and changing demands) were of minor importance. The greatest challenge in the elderly care sector is thus effectively responding to all three challenges by an integrated set of policy strategies. Nevertheless, there is also need for innovation within organizations and institutions. According to the CAS theory, organizations and institutions adapt to both the internal and external environment, as a result of which we assume that the described policy strategies will be reflected in the innovative initiatives in different countries. Innovative opportunities and their link with the described policy strategies will be discussed in the next chapters.

PART IV

INNOVATIVE OPPORTUNITIES OUTSIDE FLANDERS

1. Definition of innovation

Each of the research teams gave their own definition of innovation in the elderly care sector. Most researchers distinguished different types of innovation in their definition, such as innovative technologies, innovations in service delivery and care arrangements (*cf.* service-related innovation), innovations in planning, working, and processes (*cf.* organization-related innovation), and innovation in thinking and research. Almost all researchers mentioned the expected attributes in their definition of innovation. One research team focused on the importance of *'seeing the ageing of the population as an opportunity instead of a threat'*, but the other research team situated the expected attributes of innovation in the domain of better meeting elderly people's needs. Some researchers also mentioned the importance of improving service quality, increasing efficiency, effectiveness and productivity, and a single research team focused on 'marketing attributes', such as making care more visible and attracting high quality care and carers. This interpretation of innovation was thus in line with our interpretation of innovation.

The governmental actors also associated innovation with responding to challenges in the ageing society. The government in the United Kingdom, for instance, was not only committed to improving care for older people, but also open to new and innovative ways of meeting their needs. According to the Norwegian government, innovative initiatives have to respond to the future long term care challenges, which are 1) new user groups with varying degrees of incapacity and a greater range of health and social problems requiring different professional skills and a complete life-cycle perspective in the long-term care offer, 2) growing needs as a result of an increase in the number of elderly, 3) need for care which covers psychosocial needs and gives it a more active profile, 4) need for improving the medical and multi-disciplinary follow-up of people with chronic, and complex illness, dementia, and mental health problems, and 5) shortage of carers and voluntary care providers. The Danish government defined innovation as 1) innovations expected to better meet elderly people's needs (user-driven innovation) and 2) innovations to make working in the care sector more attractive by introducing new working procedures and helping employees to develop and renew their own work (employee-driven innovation).

In the Mediterranean welfare regimes, the focus is also on changing needs and more in particular as a result of the decrease in the number of family. According to the Portuguese government, for instance, innovation includes 1) technical solutions in supporting independent living of older people and their care services, 2) promoting co-operation of the public, private and third sector in care, and 3) creation of integrated service models that will enable public, private and third sector organizations to adopt new working methods and provide cost-effective services. Final goal of innovation was to increase autonomy and independency of the elderly and decrease the lost working days of family carers. The Greek government argued that innovation refers to developing new programmes and services to support the elderly who cannot be supported by their family and to avoid social exclusion. In this context, elderly people are considered as *'an asset for every civilized society'*.

The link with financial challenges was made by the Luxembourg government, who argued that innovation is needed to find financial resources. These resources are needed to 1) facilitate independence, 2) increase quality of life and care, and 3) improve social inclusion of dependent

elderly people. The Luxembourg government was the only one to associate innovation with financial challenges in the sector, which can be explained by the fact that this government was presented by the Ministry of Social Security and not by the Ministry of Welfare, Social Services or Health.

Both researchers and governmental actors associated innovation thus with the challenges in the ageing society. The focus was on better meeting elderly people's needs, although financial and personnel challenges were mentioned. This is also shown in the concrete innovative opportunities, which will be discussed in the next chapter.

2. Innovative initiatives

2.1. Innovative initiatives in the U.S.A

2.1.1. Alzheimer's special care unit

The Alzheimer's special care units are located in Assisted Living Facilities. As these units are less medically intense than nursing homes and even enable care for residents who are in the end stages of Alzheimer's disease, the Centre for Gerontology & Senior Scientist in the U.S.A. considered these special care units as innovative services and care forms (*cf.* service-related innovation).

2.1.2. Re-balancing of the long-term care investments

According to the Centre for Gerontology & Senior Scientist, there is a 're-balancing' of the long-term care investments in the U.S.A., as various community-based alternatives are developed. These alternatives are going from adult day care centres to assisted living facilities, which provide room, board and 24 hour supervision and support in a sheltered residential setting. A particular example is the Green House Model, which is described as

> *'a small intentional community for a group of elders and staff. It is a place that focuses on life, and its heart is found in the relationships that flourish there. A radical departure from traditional skilled nursing homes and assisted living facilities, The Green House model alters facility size, interior design, staffing patterns, and methods of delivering skilled professional services. Its primary purpose is to serve as a place where elders can receive assistance and support with activities of daily living and clinical care, without the assistance and care becoming the focus of their existence'* (Green House, 2009).

Implementation of the Green House Model required technical assistance, tools and pre-development loans (up to $ 125,000). NCB Capital Impact is pursuing the rapid replication of The Green House model in the U.S.A by offering the required assistance and loans to not-for-profit organizations in good standing. This service-related innovation goes thus hand in hand with organization-related innovation.

More information: www.thegreenhouseproject.org

2.1.3. Culture change

According to the Centre for Gerontology & Senior Scientist, all these changes in the institutional setting in the U.S.A. reflect a culture change, namely a re-orientation of the staffing in nursing homes. In the enumerated initiatives, the staff members have a role in the facilities' operations and are more involved in the planning and management, as a result of which this is an organization-related innovation.

2.2. Innovative initiatives in the United Kingdom

2.2.1. The Care Home Learning Network

The Care Home Learning Network in the South-West region of England was mentioned by the Faculty of Life and Health Sciences of the University of the West of England. This initiative was set up in 2003 and supports and offers shared and new learning to care homes. Each eight weeks, care home representatives meet each other to discuss challenges and relevant issues (*cf.* shared learning) and get introduced to new ways of thinking and working by expert speakers (*cf.* new learning). The Care Home Learning Network is guided and led by both a Core Group (including members from across the area) and an Advisory Group (including members of statutory and independent health and social service providers) who meet quarterly. Goals of this initiative are 1) promoting a culture of new and shared learning, 2) cascading knowledge and information across the whole workforce, and finally 3) improving and enhancing quality care in care homes and developing its workforce (Fear, 2006).

The Care Home Learning Network is thus an organization-related innovation. Fear (2006) argued that the Care Home Learning Network has several benefit to the care homes (going from reducing isolation in the workplace over discussion and sharing information to accessing professional development for all staff), benefits to residents (enhanced care and involvement through membership of the Advisory Group) and benefits to other organizations (such as network opportunities). Developing Care Home Learning Networks, however, requires funding.

More information:
http://www.cat.csip.org.uk/_library/docs/BetterCommissioning/Publications/Care_Homes_Learning_Network.pdf

2.2.2. Person-centred care for people with Dementia

The Faculty of Life and Health Sciences of the University of the West of England considered the person-centred care initiatives for people with Dementia in local care home organizations as innovative service and care forms (cf. service-related innovation). These initiatives are expected to enhance care for people with Dementia by using the Tom Kitwood model. This model suggests seven ways to gain insight into what it is like to have Dementia, which are presented in Table 14.

Table 14. Seven insights of the Tom Kitwood model (Kennard 2006)

1. Reading books by people who have dementia such as Alzheimer's
2. Listening carefully to what people with dementia say in groups or interviews
3. Attending carefully and imaginatively to what people with dementia say
4. Learn from the behaviour and actions of people with dementia
5. Learning from people who have had illnesses with dementia-like features
6. Understanding dementia using our own 'poetic' imagination
7. Using role play to understand the experience of dementia

More information:
Kitwood, T. (1997). Dementia reconsidered. The person comes first. Buckingham: Open University Press.

2.2.3. National Service Framework

In the United Kingdom, the National Service Framework (NSF) for Older People was introduced in 2001. According to the initiators, the NSF is *'the key vehicle for ensuring that the needs of older people are at the heart of the reform programme for health and social services'* (p. 5). The NSF is part of the British Government's agenda to increase standards and reduce unacceptable variations in health and social services. The Department of Health in the United Kingdom argued that the one-size fits all approach is out of date. Elderly care services have to effectively address elderly people's needs, promote health, and enable independency for as long as possible. In the NSF, elderly were seen as *'a vital resource of wisdom, experience and talent'* rather than *'a burden on society'* (p. 2) (Department of Health, 2001).

The NSF focuses on rooting out age discrimination, providing person-centred care, promoting older people's health and independence and fitting services around people's needs. Furthermore, attention was paid to conditions which are particularly significant for older people, such as stroke, falls, and mental health problems associated with older age. The NSF's goal was to improve services through setting national quality standards, a process by which practitioner groups, management groups and organizations representing users' and carers' interests were involved (Department of Health, 2001). The selected standards can be found in Table 15.

Table 15. Aim of the NSF standards (adapted from Department of Health, 2001).

Routing out age discrimination	Ensuring that older people are never unfairly discriminated against in accessing NHS or social care services as a result of their age.
Person-centred care	Ensuring that older people are treated as individuals and that they receive appropriate and timely packages of care which meet their needs as individuals, regardless of health and social services boundaries.
Intermediate care	Providing integrated services to promote faster recovery from illness, prevent unnecessary acute hospital admissions, support timely discharge and maximise independent living.
General hospital care	Ensuring that older people receive the specialist help they need in hospital and that they receive the maximum benefit from having been in hospital.
Stroke	Reducing the incidence of stroke in the population and ensure that those who have had a stroke have prompt access to integrated stroke care services.
Falls	Reducing the number of falls which result in serious injury and ensure effective treatment and rehabilitation for those who have fallen.
Mental health problems in older people	Promoting good mental health in older people and to treat and support those older people with dementia and depression.
Promotion of health and active life in older age	Extending the healthy life expectancy of older people.

In the National Service Framework (NSF) for older people, however, they argued that *'health and social care staff have been at the forefront of efforts to secure a better deal for older people, but too often the structures and practices that they have had to work with have frustrated these efforts'* (p.2). The structure and practices in organizations and the sector as a whole are thus important preconditions for innovation (Department of Health, 2001).

2.3. Innovative initiatives in the Netherlands

2.3.1. The Elderly Health Centres

The Elderly Health Centres collaborate with different care providers and aim to prevent illness and problems for the elderly by providing information and integrated care initiatives to provide a demand-oriented care continuum and prevent overlap and deficits within the elderly care sector (*cf.* organization-related innovation). The Academic Centre Chronic Care Tranzo acknowledge that these ideas are not new, but innovative because these ideas are not yet put into practice.

As these ideas promote meeting elderly people's needs and efficiency, the most important precondition for success is actually implementing and then evaluating collaboration in the elderly care sector.

2.3.2. www.bouwcollege.nl

The Netherlands Board for Healthcare Institutions, which is an expertise centre in the domain of housing of intramural care, made an inventory of innovative initiatives regarding housing of intramural care (especially initiatives that replace traditional intramural care forms and separate living and care) and aims to regularly update this inventory by the initiatives posted on 'Het Kennisplein' of their website www.bouwcollege.nl. According to the Netherlands Board for Healthcare Institutions (2006), innovative initiatives are client-oriented and integral initiatives combining housing, welfare, services and care, which support elderly people to stay as long as possible at home or at least to live in home-like institutions. Home-like institutions are integrated in the community, small scale, normalized and fit in with regular housing. Small scale living and housing initiatives for elderly people with dementia, which are discussed in the next paragraph, are a concrete example of home-like institutions. More examples and pictures can be found in their report and on their website.

Preconditions for innovative housing are collaboration with local partners, such as collaboration with home care, social welfare institutions and housing corporations. Financial support of these housing corporations or national, provincial or local funding, however, is the most important preconditions for innovative housing.

More information:
www.bouwcollege.nl
www.bouwcollege.nl/Pdf/CZB%20Website/Publicaties/Uitvoeringstoetsen/Verpleeghuizen/ut599.pdf

2.3.3. Small scale living for elderly people

Small scale living or housing initiatives for elderly were cited as 'innovative initiatives' by two Dutch research teams. Many elderly care providers implemented small scale living or housing, which is a new service form (maximum six elderly people per group) accompanied by a new work design leading to different job specifications (task integration of duties for staff instead of silos between professionals). According to the Academic Centre of Chronic Care Tranzo, this new service form is expected to increase quality of life and so the health situation of the elderly and is currently further investigated.

According to Tranzo, courage and the conviction that small scale living for elderly people is an improvement are important preconditions for small scale living initiatives. The Netherlands Board for Healthcare Institutions adds that enough budgets are also an important precondition to cover night supervisions per group of six. If this budget is not available, problems in staffing during night shifts can arise. ICT and Domotics, however, are innovative initiatives to deal with this problem.

2.3.4. ICT and Domotics

According to the Netherlands Board for Healthcare Institutions, ICT and Domotics and thus technological innovations can help to guard, supervise and control larger number of small scale living groups during the night. Moreover, patients and families are also encouraged to use and organize care as they want or need it, which again can lead to a decreased number of needed professionals in certain cases and increased quality of life for the elderly.

The importance of Domotics in home situations is increasingly recognized, but the Housing Centre Leo Polak – a small scale living initiative for twelve groups of six elderly people with dementia in the Netherlands – was the first to implement innovative Domotics in an intramural setting. Primary goal of this initiative was not to facilitate independent living, but to support the care professionals. Care professionals, however, can determine active functions per client based on their client profile. A study on the effects of Domotics in Leo Polak revealed a positive effect on quality of life of people with dementia, increased mobility of the elderly and a decrease of fall incidents. No effects, however, were found on the workload and satisfaction of the professionals, but this could be due to the fact that the implementation of Domotics required extra efforts of the professionals and went together with technological problems (Nouws, Sanders & Heuvelink, 2006).

The Netherlands Board for Healthcare Institutions argued that costs associated with ICT and Domotics are very high and cannot be afforded by elderly care institutions if it is not heavily subsidized. Subsidies and an open national standard were thus considered as an important precondition of the success of ICT and Domotics.

More information:
www.medicalfacts.nl/2008/05/14/onderzoek-domotica-wooncentrum-leo-polak/
http://www.devijfdedimensie.nl/upload/docs/d5d_onderzoek_domotica__2006.pdf

2.3.5. GENERO

GENERO – Geriatric Network Rotterdam and Environment – is an innovative program to improve quality of care and welfare for frail elderly in the region Rotterdam and environment. Central issues are improving accessibility, continuity, early signalisation of complex problems, improving capacity, respect for diversity, and information and education. Starting points are the needs of elderly people and their informal carers, but other relevant parties are also involved to develop, implement and evaluate effective and qualitative innovations in the care sector. As innovation requires idea generation, conversation and collaboration, learning from each other, knowledge exchange, regular network meetings, brainstorm sessions and visits within and outside the region are organized. Each of GENERO partners is allowed to submit project proposals and GENERO brings partners with similar proposals together. Project proposals in line with the GENERO program and the National Program Elderly Care can result in theme groups to elaborate the project idea. Each of the elaborated project ideas is finally evaluated on relevance and quality by the GENERO advice and evaluation commission and positive evaluated projects qualify for funding of the National Program Elderly Care in the Netherlands (Erasmus MC, 2008).

More information:
www.erasmusmc.nl/research/subsidies/investeren/genero
www.nationaalzorgprogramma.nl

2.3.6. Care for the Better

Care for the Better is a national quality program in Dutch rest and nursing homes and home care, which focus is on quality, innovation and efficiency. As the implementation and spread of 'best practices' appeared to be difficult in the healthcare sector, 'quality collaboratives' are considered as solutions to the implementation gap. These collaboratives bring standard knowledge and approaches (such as PCDA-cycles, measuring, centrally defined quality indicators, etcetera) together with local knowledge and experience by means of the Breakthrough method (see Outline 3).

OUTLINE 3
THE BREAKTHROUGH METHOD

"Health professionals from different organizations are brought together to work on improving a specific subject area of care. Each organization composes an improvement team of three to five members, which participates in conferences of the collaborative. At each conference, teams attend plenary and concurrent sessions and receive coaching from faculty. Each participating team develops a coordinated set of plan-do-study-act (PDCA) cycles that will guide the implementation of activities during the following action period. The second and third conference and the outcomes conference emphasizes shared learning through presentations on system changes made and results achieved on (clinical) measures by participating teams. In between conferences, teams test, implement, and spread changes using a small-scale, rapid-cycle approach. Teams report their activities and progress to the administration in their organizations, to the sponsoring organizations, and to other collaborative teams on a monthly basis. Multiple avenues of communication between learning sessions allows the teams to share their innovative changes, barriers encountered, lessons learned, and results with other teams and faculty. In this way, quality collaboratives can work as 'learning laboratories' (Senge and Scharmer 2001) in that they stimulate learning within and between settings" (Strating, Zuiderent-Jerak, Nieboer, and Bal, 2007, p. 2)

The Care for the Better projects are based on the breakthrough method and focused on seven domains (prevention of sexual abuse, aggression and behavioural problems, autonomy and control, eating and drinking, medication safety, decubitus ulcers and fall prevention). Final goals of the Care for the Better program are 1) involving at least 350 care organizations in an improvement program, 2) realizing in at least 70 percent of the organizations a significant improvement, 3) realizing in at least 70 percent of the organizations an adoption of the improvement method in other domains, and 4) informing 80 percent of the management and quality officials about the program.

An evaluation of the Care for the Better program by the Department of Health Policy and Management of the Erasmus University (The Netherlands) revealed that initiatives are mainly submitted by teams and not by management, as a result of which major attention is paid to quality improvement and innovation and little attention to efficiency and more 'managerial' values. More attention for managerial values, however, is crucial to go beyond the idea generation phase and actual implement ideas.

More information:
http://oldwww.bmg.eur.nl/personal/strating/ZonMW_Intermediate_report_jan08.pdf

2.4. Innovative initiatives in the Nordic countries

2.4.1. Alarm systems

The alarm systems were introduced, so that independent living elderly over 75 can receive the services they wish. As a result, these alarm systems allow independent living and reduce uncertainty among elderly living alone. Important is to have some responsible organizations to deliver the needed services. According to E-Health Network Research Group in Sweden, these services may not be restricted to those who have economic resources.

2.4.2. Card keys

Card keys are a simple and innovative solution for the elderly care personnel, who often have to bring different keys, sometimes forget keys or risk to overlook to close doors. According to E-Health Network Research Group in Sweden, card keys do not only reduce mistakes among elderly care personnel, these card keys also increase the security for the elderly.

2.4.3. The Good Kitchen

In Denmark, about 125.000 elderly are dependent on public food service and thirty percent of all elderly in nursing and care homes are malnourished due to social, psychological and physical factors. The Municipality of Holstebro worked – in close co-operation with the idea and design agency Hatch & Bloom – on a new and improved food service solution for their senior citizens. In six months they developed a comprehensive service design solution for both senior citizens of the municipality and the employees. Through visits to elderly people, involvement of a cook, dialogue with the staff and a number of other initiatives, "The Good Kitchen" came into existence. The Good Kitchen improved the quality of food experience for the elderly in Holstebro Municipality, as a result of which their health condition and well-being improved. The Good Kitchen also boosted the dialogue and interaction between the elderly and staff – leading to renewed respect among both parties and improved life

quality. Moreover, the solution led to improved cooperation, dialogue and communication between The Good Kitchen, the local health centre and the referral section in Holstebro Municipality. Therefore, the Good Kitchen is *'an innovative example of how service design can play a vital part in developing the future of welfare services. It is a fact that the European welfare state is under heavy pressure. The Good Kitchen shows how to deliver a public service of very high standards that can live up the expectations of all of society'.* This project even won the Danish Design prize 2008 – 2009, because it was considered as *'an excellent example of the capacity of a user-driven innovation process to enhance a solution – in this case an assignment for a company run by a municipality. The users' needs and expectations were explored in an interdisciplinary approach that included the users throughout'.*

More information:
http://www.hatchbloom.dk

2.4.4. Visitation section in Roskilde Municipality

A collaboration between the visitation section in Roskilde Municipality and the design and innovation agency CPH Design resulted in a lot of good and useful suggestions on how to strengthen the citizens' experience of quality within personal and practical help. The close co-operation between the visitation section, the design agency, the municipal and private home help providers and the citizens in question already made a significant difference. CPH Design helped to break down barriers to home care and improved the communication between the local authority and the elderly. With the service design approach CPH Design provided the means to implement new visitation procedures, cost savings and organizational change within a local community.

More information:
http://www.cphdesign.com/clients/

2.4.5. Future workshops in Marstal Municipality

The senior citizen section in Marstal Municipality used 'future workshops', which are workshops to discuss innovative initiatives. Based on these future workshops the institution in Marstal achieved a clear consensus among employees and management on future services. This actually resulted in better service to users living in care centre and at home and also a better working environment for the employees.

More information (only in Danish):
http://www.lo.dk/publications/download/3216.pdf

2.5. Innovative initiatives in the Continental European countries

2.5.1. Care closer to and care at home

Both the Federal Ministry of Health in Germany and the Luxembourg Government considered care closer to home and even at home as innovative initiatives. They added that these initiatives were encouraged by new laws in their country. The Federal Ministry of Health in Germany, for instance, mentioned the Act to Strengthen Competition in the Statutory Health Insurance System in 2007

and the Long-Term Care Further Development Act in 2008. The Act to Strengthen Competition in the Statutory Health Insurance System introduced a number of improvements for the insured and the long-term care sector, such as 1) improved discharge management after stays in hospital, 2) strengthening the 'rehabilitation before long-term care' principle (*eg.* care provided by mobile 'rehab' teams after leaving the hospital), 3) expansion of domestic medical care, and 4) right to specialized out-patient palliative care. The Long-Term Care Further Development Act provides that social long-term care insurance will continue to be an autonomous branch of the social insurance systems (as a result of which long-term care insurance is still a core protection system), but greater account is taken of the 'out-patient before in-patient' principle than before. Concretely, this Act will help to reinforce the establishment and extension of new high-quality care structures near to people's homes (European Commission, 2008). And thanks to the Luxembourg Dependency Insurance – a new branch in the Social Security system since 1999 - the number of day care centres increased, the reimbursement for technical aids and adaptations to the home increased, and experimental night care projects are currently elaborated. This will be discussed in the next section.

2.5.2. Night care for frail elderly people

Goal of the experimental night care project in Luxembourg is to provide night care to very frail elderly people via a care network. Funding is guaranteed by the Dependency Insurance and will be increased within two years.

2.5.3. Social City Programme

The Social City Programme is an urban renewal programme in Germany, which was launched by the Federal Ministry of Transport, Building, and Urban Affairs and the federal states in Germany in 1999. Goal was to prevent and counteract social and spatial polarization in cities. Focus was thus on sustainable development in deprived neighbourhoods. According to the Federal Ministry of Transport, Building, and Urban Affairs, *'urban development is not just building policy. Sustainable urban policy must also be responsive to peoples' concerns regarding social security, their jobs and their children's education and it must integrate migrants'* (Federal Ministry of Transport, Building, and Urban Affairs, 2008, p. 1). Improved housing and living conditions were achieved by making some infrastructural changes (*eg.* more public green spaces and playground in the residential environment), new services (eg. leisure centres for children and young people), and social inclusive actions in the field of education and employment.

During the programme period from 1999 to 2008, a sum of more than 2.2 billion euros was made available by the Federal Government, the federal states, and the local authorities for the implementation of the programme in 520 neighbourhoods in almost 330 cities and local communities. And in 2009, an additional 105 million euros of federal funds will be made available for the Social City Programme. Funding is thus an important preconditions, as well as collaboration among different governments and departments. An interim evaluation of the Social City Programme carried out in 2003/2004 revealed that activation of citizens' participation in deprived neighbourhoods, the development of efficient local structures, and the cooperation among the different departments was achieved.

More information:
http://www.sozialestadt.de/en/programm/

2.5.4. Experience for Initiatives

The 'Experience for Initiatives' programme in Germany was established to better make use of the potential of the older generation. After the career and family phase, people have a great wealth of knowledge gained through experience and time. The 'Experience for Initiatives' programme consists of courses to become *senior*trainers. Seniortrainers learn something new and use this experience in many local projects for the benefit of all age and population groups locally. According to the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (2006), *'Senior expertise teams even become reliable partners and important pace setters for voluntary involvement in local communities [and] active senior citizens develop creativity, innovation and willingness to act'* (p. 3).

The most important success factor is self-organization: senior trainers have to organise themselves and become active under their own responsibility – in cooperation with the local contact point. Therefore, a platform for individual learning processes and personality development has to be established, the individual involvement of *senior* trainers has to be strengthened and supported, the public perception, recognition, and the use of knowledge gained through experience of older people has to be promoted.

More information:
http://www.bmfsfj.de/bmfsfj/generator/BMFSFJ/Service/volltextsuche.html

2.6. Innovative initiatives in the Mediterranean countries

The Portuguese government did not give concrete examples of innovative initiatives, but mentioned two trends within the elderly care sector. The first trend is the development of integrated services with the public, private and third sector, which is a trend situated at the organizational level. The second trend is situated at the policy level, namely 'synergist cooperation' between social affairs and health ministries. Innovative initiatives are post-acute and long-term care services based on the two trends. More concrete examples were given by the Greek government, who argued that several programmes and services to support the elderly and avoid social exclusion were recently developed. A few of these programmes will be discussed here.

2.6.1. Day-care centres for the elderly

Day-care centres for the elderly (the so-called KIFI) are related to the Open Care Protection Centres for the Elderly (the so-called KAPI). KAPI were established in the early 80s by volunteer groups and currently run by local authorities. Goal of the KAPI is to provide social support and preventive medical services for elderly people, so that they can remain at home (Daniillidou, Economou, Zavras, Kyriopoulos, and Geargoussi, 2003). KIFI are also run by local authorities and situated in urban and suburban areas. These centres offer hospitality during the day (free of charge) to elderly people who cannot be supported by their family due to severe economic or social problems and also are incapable of taking care of themselves due to several causes such as mental disorders, disabilities, and etcetera.

2.6.2. Home assistance programme

The home assistance programmes were established for low income, lonely and elderly people in need, with priority to the mountainous deserted areas and the islands. Up to date there are 1.172 mobile units, in possession of 660 vehicles, 612 of which are specially designed to meet the needs of the disabled.

2.6.3. Home Tele-assistance plan

Since 2000, the Home Tele-assistance programme is established for isolated elderly people who cannot take care of themselves. Goal of this programme is 1) to come in contact with their family and friendly environment, 2) to have access to emergency care services, 3) to feel less vulnerable and insecure, and 4) to be able to stay at home.

2.7. Link with challenges and policy strategies

The focus of almost all innovative initiatives was on meeting elderly people's needs (*cf.* demand-oriented integration). Remarkable was that these needs are defined in similar ways, regardless of the type of welfare regime. More in particular, better quality of care, more attention for people with Dementia, improving quality of life, and most important increasing elderly people's independency (*cf.* de-institutionalization strategy) were considered as keys to better meet elderly people's needs in different countries. Moreover, similar initiatives were retrieved in different countries, such as the small-scaled living initiatives in the Netherlands and the U.S.A., the use of tele-assistance and Domotica in Greece and the Netherlands, and Dementia unit in the U.S.A. and the U.K. Regarding elderly people's needs, however, a few researchers and governmental actors pointed out that elderly people are not only people in need of care, but also a source of wisdom, experience, and talent.

Furthermore, collaboration played an important role in different initiatives. Three types of collaboration could be derived. The first type of collaboration focused on information exchange, learning and discussion among different elderly care actors in order to better meet the challenges in the elderly care sector. The second type of collaboration focused on the creation of a care continuum from both the perspective of the organizations (*cf.* supply-oriented integration strategy) and the perspective of the users (*cf.* demand-oriented integration strategy). The third type of collaboration focused on partnerships with organizations in other sectors.

In sum, most innovative opportunities in different countries were related to crossing the borders of the own organization and meeting elderly people's needs, which was in line with the integration and de-institutionalization strategy.

3. Preconditions for innovation

Preconditions for innovative initiatives described in the previous chapter were mostly initiative-related. Preconditions for initiatives focussing on better meeting elderly people's needs, however, were often situated in the financial or personnel domain (*cf.* financial and personnel challenges) and sometimes in the legal domain. In this chapter, the focus is on general preconditions for innovation mentioned by the researchers and governmental actors, which can be brought back to four categories.

The first category of preconditions for innovation focuses on the characteristics of the initiators. According to some researchers, these initiators do not only need freedom of acting, but also courage and a sense of entrepreneurship.

The second category of preconditions for innovation is related to the employees. According to several researchers, employees are expected to be open to innovation if there is dissatisfaction with the current situation and a consensus about the utility of new initiatives. One of the governmental actors added that cultural change among employees is also needed and another governmental actor considered informal communication, short power distances and employee involvement as important preconditions for innovation in the elderly care sector. Informal communication can be achieved by dedicating staff responsibility to line managers rather than to a central HR manager. Short power distances in the workplace means that employees at all levels are briefed to a large extent, contribute to defining skills development needs and have more equal access to educational activities. Employee involvement is the result of a tradition of critical and self-managing employees who feel a joint responsibility for the development of the company. Finally, active care required a greater professional scope in the long-term care sector (*eg.* social work and occupational therapy), as a result of which voluntary work and facilitating a better combination of labour force participation and care provision are needed.

The third category of preconditions is situated at the organizational level. One of the researchers underlined the importance of developing organization and IT in parallel. According to one of the governmental actors, strengthened management function and better organization result in flexible adaptation to local conditions and needs, close collaboration with the local community and meeting the subsidiarity principle. Another governmental actor added a suitable development of primary care as an important preconditions at the organizational level. The most important preconditions at the organizational level, however, were collaboration and partnerships with others and funding.

Finally, there were some preconditions at the policy level. One of the governmental actors considered long-term planning of investments in buildings, personnel input, skills needs, educational capacity, and adapting the physical and social surroundings as a crucial precondition for innovation. Another governmental actor underlined the importance of a good functioning health and social security system, as well as political attention and the availability of financial and human resources for research in the domain of ageing and prevention of diseases in general and age-related diseases. The importance of research was also stressed by this actor, which considered research and development work as an important precondition to create a knowledge base for planning.

In sum, the enumerated preconditions were in line with the importance of individual agents and their interactions on the one hand (*cf.* characteristics of initiators and employees) and the importance of

the internal and external environment on the other hand (*cf.* organizational and policy characteristics). There is thus a link with the insights of the CAS theory, but the importance of self-organization – a key characteristic of CASs – was not mentioned. As a result, we can conclude that the insights of the CAS theory are partially accepted by the researchers and governmental actors.

1. Participants innovation contest

The call for innovative initiatives in the elderly care sector, responding to the three main challenges in the ageing society, resulted in thirteen entries. These entries were quite diverse. Five initiatives were service-related innovations, three initiatives were organization-related initiatives and five initiatives were combinations of service- and organization-related innovations (*eg.* new services combined with a new organizational structure). Innovations were mainly non-technological, but four initiatives had a technological component. Policy innovations were lacking, as the award only addressed care providing organizations (see Table 16). How each of these initiatives was evaluated by the expert panel is discussed in the next paragraph.

Table 16. Classification of the entries per type of innovation

		Service-related	Organization-related	Combination
1	Night care for elderly people			X
2	Dementia support at home	X		
3	Recruitment campaign		X	
4	Psychological support	X		
5	Fall detection gadget	X[T]		
6	The Digital Bridge			X
7	Digital listening books			X[T]
8	Be-Buzzie concept	X		
9	Identification Seniors at Risk		X	
10	Needleless connectors with peripheral infusions	X[T]		
11	Family discussion group dementia			X
12	Dream, Dare and Do		X	
13	www.zorgbeheer.com			X[T]

[T] initiatives with a technological component

2. Expert panel

The expert panel evaluated the innovativeness of the participating initiatives on the basis of the Elderly Care Innovation Framework. Four dimensions were scored, namely 1) the perceived innovativeness, 2) the degree to which the challenges in the ageing society are met, 3) the degree of elaboration, and 4) the potential for diffusion of the initiative. The first dimension was individually scored, while the other dimensions were scored in group. In this section, a close look will be taken at the individual scores and then the general scores will be discussed.

2.1. Perceived innovativeness

Table 17. Descriptive statistics of the perceived innovativeness (dimension 1)

	MEAN at a 5 point scale	MINIMUM	MAXIMUM	VARIANCE
1	**3,68**	3,00	5,00	,473
2	2,14	,00	3,00	1,143
3	2,43	1,00	3,00	,619
4	2,21	2,00	3,00	,155
5	2,5	**,00**	**4,50**	1,917
6	3,93	3,00	5,00	,452
7	2,57	1,00	4,00	1,369
8	2,5	1,00	3,50	,750
9	2,28	,00	3,00	1,238
10	1,43	,00	3,00	1,286
11	2,71	2,00	3,00	,238
12	2,86	**2,00**	**4,00**	,560
13	2,29	,00	3,50	1,321

Table 17 presents the experts' scores for the first dimension, namely the 'perceived innovativeness'. Regarding these scores, it can be concluded that none of the initiatives was perceived as 'very innovative'. Regarding to the minima and maxima, most initiatives were perceived as either 'rather not innovative' (scores from 0 to 3) or 'rather innovative' (scores from 3 to 5). Exceptions were initiative 5 and 12. The latter is situated between rather not and rather innovative, while the minima and maxima of the former – which is a technological innovation – diverge. This is possibly due to differences in technological expertise among the experts. Except for initiative 5, it is remarkable that the variance among experts is not that large for the 'perceived innovativeness', although no instructions were given to the experts and no agreements were made among experts.

Regarding the variances in experts' scores, the question is whether experts give innovativeness a common interpretation. A further analysis of the experts' arguments for their scores revealed that all experts gave high scores to initiatives with a high degree of collaboration. Both collaboration with

other elderly care organizations and collaboration with other actors are considered as innovative. The former because collaboration is currently no obviousness in the elderly care sector, although it can increase efficiency and better meet elderly people's needs; the latter because integration in society of elderly is currently lacking. Furthermore, high scores were given to initiatives with added value for the users by meeting non-answered (new) needs and low scores when the added value for users or the effectiveness of an initiative was questioned. Finally, all experts associated innovativeness with newness. All experts namely gave low scores when there was a lack of 'newness'. Newness was then defined as 'new in the elderly care sector'. Initiatives that exist in other sectors can thus be characterized as new, if they do not yet exist in the elderly care sector. An overview of the experts' arguments for perceived innovativeness is shown in Table 18.

Table 18. Overview of the experts' arguments for perceived innovativeness

	Newness	Collaboration + integration	Improvement	Relation to needs	Effectivity increase	Starting from the basis
1	X	X	X	XX		X
2	X	X	XX	X	X	
3	XX	X	X			X
4	XX	X		X		
5	XX	X	X	X	X	
6	X	XX				
7	XX	X	X			

X is used a few times as argument;
XX is used several times as argument.

The 'newness in the elderly care sector' was thus decisive for the experts' scores on condition that the initiatives also had added value for users or demonstrated a high degree of collaboration/integration. Moreover, service- and organization-related innovations were perceived as more innovative than service-related innovations.

2.2. Degree to which the challenges are met

Most initiatives focused mainly on the increasing and changing needs of the elderly, such as new technology, new care services, and new general services. These initiatives are described in Table 19.

Table 19. Initiatives mainly focussing on increasing and changing needs.

New technology	Fall detection gadget	Discrete apparatus to detect falls and notify an alarm central/care provider/family
	Needleless connectors with peripheral infusions	Connector to decrease freedom restricting measures and increase freedom of movement
New care services	Night care for elderly people	Collaboration between several elderly care organizations to be able to provide night care for the elderly (pool of personnel) and to better meet elderly people and their relatives' needs
	Psychological support	Enlarging the team by a psychologist to identify eventual psychological needs of elderly and their relatives and to support them if necessary
	Identification Seniors at Risk	A step-by-step needs assessment tool for geriatric units within hospitals
	Dementia support at home	Central provision of information, advice and home support at the local level for people who are confronted with dementia
	Family discussion group dementia	Discussion group for family members of people with dementia in order to improve quality of the provided services and open their hearts to other family members
New general services	The Digital Bridge	Cybercafé within elderly care organization to stimulate permanent development, which is open to the elderly and local residents
	Digital listening books	Books for geriatric patients who have reading difficulties
	Be-Buzzie concept	Movement circuit (based on the fit-o-meter) to stimulate physical exercise for elderly people who stay in care organizations

Three initiatives focused mainly on the elderly care personnel. One of these initiative addressed personnel shortage, although the experts were not sure that the proposed initiative was strong enough to answer this challenge (too local and layout not attractive for young people). The other two initiatives' focus was on information exchange and discussion to deal with all kind of challenges. More information about these initiatives, which at the end also focus on better meeting elderly people's needs, is given in Table 20.

Table 20. Initiatives mainly focussing on personnel challenges.

Personnel shortage	Recruitment campaign	A regional poster campaign to motivate people to choose for a job in the care sector
Information exchange and discussion on all challenges	Dream, Dare and Do	Tool to increase creativity of employees and to facilitate organizational change
	www.zorgbeheer.com	Internet platform for care managers to exchange information and discuss

2.3. Degree of elaboration

Although the call mentioned the importance of the degree of elaboration of the initiatives, three initiatives were situated in the ideas phase. One initiative was situated between an idea and an implemented idea, six initiatives could be situated within the implementation phase and three initiatives in the evaluation phase. This result seems to confirm the difficulty of implementing and especially evaluating new ideas within an organization.

2.4. Potential for diffusion

Two initiatives were considered as not translatable to other organizations, namely dementia support at home and the recruitment campaign. The experts argued that no solutions for the challenges were offered and this would neither be the case in other organizations.

Five initiatives were evaluated as being translatable to a limited extent. The fall detection gadget and the psychological support, for instance, require enough financial resources, which is not easy for individual elderly or small elderly care organizations. The needs assessment tool is only applicable in geriatric care units within hospitals, as elderly care organizations already have similar tools. The Internet platform for elderly care actors is considered as translatable to a limited extent, as the functionality of these forums decreases if more forums emerge. The needleless connectors with peripheral infusions were finally considered as to a limited extent translatable, as the added value for other organizations was not really clear to the experts.

The family discussion group dementia and the night care for elderly got a high but not a maximum score for translatability, as these initiatives were quite complicated. Making a copy of this initiative is thus not easy. The maximum scores for translatability were given to less complicated initiatives, such as the Be-Buzzie concept, the listening book, the Digital Bridge, and Dream, Dare and Do.

2.5. Innovativeness

On the basis of their scores, each expert made its top 3. All initiatives mentioned in the experts' top 3 were considered as 'innovative initiatives' and further investigated via a case study approach. Table 21 shows that five initiatives can be considered as 'innovative initiatives', namely night care for elderly people, the Digital Bridge, the Be-Buzzie concept, the family discussion group dementia, and 'Dream, Dare and Do'.

Table 21. Top 3 of each of the experts

	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	Expert 6	Expert 7	TOTAL
1				X				X
2								
3								
4								
5								
6	X	X	X	X	X	X	X	X
7								
8	X		X				X	X
9								
10								
11		X			X	X	X	X
12	X	X	X	X	X	X	X	X
13								

The five selected initiatives also had the highest mean scores (see Table 22), which is not surprising as there was little variance among the experts for the first dimension and as the other dimensions were scored in group. Each of these initiatives will be subjected to a case study, of which the results are presented in the next section.

Table 22. Innovativeness score of each of the initiatives.

	DIMENSION 1	DIMENSION 2	DIMENSION 3	DIMENSION 4	TOTAL
1	3,68/5	2/4	1,5/3	4/5	11,18/17
2	2,14/5	1/4	1/3	0/5	4,14/17
3	2,43/5	0/4	3/3	0/5	5,43/17
4	2,21/5	1/4	3/3	3/5	9,21/17
5	2,5/5	1/4	2/3	3/5	8,5/17
6	3,93/5	4/4	2/3	5/5	14,93/17
7	2,57/5	2/4	1/3	5/5	10,57/17
8	2,5/5	2/4	2/3	5/5	11,5/17
9	2,28/5	3/4	2/3	3/5	10,28/17
10	1,43/5	3/4	1/3	3/5	8,43/17
11	2,71/5	4/4	2/3	4/5	12,71/17
12	2,86/5	4/4	3/3	5/5	14,86/17
13	2,29/5	2/4	2/3	3/5	9,29/17

3. Five Flemish cases

3.1. Be-Buzzie concept

3.1.1. Newness of the initiative within the organization

The Be-Buzzie® concept is a movement circuit in the corridor of the geriatric unit of a universitary hospital in Ghent with different exercises to keep fit and in shape. The Be-Buzzie® concept can be considered as a platform project. Firstly, there were yet physiotherapists in the acute geriatric unit of the universitary hospital in Ghent, who organized individual therapy and sit gymnastics. New was that physiotherapeutic exercises could be done in the corridors of the acute geriatric units, as a result of which social contact among patients and between patients and employees was enabled. Secondly, the Be-Buzzie® concept was built on the existing infrastructure, as exercises could be done at the bars in the corridor and instructions were hanged on the wall. Consequently, physiotherapy became more visible, dynamic and active in the acute geriatric unit. Finally, the Be-Buzzie® concept (name, logo, posters, etcetera) was invented after developing exercises in the corridor.

As the Be-Buzzie® concept was received with open arms within the acute geriatric unit, the initiators (the occupational and physiotherapist) are thinking about implementing Be-Buzzie® in other units of the hospital with geriatric patients and even within other hospitals (such as the hospitals in their region) and nursing homes. Moreover, the initiators strive for improvement of the Be-Buzzie® concept. Based on the feedback of patients and employees, they continuously adjust the Be-Buzzie exercises. The initiators even think over a digital version of the Be-Buzzie® concept, so that patients have a visual representation when doing physical exercises at home.

3.1.2. Organization-driven versus system-driven

The Be-Buzzie® concept was both organization- and system-driven. The idea came from the occupational and physiotherapist in the geriatric units, who developed the Be-Buzzie® exercises and concept based on their knowledge, expertise and experience. Important sources of inspiration were practices in nursing homes (as one of the initiators worked in a nursing home context) and the fit-o-meter of Bloso, which is a circuit in open air with different exercises to keep fit and in shape (*cf.* interaction with external actors). The main characteristic of the fit-o-meter is its flexibility. Participants cannot only compose their own set of exercises; they also can choose whether to do exercises individually or in group. The same goes for the Be-Buzzie® concept. By offering an alternative for the individual therapy and sit gymnastics and by enabling flexibility, the Be-Buzzie project is in line with the demand-oriented integration strategy.

A difference with the fit-o-meter was that exercises were designed so that the general functionality was improved and these exercises could be done at home (for instance with the help of a table or a cupboard). Patients were encouraged to do physical exercises at home by a brochure with a selection of exercises and points of interest and a consultation between patient, family members and the occupational and physiotherapists. Be-Buzzie® made the bridge between the hospital and the home, which is in line with de-institutionalisation strategy. As this project did not require an increase in financial resources, there is also a fit with the rationalization strategy. Applying the Be-Buzzie® concept in other institutions would possibly contribute to integration, de-institutionalization, and rationalization at the sector level.

3.1.3. Top-down versus bottom-up

The Be-Buzzie® idea came – as mentioned above – from the occupational and physiotherapist in the geriatric units, but they argued that the positive feedback of the unit's management was crucial. The unit's management evaluated new ideas on the basis of the added value for the patient, the feasibility and the support within the unit. Ideas from single individuals or cliques within the team were thus less likely to be accepted. The positive evaluation of the Be-Buzzie® idea was a stimulus for occupational and physiotherapist to further elaborate and implement the project.

3.1.4. Practical conditions

The enthusiasm of the occupational and physiotherapists was an important precondition for the implementation of the Be-Buzzie® concept, as well as the receptiveness for new ideas of the acute geriatric unit's management. Important was that the nurses, physicians and other employees in the acute geriatric unit were also enthusiastic about the project, as it was situated within their working environment. Secondly, patients also had to fulfil certain conditions, namely the ability to move independently, a certain intellectual power, and no contraindications for movement. A multidisciplinary consultation decided whether these conditions were fulfilled. Patients with far gone dementia or patients who underwent a surgical treatment, for instance, were advised not to participate. The initiators, however, stressed the importance of asking participants for feedback regarding the feasibility and the development of exercises. Thirdly, some regularity was needed (*eg.* a certain point in time in the day or week planning). As occupational and physiotherapist were only present during working days, the instructions hanging on the wall were crucial to guarantee flexibility, as these instructions enabled patients to do exercises on their own, whether or not accompanied by their family members. Moreover, employees within the acute geriatric unit had to be well informed about the Be-Buzzie® concept. Finally, the concept *an sich* (name, logo, lay-out, logo, etcetera) was important to create more visibility and motivate patients to participate.

According to the initiators of the project, an important precondition to implement Be-Buzzie® in other units, hospitals or nursing homes is having empirical evidence of the effectiveness of the project. Moreover, there are not only their colleagues in this universitary setting who pay much attention to empirical evidence, the government increasingly pays attention to evidence-based practices. Once empirical evidence is available, the Intern Liaison Team within the hospital will have to fulfil a critical role. The Intern Liaison Team namely investigates the needs of patients with a geriatric profile within a non-geriatric unit and looks together with the employees of the unit for the most appropriate solution. The Be-Buzzie® concept can thus be 'promoted' and translated to other units by this team.

3.1.5. Effects

Remarkable was that the initiators paid much attention to the lay-out of the Be-Buzzie® concept. When entering the acute geriatric unit in the hospital, the brightly green coloured Be-Buzzie® posters leapt to the eye. Initiators of the project confirmed that colleagues of other units sometimes ask for information about the project in response to the posters. According to the initiators, the Be-Buzzie® concept will have a positive impact on the image of the acute geriatric unit. Moreover, the initiators pointed out that the green colour of the Be-Buzzie® poster was chosen, because of its association with energy and dynamism. The same line was continued within the acute geriatric unit. The Be-

Buzzie® exercises were hanged on the wall, the initiators of the Be-Buzzie® concept wore work clothes with the Be-Buzzie® logo, and the Be-Buzzie® logo was also retrieved on the Be-Buzzie® brochure. The interviewed patients did not spontaneously mention the lay-out, but liked the lay-out.

Regarding the effects on the patients, the initiators mentioned several positive effects. Physical exercise and training *an sich* can improve static and dynamic balance, limberness, muscular strength, the walk pattern, endurance and coordination. Furthermore, physical exercise is expected to increase self-confidence and reduce fear for falling among elderly people, and as a result immobility, passivity, isolation and loneliness among elderly people. Moreover, independence of elderly people is stimulated, which can have a positive impact on elderly people's quality of life. By giving elderly patients the opportunity to do exercises in the corridor of the acute geriatric unit, Be-Buzzie® makes patients aware of the importance of physical exercise, stimulates social contact among patients and between patients and employees, and enables learning by observing. Moreover, the Be-Buzzie® exercises and brochure stimulate elderly patients to do physical exercises at home. The interviewed patients confirmed that the Be-Buzzie® concept was an agreeable way of doing physical exercises, although they underlined the importance of having a good coach (*in casu* occupational and physiotherapists). A good coach was in this context defined as a severe coach, who helps patients to go one step further and work hard. The initiators, however, added that they would like to further investigate the effectiveness of Be-Buzzie®. As there are a lot of students on work placement within the acute geriatric unit, one of the possibilities is to conduct follow-up studies of patients to check whether Be-Buzzie® achieves its goals.

The initiators added that Be-Buzzie® also had an impact on the personnel of the acute geriatric unit. Firstly, the collaboration between occupational and physical therapists improved, as well as the collaboration between occupational and physical therapists and the personnel within the acute geriatric unit. Secondly, Be-Buzzie® changed the acute geriatric unit in a more dynamic and active environment and a more attractive working environment. This was confirmed by the other members of the acute geriatric unit.

Finally, all interviewed employees considered Be-Buzzie® as a durable project, as this project was well prepared and well embedded within the acute geriatric unit. Moreover, the Be-Buzzie® concept was considered as having potential to grow and evolve in the future.

3.2. "Dream, dare and do"

3.2.1. Newness of the initiative within the organization

'Dream, dare and do' is an innovative change process in the Social Service Department of Leuven, by which employees, residents, and managers are actively involved in the quality management process of the organization. Goal was to translate vague, resident-oriented values in very concrete points of attention and embed these points of attention in employees' way of thinking and working. Five waves could be derived in the process. In the first wave, the focus was on four values (in casu privacy, autonomy, dignity and safety). All employees received each two weeks a letter with one of the values, in which they were asked for concrete and feasible examples of how to concretize this value. All examples were categorized and pilot groups with frontline employees (*i.e.* employees that directly interact with clients) in the different Living and Care Centres of the Social Service Department

of Leuven were asked to select 'wish to' and 'have to' examples. Next, three points of attention per value were selected by the frontline employees and managers of the different Living and Care Centres and a training was organized to communicate these to all employees. Then, each Living and Care Centre selected one additional point of attention per value, resulting in a four-leave clover of points of attention. The results were presented for the management and Board of the organization and a calendar and posters with the twelve points of attention were made.

The second wave focused on four other values, namely participation, right of complaint, integration and freedom of choice. The same procedure was followed. Moreover, some supportive measures were introduced. Firstly, the points of attention became a fixed item on the agenda. Secondly, the points of attention were an item during the performance and evaluation interview. Thirdly, each year a refresher course was organized for new employees. Finally, the points of attention were enumerated in the information brochure for new residents. As a result, all employees and residents were well informed about the points of attention. During the third wave, the focus was on the perception of the residents. A satisfaction survey among residents was conducted in order to find out whether the points of attention were realized within the four Living and Care Centres. The results were used to continuously increase quality. Focus of the fourth wave was and is the further elaboration of a quality and documentation system (including brochures, procedures, etcetera).

The initiators underlined that the Living and Care Centres also paid attention to quality before the 'Dream, dare and do' project, but the way in which this was done was totally different. Where previous projects were rather top-down projects (*eg.* posters with the quality commands), this project is a bottom-up project (see below) and totally new core processes were needed. Therefore, this project could be considered as a breakthrough project, which initiated several derivative projects. At this moment, the initiators are thinking of using www.youtube.com to visualize the 'best practices' and procedures and of doing a survey among employees.

3.2.2. Organization-driven versus system-driven

The initiators of the project indicated that the arrival of a number of new executives in the organization created a new dynamic within the organization. As the new executives came from outside the organization, they saw the need for change within the organization. Moreover, dissatisfaction among the employees about the current situation facilitated the introduction of change within the organization. The new executives decided to introduce a new approach of quality management within the organization. The existing quality system met the legal requirements, but the support for the quality system was very weak. Therefore, there was opted for an open-ended and bottom-up approach by which all employees were involved (*i.e.* care personnel, administration, maintenance personnel, animation, and etcetera). Starting points were the resident-oriented values or the sector specific minimal quality requirement of the Quality Decree (such as privacy, dignity, autonomy, and etcetera), as a result of which this organization-driven project was embedded in a broader system-context.

3.2.3. Top-down versus bottom-up

As mentioned above, this project was a bottom-up project, as it strived towards a bottom-up interpretation of the Quality Decree and the sector-specific minimum quality requirements. The

manager of the organization – who had work experience in the socio-cultural training context – was a fervent adherent of a bottom-up approach. Via this approach, employees were obliged to think about quality, as a result of which learning was enabled and support for quality was created within the organization. All interviewed employees and managers agreed that the involvement of all actors within the organization was a critical success factor. Coordination of the project was guaranteed by the quality manager and a counselor, who voluntary participated in the beginning of the project and later on for remuneration. Important was that the political and administrative top of the Social Service Department of Leuven was enthusiastic about the project and the continuous, positive, open-ended, bottom-up approach. The approval of the political and administrative top was thus an important precondition to go ahead with the 'Dream, dare and do' project. Practical conditions are discussed in the next section.

3.2.4. Practical conditions

Involving *all* employees within the organization required a well thought-out approach. As mentioned above, the coordinators of the project (*in casu* the quality manager) decided to send each two week a letter to all employees, in which they were asked for concrete and feasible examples of how to concretize different values and more in particular personal 'best practices'. All interviewed employees confirmed that these continuous stimuli, which were both obligatory and anonymous, were an important precondition to get support for a new approach of quality within the organization.

Important was also to brief *all* employees about the project and communicate the results to all employees, so that employees felt involved and felt that their input was valuable. During different meetings, the 'Dream, dare and do' project was an item on the agenda and all information was available on the Intranet. The employees confirmed that the feedback was a kind of a reward for them. As the project evolved, a few enthusiastic employees were asked to participate in the pilot groups. All interviewed employees stressed the importance of involving employees of different departments and disciplines in the pilot groups, so that different perspectives were integrated and the information flow about the project was improved. Moreover, the participants of pilot groups encouraged their colleagues to do their best to improve the service quality.

The quality manager – who was very enthusiastic about the project – underlined the importance of a positive approach. Goal was to encourage the desired behaviour among employees instead of punishing undesired behaviour. Moreover, the initiators tried to create an agreeable atmosphere during the 'Dream, dare and do' meetings by providing some titbits at their own expense, as Social Service Department of Leuven was not allowed to buy these on the budget of the organization. Several pictures of the meetings illustrated the agreeable atmosphere during the meetings. The interviewed employees who participated in these meetings added that it was also nice to meet colleagues of other disciplines and departments.

Finally, the concretization of the values had to be adapted to the specific context of the different Living and Care Centres, so that each Living and Care Centre could preserve its individual character. The centre-specific points of attention were visualized in a four-leave clover. Moreover, visualization was achieved by the posters with the points of attention within the different Living and Care Centres. By means of the posters, employees and residents could draw someone's attention to the attention point.

3.2.5. Effects

During the interview, the quality manager showed the reactions of the employees to the letters. As several employees submitted more than one example, a thousand examples per question were received. The quality coordinator explained the high response rate by on the one hand the combination of anonymity and obligation and on the other hand the employees' professionalism and pride. The interviewed employees confirmed that the 'Dream, dare and do' project was an acknowledgement for their work. One of them stated *'you get the feeling that you can impart knowledge and experience to the organization'.* The enthusiasm even increased, once employees saw that their input was used. Both the formal and informal communication were dominated by the 'Dream, dare and do' project. According to the interviewed employees, only a few employees complained about the extra efforts that had to be done (*in casu* answering the letters), but even these employees' interest increased as the project made progress.

The employees involved in the pilot groups added that an important effect of the project was that they got insight into the opinion and concerns of colleagues in other departments and disciplines. They found out that all employees were somehow involved with the residents and did their best to meet residents' needs. Moreover, some employees involved in the pilot groups were asked to give a presentation for the Board, which was really appreciated by Board and personnel. The quality manager confirmed that the Board was surprised about the enthusiasm of the personnel. He even argued that the 'Dream, dare and do' project created more understanding among employees, which resulted in a better atmosphere. The head of nursing argued that the readiness for change also increased as a result of the 'Dream, dare and do' project.

All interviewed employees agreed that more attention was paid to the enumerated values. The values became a way of thinking and behaving. One of the employees explained that they, for instance, first ask themselves *'does this resident want to eat now or does he prefer to be waken up later?'*. In the beginning, some colleagues feared that taking residents' wishes into account would increase the pressure of work, but the opposite seemed to be true. The interviewed residents and family members of residents, which were not acquainted with the 'Dream, dare and do' project, admitted that all employees pay attention to the well-being of the residents. The satisfaction survey among residents – conducted by an independent trainee – also confirmed that the enumerated values were embedded in the employees' behavior.

An interview with a new employee in the organization revealed that the project is still alive today. The values were not only embedded in the way of thinking and working, colleagues also explained how to do work and referred to the posters. The quality working groups with representatives of all disciplines also contributed to the quality culture within the organization, although one of the interviewed employees admitted that not all departments were equally involved. As one of them said *'the enthusiasm of the participants of the working groups makes or breaks the 'Dream, dare and do' project'.* Durability of the 'Dream, dare and do', however, can only be guaranteed if the idea is kept to the fore.

Since the start of the innovative change process, the 'Dream, dare and do' project was presented at different conferences, among which the Flemish Quality Conference for Local Government in Courtrai, the Belgian Quality Conference for Government in Brussels and the European Quality Conference for Government in Paris. According to the quality coordinator, the reactions of colleagues and other

organizations were always very positive, which was demonstrated by several congratulation e-mails and requests for articles and presentations.

3.3. Family discussion group Dementia

3.3.1. Newness of the initiative within the organization

The Family discussion group Dementia in Living and Care Centre Het Booghuys in Leuven can be considered as a breakthrough project, as this service was non-existent in the past. Previously, attention was paid to supporting family members of their residents, but this was rather an informal form of support focussing on the residents' wellbeing (*eg.* speaking to family members who visit the organization). Furthermore, there was a yearly Family Council, where family members could give feedback about the organization. The Family discussion group Dementia, however, was organized at regular points in time and was more structurally embedded within the organization. The interviewed family members confirmed that there were a lot of initiatives for residents in Het Booghuys, but few initiatives for family members before the implementation of the Family discussion group Dementia. Since this initiative was implemented, family members and acquaintances of the residents with Dementia can participate in the discussion group – guided by the social worker – without obligations.

The poster of the initiative mentioned that the goal of the discussion groups was to give family members the chance to give feedback and ask questions that they do not dare, want or can ask during the daily contacts with the care providers. These questions and feedback would be used to better gear the services to the needs of the users and to create *'an endless, upward spiral of quality improvement'*. Interviews with the initiators, personnel and family members demonstrated that the Family discussion group Dementia was chiefly a forum, where family members could open their hearts to other family members. Family members namely experience similar questions, difficulties, and frustrations, but do not meet each other. They do not only visit different departments, but also visit the organization at different points in time. Via the Family discussion group Dementia, family members could meet and get to know each other.

3.3.2. Organization-driven versus system-driven

The Family discussion group Dementia is an organization-driven initiative, as this project was elaborated one and a half year ago in the context of an educational program of the social worker in Het Booghuys. As the social worker experienced that family members were often led in the cold, she decided to do a project for this target group. The manager of Het Booghuys confirmed that family members are often forgotten: they experience the illness from another perspective, which is often equally and sometimes even more painful. The manager added that this project fitted within the mission and vision of Het Booghuys, as they strive towards openness to questions and input of family members. The sector specific minimal quality requirement 'right of complaint and consideration', for instance, was interpreted as having attention for the opinion of less articulate customers.

Despite the organization-driven character of this initiative, the Family discussion group Dementia is also in line with some policy trends. In the Living and Care Decree, for instance, more attention is paid

to the people around the patient. The so-called Board of Residents was renamed as the Board of Users. Moreover, more attention is paid to Dementia at the policy level. Examples are the Discussion Cafes Dementia (among which Discussion Café Dementia Leuven), although the employees of Het Booghuys and the family members argued that these initiatives differ from the Family discussion group Dementia. Most important differences are that the Discussion Cafes Dementia mainly focus on transfer of information for a big group (eg. lectures, theatrical performances, and etcetera), while the Family discussion group Dementia focuses on family members' feelings and emotions. The Family discussion group Dementia is thus in line with a demand-oriented integration strategy. As the costs of this initiative are very low, this initiative does not hinder the strive towards rationalization.

3.3.3. Top-down versus bottom-up

As the idea for the Family discussion group Dementia came – as mentioned before – from the social worker, it can be assumed that this is a bottom-up initiative. Interviews with the employees and management of Het Booghuys demonstrated that everybody can bring in new ideas, but these ideas are evaluated on added value, practical and financial feasibility. Moreover, new ideas have to be in line with the mission and vision of Het Booghuys, which clearly states what Het Booghuys wants to achieve. The management of Het Booghuys steered the selection of ideas thus in what they considered as the right direction (*cf.* top-down approach). In the case of the Family discussion group Dementia, the social worker first had to demonstrate that there was need for an initiative for family members and subsequently had to ask the management's permission to implement the idea. The manager of Het Booghuys remarked that public organizations have to keep to the rules. On the one hand, these rules and regulations sharpen the creativity to mould regulations and rules to their will. On the other hand, the implementation of new ideas is hindered. The implementation of new ideas, for instance, sometimes requires the permission of different actors, which is not easy because of procedural, financial and technical reasons, and social and political sensitivities.

3.3.4. Practical conditions

Firstly, the initiators underlined the importance of making the initiative known among the family members. The announcements happened via brochures, the newsletter, as well as via the nurses in different departments and personal invitations. Important conditions are the attractiveness of the brochures, the degree to which nurses are well-informed about the initiative, and the degree to which the social worker has insight into who needs to be invited for the Family discussion group Dementia. The initiators mentioned that they strived towards playful brochures and posters, informed the employees via the head nurses and the Interdisciplinary Consultations, and conferred with the head nurses which family members had to receive a personal invitation.

Both the initiators and the interviewed family members underlined that the discussion groups may not be too large, so that family members do not feel inhibited. All family member have to get a chance to say what they think, feel or want. Therefore, a group of five to six family members was considered as an optimal group. Moreover, a small group creates intimacy, which is important as some memories and stories move family members to tears. Therefore, only one employee was present during the discussion groups, *in casu* the social worker. The social worker is expected to support the family members and help them to deal with Dementia. The interviewed employees were convinced that family members are more likely to speak freely with the social workers than with other employees, as

the social worker is not directly involved in the daily care provision. The interviewed family members, however, stressed the importance of having a guide, which is connected to the organization and knows the residents and employees.

In the beginning the social worker wanted to take charge of the Family discussion group, but after a while she experienced that she would better give the reins to the family members. The social worker concluded that her task is to give some input and information for the discussion, but the rest has to come from the family members themselves. The interviewed family members confirmed that the social worker was a very good listener and afterwards brought in her expertise. This non-pedantic approach was very much appreciated by the family members. Moreover, the family members considered the personality of the social worker and the degree to which the family members clicks with the social worker as a person as crucial success factors. One of the family members concluded: *'successful initiatives require the right people on the right place and this at all levels'*.

3.3.5. Effects

Regarding the attendance, the initiators stated that the first group was quite large with nineteen attendees, but with the lapse of time the group was reduced to five to six people. The social worker argued that the Family discussion group Dementia is attended by the same family members, even though a lot of invitations are sent for each of the discussion groups. Both the initiators and the family members agreed that the timing is decisive for the attendance. Working family members are excluded during the day and in the evening family members that do not like to come outside by night are excluded. One of the family members therefore suggested to organize several discussion groups or at least to conduct a survey among the family members to gain insight into their needs and preferences. The employees, however, argued that family members may not be pushed to participate. Some family members prefer to keep their feelings for themselves, which also has to be respected.

According to the initiators and family members, the Family discussion group Dementia fulfilled the expectations qua content. The social worker argued that family members speak freely about their feelings, emotions and experiences, they can laugh and cry, and they exchange tips and experiences. The family members confirmed that they exchange ideas and tips and experience support and intimacy. One of the family members even described the Family discussion group Dementia as a heaven of peace, where they can calm down, talk, and cry. Moreover, where they did not meet nor know each other, they received support from each other. The initiators confirmed that they sometimes spot family members in the cafeteria. Finally, the initiators mentioned that they try to take the ideas and suggestions of the family members into account, which was confirmed by the family members. An example was the New Year meeting, where family members could meet each other's family members.

Regarding the durability, the initiators believed that the project will remain as long as there's great demand. However, it is not inconceivable that family members' questions and needs will evolve over time. Therefore, the initiators and manager of Het Booghuys underlined the importance of continuously considering the relevance of the project, *in casu* whether this initiative is the best way to meet family members' needs.

3.4. Night care for the elderly

3.4.1. Newness of the initiative within the organization

Before the implementation of the night care project in Leuven, there existed yet two sit-in service organizations working with volunteers. However, these service organizations were not able to meet all demands, particularly demands of frail elderly. Several participating organizations in the night care project (the so-called 'partners') confirmed that frail elderly often unnecessarily ended up in a residential care organization, because the existing night care offer was inadequate. In the night care project, several night care forms are offered, namely night care provided by volunteers, night care provided by certified carers at home and night hotel for temporary care in a Living and Care Centre. At the sector level, the night care project can thus be considered as an addition to the existing night care offer by professional night care (*cf.* new services). The new night care offer was realized by a network of care organizations, by which a coordinator was appointed as contact person for both people in need of night care and care providers. People in need of care can request night care by telephone, e-mail or the website. Next, the coordinator goes visiting the people in need of care for an admission interview and contacts the partner to deliver the required form of night care. Besides the visiting, the coordinator also keeps a dossier and draws up schedules (*cf.* new processes). At the sector level, this project can be considered as a breakthrough project, as new services and processes were realized via collaboration between different care organizations. At the organizational level, this project also included an addition to the existing services and process changes for the professional organizations. For sit-in service organizations with volunteers, however, this project was rather a derivative project, as there were only some process changes.

3.4.2. Organization-driven versus system-driven

The night care project was a system-driven initiative. Firstly, there was a high degree of interaction with other organizations. The partners confirmed that individual organizations are not able to realize night care, as they cannot guarantee continuity. One of the participating residential organizations, for instance, argued that they were not able to continuously reserve a bed, especially as people are less likely to go to a residential care setting with a night care demand. Collaboration with other organizations was necessary to create a night care pool and realize continuity and a guarantee for care. Moreover, the collaboration between home care and residential care facilitated customers to choose the most appropriate night care form. Anyhow, organizations have nothing to lose by collaborations with other organizations in the context of an ageing society and a government focussing on the realization of local social policy (*cf.* decentralization strategy).

Secondly, the night care project is system-driven, as the night care network was inspired by other night care networks. About five years ago, for instance, a similar night care network was established in Antwerp. Moreover, there were contacts with other initiators of night care via the coordination consultations, which were set up by the Flemish Minister of Welfare, Public Health and Family.

Thirdly, the night care project is system-driven, because this project was in line with the policy strategies of both the Flemish and Federal Government. The Flemish and Federal Government namely financially supported care innovation projects that encourage collaboration among organizations. Moreover, the government strived towards continuity of care (*cf.* integration strategy) and the facilitation of

home care (*cf.* de-institutionalization strategy). It is unclear whether this initiative is in line with the rationalization strategy. Several partners argued that night care is an expensive form of care.

3.4.3. Top-down versus bottom-up

Several organizations received signals that there was need for night care: not only to answer frail elderly people's needs, but also to relieve the voluntary carers. According to the partners, both informal, personal contacts between organizations and the more formal Elderly Consultation Region Leuven were important facilitators for collaboration. Organizations in the Elderly Consultation Region Leuven regularly met and knew each other, as a result of which organizations could exchange information and find each other if they wanted to collaborate. The initiators were convinced that at a certain moment the whole sector was informed about the initiative and could participate. Therefore, the night care project can be considered as a bottom-up project. As the government encouraged this kind of initiatives, there was also a top-down stimulus. Finally, the executives of eighteen organizations formed a steering group. During the monthly steering group meetings, the idea was further elaborated, by which the organizations 'National Home Care' (Landelijke Thuiszorg) - a home care organization – took charge of the initiative. The application for funding of the Flemish Government was submitted by 'National Home Care', as home care was most important to realize the project and as the organizations 'National Home Care' was willing to accept the financial responsibility for the project if this initiative is going wrong. Several partners underlined the importance of having people with power of decision within the steering group. These people namely did not have to give feedback to their executives, which can slow down the process, and they had a better insight into the reaction of their Board of Management. One of the partners argued: *'if executives say they'll participate, they will'*.

3.4.4. Practical conditions

The elaboration and preparation of the night care project was very time-consuming. Firstly, there were different steering group meeting to further elaborate the idea and a lot of practicalities had to be arranged. The partners, for instance, decided that the volunteers would stay within the voluntary sit-in service organizations, while two professionals would be detached from their organization to the night care project. Further, an information technology system had to enable collaboration between detached professionals and volunteers (for instance regarding the exchange of information on schedules and dossiers). Next, a coordinator had to be appointed as contact person for both people in need of night care and care providers. Furthermore, a common brochure, a central phone number and a common website were launched. Finally, the initiators decided to establish a central invoice system. Partners invoiced to the coordinating organization 'National Home Care', which in turn sent an invoice to the client. As a result, clients monthly received an invoice including all care forms (voluntary versus professional). Once the coordinator received the money, the money is transferred to the involved care providers. At the moment, however, the volunteers are not yet called up, as their prices are higher than those of the professionals. In the near future, all prices will be fixed at 25 Euros per night, as this was laid down in the Living and Care Decree.

On the basis of the weight of care, specific agreements were made regarding tasks for volunteers and tasks for professionals, although it was argued that this distinction was often difficult to make. Moreover, the final choice is given to the client. Agreements were also made regarding the provision

of meal, but the prices of the meals were not made uniform. Each partner also had to make internal agreements. In the residential elderly care organizations, for instance, arrangements were made regarding the admission of clients into the organization.

Besides the enumerated arrangements, formal arrangements of the collaboration were also considered as important preconditions for a successful collaboration. The initiators were convinced that formal contracts discouraged a noncommittal attitude. Organizations were obliged to engage themselves for the project. Formalization also guaranteed that the organization and the Board of Management side with the project. Finally, a formal contract was expected to have an important symbolic value, as this visualized the collaboration. During the interviews, however, not all partners had yet signed the contract.

Furthermore, the partners stressed the importance of making the initiative known and keep making the initiative known, as this was the only way to inform the public about the night care forms in Leuven. Therefore, all partners distributed flyers among their clients and several organizations that addressed the potential target group were asked to spread information about the initiative. The General Practitioners were informed via the Medical Center of General Practitioners and the pharmacists via the Brabant Pharmacists Federation. The interviewed family members of a user of night care confirmed that the Social Service Department of Leuven informed them about the initiative.

Finally, a steering group was needed to follow up and evaluate the initiative. The frequency of meetings and the number of steering group members, however, could be reduced.

3.4.5. Effects

The night care project was started on the first of February 2009, but the initiators argued that the demands for all forms of night care exceeded the night care offer yet. As a result, the number of professionals will have to be increased. The initiators also found out that not only frail elderly are in need of night care, but also other target groups. These demands cannot be met in the context of this project, but all demands are recorded to eventually expand the project in the future. The interviewed family members of one of the night care users confirmed that there was certainly need for night care, as there was only one voluntary sit-in service organization in the region before the night care project was introduced. As a result, frail elderly people were obliged to go to a residential elderly care organization. In general, the interviewed family members were very satisfied about the project and especially about the professionalization. According to these family members, professionals are more trustworthy, as they have more expertise. Moreover, professionals are expected not to sleep, while volunteers are allowed to sleep. Only disadvantage of professionals is that work from 10 PM until 7 AM, which is considered as ‘starting quite late’ and ‘ending quite early’ by the family members. The coordinators argued that this inflexibility is due to the employment contracts.

According to the participating organizations for whom the night care service was new, the personnel within their organization was enthusiastic about the project and about twelve professionals were willing to have themselves detached. As mentioned before, two of these twelve professionals were selected. One of these organizations – a residential elderly care organization – argued that the initiative can create a new dynamic within an organization. One of the voluntary sit-in service organizations

– which were used to offer night care – stressed that their volunteers were less enthusiastic about another reduction in price. A few months ago, their prices were reduced and the price laid down in the Living and Care Decree enforces them to reduce their price a second time. Although money is not the most important motive for volunteers, two price reductions: that is too much of a good thing for the volunteers.

According to the initiators of the night care project, the successful start of the initiative encouraged organizations - that were previously rather reluctant to participate – to get in the project. Nevertheless, a number of organizations do not participate, because their Board of Management was against it. The initiators, however, underlined that the door is always open for new partners, because all help is welcome in the context of high needs for night care. According to the initiators, this night care project illustrates the increasing willingness for collaboration and networking in the care sector, by which clients take advantage and an optimal allocation of resources is achieved.

Regarding the durability of the initiative, all partners agreed that this project will succeed on the long term. A tricky problem, however, is the funding, as the organizations are not able to financially support the initiative themselves. Night care is quite expensive care and the price of 25 Euros per night is not cost-effective for Living and Care Centres. For the moment, the coordinating organization pays the difference for the Living and Care Centres (maximum ten times). Therefore, governmental funding is required. Possible forms of funding are a continuation of the funding of the Flemish Government or funding via Protocol 3 of the Federal Government, which goal is to structurally embed meaningful and successful projects. The night care projects stand a chance of Protocol 3 funding, as these projects are often cited as prototypical examples of Protocol 3 projects.

3.5. The Digital Bridge

3.5.1. Newness of the initiative within the organization

In August 2008, Living- and Care Center De Vijvers opened the Digital Bridge in the common room on the first floor, where five computers were put at the disposal of the residents and local residents. The former were allowed to use these continuously, while the latter could use them during specific opening hours. The Digital Bridge was also included on the list of activities of the animation and reactivation team, as a result of which residents and local residents could get assistance. Moreover, guidance is also provided by children of the local school and during the holidays by the children of the Pagadder - a youth organization of the Social Service Department of Ghent – through which this project can also be an intergenerational project.

The Digital Bridge can be considered as a platform project. Firstly, the computers in the common room were new, but this project did not appear out of nothingness. Before the Digital Bridge was installed, there were yet residents who asked (and were willing to pay) for computer and Internet within their room. Living- and Care Center De Vijvers responded to these demands in an *ad hoc* way. The Digital Bridge can be considered as a more systematic response to the demand for computers within the organization. Secondly, opening the Digital Bridge to local residents and children in the neighbourhood was the next step in striving towards integration of Living- and Care Center De Vijvers within the neighbourhood. Previous initiatives towards integration within the neighbourhood

were opening the restaurant to the public, contacts with the residents' association, and participation in local residents' association meetings, the community centre, the local welfare centre, and the senior citizens' council. Thirdly, the Digital Bridge built on existing collaborations with the Pagadder and the local school. Finally, new core processes were required within Living- and Care Center De Vijvers (such as teaching residents to use Internet and involving volunteers and children of the Pagadder as 'teachers'), but there were yet volunteers involved in the organization and contacts with children of the Pagadder.

The Digital Bridge idea (both service and process) was adopted from Living and Care Centre Het Heiveld. Both Living- and Care Center De Vijvers and Living- and Care Center Het Heiveld belong to the Social Service Department of Ghent. As Living- and Care Center Het Heiveld had already some experience, risks related to this change were largely reduced. From the perspective of the Social Service Department of Ghent, the Digital Bridge initiative was thus rather a derivative project.

3.5.2. Organization-driven versus system-driven

The Digital Bridge was introduced, as several residents were eager to learn and showed interest in new technology. Moreover, this project was expected to keep up and even broaden the social network of the residents, which were often confronted with limited mobility. On the one hand, the medium *an sich* provided communication opportunities to keep up and broaden the social network (e-mail, chatting, blogs, and etcetera). On the other hand, the Digital Bridge was situated within the common room of Living- and Care Center De Vijvers and open to the local residents, as a result of which residents, local residents, and children of the Pagadder and the neighbourhood could meet each other. As Living- and Care Center De Vijvers strived towards self-realization, empowerment of their residents, and integration within the neighbourhood, the Digital Bridge project was clearly embedded within the Living- and Care Center De Vijvers.

The Digital Bridge project was also embedded in the Social Service Department of Ghent. Firstly, the Digital Bridge addresses the gap between the ICT-rich and the ICT-poor in our society by introducing residents, children, and local residents in the technological world. This is in line with the Social Service Department's task to assure participation, empowerment, and a dignified existence for everyone. Secondly, the Digital Bridge is in line with the focus on intergenerational encounters in the Social Service Department of Ghent by bringing the residents and the children of the Pagadder together.

The Digital Bridge is thus embedded within Living- and Care Center De Vijvers and the Social Service Department of Ghent, but there is some evidence that the project is even embedded in a wider context. Firstly, the Digital Bridge is in line with the demand-oriented integration strategy, as this project tried to meet the needs of some of their residents. Secondly, the Digital Bridge project is in line with the rationalization strategy, as Living- and Care Center De Vijvers looked for own financial resources. Living- and Care Center De Vijvers got financial support from a non-governmental organization for high educated women, who try to improve the juridical position of women of all ages (Soroptimist International) and a provider of integrated telecommunication services (Belgacom). Thirdly, interaction with external actors and organizations was an important characteristic of the Digital Bridge. There were collaborations in terms of funding (Soroptimist International and Belgacom), but also collaborations with the Pagadder and volunteers to realize the initiative and collaborations with organizations in the neighbourhood (local residents' association, community centre, local welfare

centre, and etcetera) to promote the initiative. Moreover, the project addresses not only residents of Living- and Care Center De Vijvers, but also local residents, family members, visitors of Living- and Care Center De Vijvers and young people of the Pagadder, as a result of which the neighbourhood and the community are brought into the organization. Bringing the society within the organization can even be considered as a form of de-institutionalization. In brief, the Digital Bridge is system-driven as there is interaction with external actors and a clear fit with the existing policy strategies.

3.5.3. Top-down versus bottom-up

Living- and Care Center De Vijvers was demanding party to respond to the ICT needs among residents, but the first Digital Bridge note written in 2006 was an initiative of the Social Service Department of Ghent, which strongly encouraged ICT projects and intergenerational projects. Moreover, not all employees (among which the occupational therapists) were involved in the first steps of the elaboration of the initiative. The Digital Bridge is thus rather a top-down initiative. In time, the occupational therapists were also involved to further elaborate the initiative. They were, for instance, asked to give feedback about the location of the Digital Bridge. Once the Digital Bridge was implemented, feedback of different actors is used to continuously improve the initiative (*cf.* bottom-up).

The interviewed employees underlined that there was room for discussion and bottom-up initiatives within Living- and Care Center De Vijvers, as long as new ideas and initiatives were well-argued and innovative. According to the manager of Living- and Care Center De Vijvers, well-argued initiatives meet the following criteria: 1) responding to the needs of (potential) residents, 2) being in line with the mission and vision of Living- and Care Center De Vijvers and the Social Service Department of Ghent, and 3) practical, organizational and financial feasibility. The manager considered 'innovativeness' not as a criterion *an sich*, as new ideas and initiatives are anyhow innovative. The perception among employees that projects had to be innovative was explained by the manager as being the result of a few innovation awards in the recent past and the receptiveness for new initiatives in other care and partner organizations.

New initiatives did not only have to be approved by the management of the Living- and Care Center De Vijvers, but also by the Social Service Department of Ghent. Therefore, the manager of the Living- and Care Center underlined the importance of connecting initiatives to the mission and vision of the Social Service Department of Ghent. A smooth and rapid course required insight in the procedures and decision system of the bureaucratically organized Social Service Department. The manager of the Living- and Care Center, however, argued that the bureaucratic organization was not a barrier for innovation. Moreover, new initiatives were encouraged by an open-minded administration.

3.5.4. Practical conditions

The implementation of the Digital Bridge required material resources (*eg.* computers, desks, and etcetera). Several actors pointed out that this initiative was a new service for residents and thus not a reusing of scrapped computers of the organization. The initiators of the project underlined that this does not necessarily requires large budgets, but rather creative use of financial resources and sponsoring (*in casu* Soroptimist International and Belgacom). Continuous financial resources, however, were desirable to be able to install updates and invest in new material. Furthermore, the

initiators and occupational therapists stressed the importance of the location of the Digital Bridge. The location has to be accessible for residents and local residents while not disturbing for non-interested residents.

The volunteers let us know that continuous communication about the Digital Bridge within the organization is necessary, as there are regularly new residents. This task, however, had to be accomplished by the employees. The initiators confirmed that their goal is to present all activities within the organization to new residents, so that they can choose which activities best fit with their interests. As the computer was a totally new medium for the residents, they had to gain insight into how computers could mean for them. Guidance was thus needed to understand the link with their living environment and possible benefits, as the Digital Bridge is only successful for interested residents. Moreover, some residents had to overcome a lack of self-confidence and fear for the new medium. The presence of 'coaches' (*in casu* occupational therapists, volunteers and children) and thus human resources is thus required. Occupational therapists and volunteers underlined that these 'coaches' had to be able to give clear explanations, work step-by-step and uniformly, respond to residents' living environment and personal interests. As a result, the involvement of children as 'coaches' required guidance and support for the children. The coach of the Pagadder, however, argued that intergenerational projects are in a pioneering phase, as a result of which a trial-and-error approach had to be applied.

3.5.5. Effects

According to the initiators of the Digital Bridge, this project responded to current and future needs of the elderly, both regarding their inquisitiveness and interest in new technology and their need for social contact. Some of the residents, however, had to be convinced about the benefits of this totally new medium, although the manager of Living- and Care Center De Vijvers added *'the time of red nose activities in long-term care institutions is past'*. Moreover, the Digital Bridge also responded to the needs of the local residents, as it was accessible (both in time and in place). Because the Digital Bridge was installed in the common living room, however, local residents could not use the Digital Bridge when the elderly were eating.

The initiators mentioned that this initiative did not increase the employees' workload, as occupational therapists and volunteers are responsible for the Digital Bridge. Moreover, the Digital Bridge even enabled employees to use the computers during their breaks. The occupational therapists, however, pointed out that coaching residents is very labour intensive, as one-to-one coaching is required. Additional help from family members and volunteers made this task lighter, although communication with these actors is required to guarantee continuity (eg. unambiguous coaching and uniform procedures and explanations).

The occupational therapists, which were involved in guiding residents to use computer and Internet, argued that the Digital Bridge participants were really enthusiastic about the computers and the Internet and were impressed by its opportunities. They reached about eight residents. Some residents focused on word processing, but most residents preferred Internet. Favourites were earth.google.com, www.hotmail.com and www.seniorennet.be and even MSN Messenger. The volunteers argued that they had about three to six residents in each session, which were all very enthusiastic. The volunteers enumerated the same favourites as the occupational therapists and pointed out that

residents often exchange messages and photos with children and grandchildren. The volunteers added that most residents use the computer accompanied by a volunteer or an occupational therapist, but some residents are able to work independently. The Digital Bridge was also used by children and local residents. According to the occupational therapists, however, both groups seldom work together with the computers. The volunteers confirmed that the computers are sometimes occupied by young local residents, but added that these were not the prime target group.

The three interviewed residents confirmed their enthusiasm about the Digital Bridge. One resident argued that he was not always able to leave his wife (also a resident) alone, but the other two residents argued that they use the computers frequently and demonstrated their ability to work with the computer (*eg.* starting up and closing down the computer, checking e-mails, opening attached photos, and google information). However, the interviewed residents – even those with prior knowledge of computers – mentioned that working with the computers is not always easy. The son of one of the interviewed residents confirmed that residents sometimes forget the instructions and get confused if the volunteers or occupational therapists want to do too much. Nevertheless, it is considered as a good way to communicate with family members and an agreeable recreation form.

It can thus be concluded that the Digital Bridge achieved its goals, namely responding to residents' inquisiveness and keeping up and broadening their social network, although there are still some improvements to be made (such as installing Microsoft Office, a bigger screen). According to the initiators, the durability of the Digital Bridge can be guaranteed if the initiative is well embedded in the organization and if it is kept to the front.

4. Preconditions for innovation

4.1. Discrete versus permanent change

In all cases, the described initiative was not the only new initiative. All organizations could easily enumerate several other new initiatives within their organization. Moreover, introducing new initiatives and being creative was considered as important in most organizations. Remarkable was that both derivative projects and platform and breakthrough projects were changed and improved after their implementation. In several cases, the initiatives were at the basis of derivative projects. The initiators of the Be-Buzzie® concept, for instance, were thinking of a digital version of the Be-Buzzie® exercises. The Digital Bridge also worked on new projects, such as a blog with the residents and an interactive website with pictures of activities and events. Some organizations argued that continuous introduction of new initiatives also had some side effects. The time to follow up and consolidate new initiatives decreased – or as one of the organizations stated: *'we don't have time to stand still'*.

4.2. Low versus high variety

The development of new ideas was in all organizations considered as a responsibility for everyone, regardless of discipline and function. In one of the organizations, creativity was even one of the established competences to evaluate applicants for a function within the organization. All employees - from maintenance staff to management – were encouraged to bring in new ideas. New ideas were thus introduced by both the basis (bottom-up) and the top (top-down). Some interviewed people, however, underlined that not all employees were equally creative and willing to bring in new ideas. The initiatives, however, illustrated that creativity is not a pure individual characteristic. Individuals are embedded in a social context, as a result of which ideas can be generated. Needs and feedback of elderly people and their family members, for instance, were often at the basis of new ideas of the employees, as a lot of the employees were regularly in contact with elderly people and their family members. Moreover, the idea of the Family discussion group Dementia arose when the social worker had to implement a new idea in the context of an educational program and the Be-Buzzie® concept and the 'Dream, dare, and do' project were the result of the initiators' working experience in respectively a nursing home and a socio-cultural training organization. Furthermore, the introduction of bottom-up initiatives was preceded by brainstorming and discussion, although there were differences regarding the degree to which the brainstorming and discussion was formalized. Some organizations had regular meetings during which new initiatives were discussed, while other organizations discussed new initiatives mainly informally. There was less brainstorming regarding obligatory top-down initiatives, although one of the executives remarked that brainstorming did occur, but at the top level. The most fruitful brainstorming and discussions at all levels were – according to two organizations – found in multidisciplinary meetings.

Each of the organizations was characterized by a high degree of participation in external networks. The initiators of the initiatives underlined that participation in external networks was even encouraged within their organization. Reasons for participation in external networks were the creation of care continuity for the patients, training and education, and information exchange. One organization considered participation in associations in the neighbourhood as important for the integration of their organization within the neighbourhood. The participation in external networks was even reflected

in all of the described innovative initiatives. In the night care for the elderly project, the external network was the project's origin. The same goes for the Family discussion group Dementia, as the participation of the social worker in an educational program outside the organization was the starting point of the initiative. In the Digital Bridge project, the external network with the Pagadder, volunteers, a non-governmental organization, and a telecommunication company guaranteed the implementation of the idea by providing human, material and financial resources. In the Be-Buzzie® concept, the organizations in their external network were considered as a potential target group to implement the Be-Buzzie® concept. All organizations (except for one organisation) were convinced that communication to the outside world (*i.e.* marketing of the organization and its initiatives) had to be improved. By going public, best practices can be shared and clients get a better insight into the care provision.

All organizations were thus characterized by a high degree of variety, as there were a lot of input channels, a high degree of brainstorming, and participation in several networks.

4.3. Low versus high reactivity

According to all interviewed initiators, managers and employees, the ideas, desires and needs of all employees within the organization were taken into account as much as possible. Ideas were communicated in a formal way (via meetings or suggestion boxes) or in an informal way. Informal communication was even found between employees and managers, which was the result of the managers' accessibility (both literally and figurative). Literal accessibility referred then to the location of the manager's office and figurative accessibility to the openness of the manager. Most managers and initiators considered the employees within their organization as open for change, although this change could be preceded by resistance. Resistance, however, was not considered as negative, but rather an indication of the importance of communication, and more in particular well-arguing and giving employees a chance to give feedback. Face-to-face communication was considered as most appropriate, but some messages and decisions could not be communicated informally, as the group was too large. In these cases, there were mails to all, although this was not considered as an optimal communication channel. Communication with the umbrella organization or the Board of Management was mainly formal and indirect, as a result of which there was little interaction. Only one organization argued that their Board was very accessible. Remarkable was that several organizations were not convinced that more communication is better. Two organizations even stated that their team members understood each other very well, as a result of which little communication was needed. One organization stated that 'information overload' arises if there is too much communication. Another organization argued that too much communication results in inefficiency.

Regarding the reactivity of the described organizations, a high level of reactivity can be derived, mainly because a lot of formal and informal communication was present in all organizations. However, not the quantity but the quality of the communication does matter.

4.4. Low versus high self-organized emergence

Most of the interviewed people underlined the importance of a bottom-up approach. In none of the cases, however, new initiatives could be implemented without the approval of the management of the team for innovations at the team level or the approval of the management and the Board of the organization for innovations at the organizational level. The approval was based on a few criteria, which is in line with the idea of order-generating rules. Remarkable was that these criteria were quite similar. All organizations namely mentioned added value for the patient and feasibility (both practical and financial), as all organizations were confronted with human, time, material, financial and even policy constraints. Other criteria were the support within the team or organization and the fit with the mission and vision of the organization. As a result of these criteria or order-generating rules, there were a lot of internal feedback loops within most organizations before an idea was approved.

Regarding the implementation and integration of new initiatives, several organizations argued that top-down changes were often accompanied by resistance. According to the interviewed initiators and managers, organizations can deal with this resistance by well-arguing initiatives, entering into consideration with employees and by serving as an example for others. Bottom-up changes were less likely to be accompanied by resistance, although it was also considered as important to integrate initiatives in a thoughtful way. Here again, it was considered as important to well argue initiatives and enter into consideration with different actors (whether or not in a structured and step-by-step way). In one organization, the initiators and management mentioned that simplicity also was an important success factor for the implementation of new initiatives.

Besides the human aspect of the implementation and integration of new initiatives, the interviewed initiators and managers added that the existing procedures, regulations and laws are restrictive factors in the implementation and integration process. Important decisions during the implementation process, for instance, sometimes required an extra approval, which slowed down the implementation process. Two organizations mentioned that the Law on Government Assignments is also limiting the implementation process, as this law restrains organizations regarding what and by whom they make purchases. Regulations did not only slow down the integration of new initiatives, but also restricted the possibilities. In the meanwhile, a few interviewed people argued that these regulations can also sharpen the creativity to mould regulations and rules to the organization's will.

The integration of an initiative within the organization was by all initiators considered as a precondition for durability. Several interviewed initiators, employees and managers, however, added that the initiatives had to be kept alive by communicating about the initiative. Not only internal communication was important, but also external communication. Moreover, several initiators agreed that attention had to be paid to the follow-up and evaluation of initiatives. Not only to improve the initiative, but also to find out whether the initiative is still responding to the demands and needs of the target group. Concrete examples of follow-up and evaluation initiatives were data gathering about the use or attendance of initiatives, satisfaction surveys among residents, and studies to test the effectiveness of the project.

In brief, there is some form of self-organizing emergence in the different organizations, but the process of mutually adjusting behaviour to changes in the internal and external environment was restrained by top-down forces, procedures and regulations.

4.5. Conclusion

The organizations of the five innovative initiatives were characterized by permanent, continuous change, a high degree of variety and reactivity and a medium degree of self-organizing emergence. We can conclude that these organizations partially act as complex adaptive systems. More in particular, there was a considerable potential for new idea generation within all organizations, as these consisted of a collection of individual agents, who were interconnected and changed each others' context (*cf.* variety). Communication and feedback loops demonstrated that the organizations were aware of this potential (*cf.* reactivity). The agents, however, were not always able to totally adjust their behaviour to cope with internal and external demands (*cf.* self-organized emergence), because of order-generating rules, top-down forces, procedures and regulations. The organizations of the five innovative initiatives were thus situated between disintegration (total chaos) and ossification (total stability), which is also referred to as 'the edge of chaos'. As a result, the edge of chaos model can thus be considered as a feasible framework for explaining adaptive (and thus innovative) behaviour. Therefore, this framework will be at the basis of the managerial and policy recommendations.

PART VI
MANAGERIAL RECOMMENDATIONS

According to Burnes (2005), there is a broad agreement among and between academics and practitioners that the ability to manage change and innovation is a core organizational competence. Nevertheless, many studies reporting high failure rates (Burnes, 2005). As a result, the 'best practices' in the elderly care sector are particularly interesting. The empirical results have shown that 'best practices' in the elderly care sector act as complex adaptive systems at the edge of chaos, as there is a lot of variety, reactivity and some self-organized emergence. Central question in this part is how elderly care organizations in general can increase variety, reactivity and self-organized emergence within their organization and thus how complexity-based change and innovation can be introduced in elderly care organizations. Based on the insights of the CAS theory, a few managerial recommendations will be formulated.

1. Use the butterfly effect

The first recommendation comes from McMillan (2007) and is *'think about all the people in the organization and the impact they can make if they all make small improvements'* (p. 183). This quote points out that small changes at the micro level can be very powerful and require very little in terms of resources. Tan et al. (2005) confirm that small initial perturbation in healthcare organizations can lead to significant changes within the overall system (i.e. the butterfly effect). Therefore, the organization's management need to respect all individuals within the organization, encourage them to make improvements in their working practices and suggest ideas for more improvements. Moreover, supervisors have to give support to implement promising new ideas (McMillan, 2007). Good examples of using the butterfly effect were the Be-Buzzie® concept and the Family discussion group Dementia discussed in Part V, as these initiatives were initiated by individuals within the organization.

2. Focus on gaps and bridging

The second recommendation is to focus on gaps between today's reality and visions of the future. Goal is to bridge the gap between today's reality and the vision of the future by developing and implementing new initiatives (McMillan, 2007). The focus on bridging gaps was illustrated by the focus on challenges in the ageing society in almost all innovative initiatives in and outside Flanders (see Part IV and V). Kotter (2008) adds the importance of creating a sense of urgency regarding the gaps. As urgency is hindered by missing important information and mistaking energy and activity for real urgency, methods to increase urgency are not only to behave urgent everyday and to find opportunities in crisis, but also to listen to frontline employees, bring the outside in, send talented employees out, and deal with resistance for change. These methods will be discussed in the next sections.

3. Listening to people

The third recommendation is to listen to people. According to Kotter (2008), frontline employees possess vital information, as they know what's going on within the organization. McMillan (2007) underlined the importance of bringing a mix of employees from all categories, levels and areas together. This can be achieved by, for instance, organizing consultation or participation workshops. Workshops encourage employees to exchange information and ideas and learn from each other, which creates fast flows of information, keeps energy and ideas flowing, and disturbs the *status quo* within the organization. Listening to people is also important to discover talent within the organization and to tap into energies and interests of people. Tapping into people's energy and interests can also be achieved by encouraging them to come forward at meetings, workshops and events, so that other employees also can listen to them. Best is to ensure that senior team or departmental managers attend these meetings, workshop and events to listen to ideas and suggestions of everyone (McMillan, 2007). By taking everyone's energy and interests into account, resistance to change can also diminished (Kotter, 2008). Good example of listening to people were the Future Workshops described in Part IV and the Dream, Dare and Do project described in Part V.

4. Bringing the outside in

Innovation and new thinking as well as discussion and debate can be encouraged by bringing the outside in, which is a fourth recommendation. McMillan (2007), for instance, suggests *'expose everyone to a strong flow of information and ideas from other organizations – even other sectors'*. Plsek and Wilson (2001) confirm that systems have to be created to disseminate information about best practices, so that other can adapt those practices in ways that are most meaningful to them. Concrete examples are 1) encouraging employees to do courses and receive trainings, where they meet other people and learn new skills, 2) inviting speakers from other organizations and sectors to speak to groups of employees, 3) internal secondment scheme, so that *'employees can move around the organization gaining a global perspective, learning new skills and deriving new insights'* (p. 183), 4) arranging opportunities to meet people from other areas of the organization and other organizations to talk to everyone about their role and experiences, and 5) setting up schemes whereby employees visit other organizations or even do a spell of voluntary work (McMillan, 2007). Researchers and governmental actors outside Flanders enumerated several examples of initiatives to help organizations to bring the outside in, such as the Care Home Learning Network, GENERO and Care for the Better (see Part IV). In Flanders, most of the described initiatives were the result of bringing the outside in via listening to customers, education and trainings, and observation of other initiatives (whether or not in the elderly care sector). Finally, a lot of initiatives in and outside Flanders bring the outside in by developing initiatives in line with the policy strategies within their country (see Part IV and V).

5. Let go command and control

Dominant management and leadership theories believe that human organizations – and more in particular business systems – must be controlled and managed like machines. According to Liang (2007), however, *'human beings do not function like machine parts (…) and human organizations are not totally machine-like systems either'* (p. 112). Therefore, the fifth recommendation is that managers need to let go command and control and look for new management and leadership styles. Tan et al. (2005), for instance, argue that complex healthcare and services delivery systems cannot be entirely controlled, but guidance is possible. Leaders in a CAS need to recognize that change occurs naturally within the system and that individuals participate for a variety of reasons. Respecting the patterns reflected in the past innovation efforts is crucial to quickly spread good practices within the healthcare system (Tan et al. 2003). Furthermore, leaders need to pay attention to the cultivation of an environment of listening to people, the improvement of relationships and the creation of small non-threatening changes stimulating creative thinking (Holden, 2005). Most important, however, is to encourage self-organization, which will be discussed in the next section.

6. Encourage self-organization

The sixth recommendation is to encourage self-organization, as this facilitates better outcomes. According to Burnes (2005), for instance, self-organization allows different agents within an organization to respond to environmental changes in a timely and appropriate manner. Managers can influence the self-organization process by recognizing self-organization as a property of all social systems (Anderson, Issel & McDaniel, 2003). As self-organization is characterized by the absence of an inside or outside agency responsible for the emerging behaviour, CASs do not fit with goals, plans, strategies and agreements (Paley, 2007). Tan et al. (2005) confirm that controlling the long-term future by planning, forecasting and controlling the evolution of elderly care systems is impossible. Only small changes can be managed, monitored and researched (*cf.* butterfly effect). Moreover, detailed guidelines and standards fail to take advantage of the natural creativity embedded in the organisation and ignore the inevitable unpredictability of events (Plsek & Wilson, 2001). As a result, a new way of thinking needs to be introduced.

Stacey (2007) suggests encouraging self-organizing groups that have to discover their own challenges, goals, and objectives. Managers' role is to create an atmosphere in which this can happen by presenting ambiguous challenges instead of clear long-term objectives or visions. According to McMillan (2007), however, managers can create self-organizing project teams by asking people from different areas of the organization to volunteer to work on specific short-term projects that involve making changes. Important is to be very clear about the aims and specifics of the project. By doing these projects, people share learning experiences and a co-learning community is created and group adaptation and self-organization are encouraged.

Henriksen, Selander and Rosenqvist (2003) argue that development and innovation can be encouraged by a wide space for innovation, adequate visions, and simple rules. Several authors confirm that simple rules are needed to prevent organizations from too much instability or chaos. Plsek and Wilson (2001), for instance, underline the importance of simple and flexible rules, which are referred to as 'minimum specifications', and Burnes (2005) stresses the importance of 'order-generating rules'.

These minimum specifications or order-generating rules provide 1) direction pointing, 2) boundaries, 3) resources, and 4) permissions. By these four factors, order-generating rules enable the creation of an environment in which innovative and complex behaviours and shared action can emerge. As a result, minimum specifications or order-generating rules are thus a precondition for creativity and innovation (Plesk & Wilson, 2001). According to Burnes (2005), order-generating rules even have the potential to overcome the limitations of rational, linear, top-down approaches to change. Nevertheless, they are not perfect and will change over time, as these specifications are the product of organizational dialogue (Plsek & Wilson, 2001).

The combination of encouraging self-organization and applying minimum-specification or order-generating rules is concretized in all Flemish cases described in Part V.

7. Provide the 'right environment'

According to McMillan (2007) *'self-organizing change processes will not emerge and flourish unless the right environment is provided'* (p. 186). Providing the 'right environment' is the seventh recommendation. Such an environment includes skilled and trusted facilitators, who are able to support self-organizing teams (eg. by building group confidence and cohesion and by enabling democratic decision making). Furthermore, the 'right environment' has to be a *'safe organizational space for experimentation and learning'*, as people will not engage in self-organizing project teams where they are blamed if things go wrong. As a result, the role of humour and fun cannot be underestimated. Finally, it is important to encourage *'equality of participation so that everyone's voice is heard and everyone's contribution is valued'* (McMillan, 2007, p. 186). Everyone's contribution namely can lead to a butterfly effect.

8. The Edge of Chaos Assessment Model

Managers who want to reflect or discuss about their management style or performance and find out whether their organization, department or employees are acting as CASs at the edge of chaos are recommended to use the Edge of Chaos Assessment Model of McMillan (2007). This model confronts CAS characteristics with characteristics of total stability (*cf.* mechanic world view) and chaos (*cf.* chaos theory). The Edge of Chaos Assessment Model for individuals and organizations is presented in respectively Figure 6 and Figure 7.

Figure 6. Edge of chaos assessment model – individual (adapted from McMillan, 2007).

Totally stable No novelty	Stable aspects	Behaving as a CAS	Chaotic aspects	Chaotic Too much novelty
Ultimate couch potato		Moving around, active exploring		Ultimate headless chicken
No real learning	Single-loop learning	Engaged in single- and double-loop learning. Sense making and reflection		No sense making
Inadequately connected to environments, data flow lacks energy or real value		Well connected to all environments, internal and external, with a steady flow of reliable and useful data		Over connected and over whelmed with data of variable quality
Life too structure, too rigid and inflexible		Flexible structures and strong guiding frameworks		No reliable structures or guiding frameworks
Is a slave to routine, rigidly bound by own set of values whatever the circumstances		Has flexible routines for working and social/family life. Clear values and guiding principles for living		Has no routines. Values and guiding principles subject to sudden changes. Like a rudderless ship in a storm
Stuck in the past. Repeating past behaviours to the detriment of the present and the future		Values in the past, envisions the future, lives in the present		Obsessed with the future to the detriment of the present

EDGE OF CHAOS

Lack of interest in living – little or no discernible life force

Healthy, active, fulfilled individual

Highly stressed, breakdown (mental/physical/emotional) seems inevitable

Figure 7. Edge of chaos assessment model – organization (adapted from McMillan, 2007).

Totally stable **No novelty**	**Stable aspects** **Little novelty**	**Behaving as a CAS**	**Chaotic aspects** **Lots of novelty**	**Chaotic** **Too much novelty**
Tight, rigid management control		Management by self-organizing principles, shared processes		No co-ordination or organization. Management confused and without coherence
Change can be organized but does not occur		Constantly changing and adapting as needed		Change cannot be co-ordinated
Totally inflexible and unresponsive structure and frameworks	Inflexible and largely unresponsive structure and frameworks	Flexible, responsive structure with supportive frameworks	Insufficient structure or frameworks	No discernible structure or frameworks
Inadequately connected to all parts of the system. Little or no flow of relevant, clear and useful information, often inaccurate and untimely	Adequately connected but information flow is spasmodic, often of poor quality, often not relevant or difficult to understand	Well connected to all necessary parts of the system/ Flow of relevant, good quality, important, information that is useful, timely and readily manageable	Over connected to all parts of the system and receiving an overload of information (some relevant and some irrelevant). Struggling to handle it	Highly overly connected to all parts of the systems and receiving overwhelming overload of information relevant and irrelevant – it is impossible to handle and make sense of this
Decisions deferred and delayed to serious detriment of system	Decision making slow and cumbersome and sometimes too late	Able to make effective, timely decisions using information flow and contacts	Decisions are rarely made on a well-informed basis, of poor quality, fudged or not taken at all	Decision making chaotic and to detriment of system
Single-loop learning only static mental models		Lots of double-loop learning ad single-loop learning too		Double-loop learning but disconnected from reality and frantic. No sense making
Trapped in the past to the detriment of the present and the future		Aware of the past and future possibilities		Obsessed with the future to the detriment of the present

EDGE OF CHAOS

Ossification certain — ossification likely — high survival chances — disintegration likely — disintegration inevitable

9. Conclusion

In this part, several recommendations were enumerated in order to increase variety, reactivity and self-organized emergence within elderly care organizations without ending up in chaos. Important to notice is that managing organizations does not get easier by implementing these recommendations. The role of managers appeared to be more rather than less important in complex adaptive systems (Burnes, 2005). Managers do not only have to understand the insights of the CAS theory, they also have to be able to facilitate variety, reactivity, and self-organization. As a result, Arndt and Bigelow (2000) pointed out that complexity theories led to consternation as well as delight in the health care sector. Moreover, not only the elderly care organizations have to balance between stability and chaos, the same goes for the elderly care sector as whole. This will be discussed in the next part.

PART VII
POLICY RECOMMENDATIONS

As suggested in the previous part, not only the elderly care organizations have to seek to exist at the edge of chaos, the elderly care sector as a whole and governmental actors in particular also need to respect this principle and facilitate a good balance between stability and chaos. In this part, some policy strategies to encourage elderly care organizations to exist at the edge of chaos will be discussed.

1. Butterfly strategy

The first recommendation is to think about all organizations in the sector and their impact on society if they all make small improvement and thus to use the butterfly effect at the sector level. Therefore, governmental actors have to get tuned in to initiatives within different elderly care organizations, which brings us to a second recommendation. The second recommendation is to listen to different actors in the elderly care sector. Visiting these initiatives and giving elderly care actors a chance to give input, take part in debates, and participate in the decision making process can help to put this recommendation into practice.

2. Exchange strategy

Governmental actors, however, have to go a step further and facilitate information exchange and feedback loops among different elderly care actors, which is a third recommendation. Examples are bringing elderly care organizations together to discuss their working, and giving elderly care organizations a forum to present and comment on new initiatives and ideas. More concrete examples and guidelines (such as guidelines regarding coaching, participants, and etcetera) can be retrieved in the descriptions of The Care Home Learning Network, GENERO and Care for the Better (see Part IV). Out-of-the box thinking, however, is equally important. As a result, governmental actors can supply information about ‘best practices’ in other sectors and encourage organizations to exchange information with organizations and actors in other sectors. Moreover, the same holds for developing policy strategies as well. The Social City program (see Part IV), for instance, demonstrated that information exchange and collaborations among different ministries can result in innovative initiatives.

3. Soft landing strategy

As mentioned in some of the information exchange and feedback stimulating initiatives in Part IV and V, a fourth recommendation is to avoid a ‘knowing-doing gap’. Pfeffer and Sutton (1999) argue that the main reasons why organizations fail to turn knowledge into action are 1) too much focus on planning, 2) a lack of trying different things and experimentation, and 3) fear for failure. An exchange strategy has thus to be combined with a ‘soft landing’ strategy, by which experimenting and risk-taking organizations are provided a ‘soft landing’ if things go wrong. A ‘soft landing’ means thus that failure and error are not punished by the government. Moreover, trial and error have to be encouraged as long as organizations learn from their mistakes.

4. Self-organization strategy

Policy actors do not only have to allow trial and error, but also have to enable organizations to respond in a timely and appropriate manner to environmental changes (*eg.* Burnes, 2005). As discussed before, environmental changes include needs of elderly people and their environment and actions of other elderly care organizations, as well as political, juridical, economic, socio-cultural, technological and ecological influences. The survey and the interviews outside and in Flanders, however, illustrated that laws, regulations and procedures sometimes decrease organizations' adaptability. Therefore, our fifth recommendation for governmental actors is to take a close look at the existing laws, regulations, and procedures and evaluate their impact on the organizations' adaptability. Only simple rules encourage organizations to act as CASs at the edge of chaos.

5. Framing strategy

The butterfly, exchange, soft landing and self-organization strategy seem to imply that the role of the governmental actors is restricted to facilitator of variety, reactivity, and self-organized emergence. Too much instability (the so-called explosive stability), however, has to be avoided, as a result of which governmental actors also have a framing role. A framing role implies that governmental actors develop an order-generating framework for elderly care organizations, just as managers were advised to develop an order-generating framework for the management of their organization. In the elderly care sector, order-generating frameworks can refer to the challenges in the ageing society. In this research report, the three main challenges were described, but it is not inconceivable that these challenges or at least their interpretation will change over time. Finally, governmental actors need to frame that elderly care is only one aspect of ageing. Ageing, however, also increases wisdom and experience within our society, which are very valuable resources (Schoenmaekers & Breda, 2004).

6. Conclusion

In sum, acting in line with the principles of the CAS theory does not reduce the role of the government, but rather updates their role. A few strategies were formulated to fulfil their role. Although these strategies were formulated in an imperative mood, these strategies can be considered as suggestions. We only encourage reflection and experimentation with the enumerated strategies, and repeat 'no trial without error'…

PART VIII
CONCLUSION AND DISCUSSION

This research report can be considered as a way to disseminate 'best practices' in the domain of elderly care innovation in and outside Flanders. As a result, this report is a first step towards exchange of information and 'best practices' in the elderly care sector. Moreover, this research report also provides insight in the preconditions of innovation in the elderly care sector. As the literature review, survey and case study results demonstrated that the CAS theory – and the edge of chaos model in particular – can be considered as a feasible framework for explaining adaptive (and thus innovative) behaviour within elderly care organizations, we formulated several managerial and policy recommendation on the basis of these insights.

Additional case studies in and outside Flanders, however, are needed to further underpin the insights of the CAS theory and the edge of chaos model. A new edition of the innovation contest in Flanders and case studies in the organizations of the enumerated initiatives outside Flanders certainly have the potential to provide more insight in the generalization of the CAS theory and the edge of chaos model in and outside Flanders. Moreover, future research has to find out whether the CAS theory and the edge of chaos model also explain non-innovative behaviour, as the current research only focused on 'best practices'.

In sum, this research report aims to stimulate elderly care actors to reflect about traditional innovation and change ideas and experiment on the basis of the new insights within this report. The challenge is to move away from too much stability without ending up in total chaos and thus to find the edge of chaos...

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Appendix A: overview of the challenges in the ageing society

	WHO	OECD	EC
Increasing demands	Increasing demands for supportive services and programmes for older persons and their family caregivers (WHO, 2000)	Increasing demands for elderly care and especially long-term care (OECD, 2005)	Growing demand for health and care services (EC, 2002)
		Ensuring access to care (OECD, 2005)	Ensuring access to care (EC, 1999;2004)
Changing demands	Increased risk of disability or chronic disease (WHO, 2002) + preventing and managing age-associated chronic diseases (WHO, 2007)		More serious and more chronic nature of age-related diseases (EC, 2001)
	In older age, the risk of falls increases and consequences of injuries are far more serious (WHO, 2007)		
	Maximize the health and functional capacity of older people and their social participation and security (WHO, n.d.)		Idem (EC, 1999)
	Developing age-friendly services and settings (WHO, 2007)	Enhancing patient orientation (OECD, 2005)	
	Maintaining autonomy and independence, quality of life and healthy life expectancy (WHO, 2002)	Improving quality (OECD, 2005)	Idem (EC, 1999) and high-quality services (EC, 2002) Elderly people expect ever better quality and efficiency as a result of better circumstances of life (EC, 2001)
	New paradigm: older people are active participants in an age-integrated society and as active contributors as well as beneficiaries of development (WHO, 2002)		Idem (EC, 2002)
	Poverty in old age (WHO, 2007)		Idem (EC, 2002)
	Changing family and work patterns (WHO, 2000)	Decreasing workforce (labour discourse and less informal caregivers (OECD, 2005)	
	Feminization of ageing (significantly more women) (WHO, 2002)		Idem (EC, 2002)

Personnel challenges	Training for health professionals on old-age care (WHO, 2007)	Staff qualitifications (OECD, 2005)	Ensure high level of training (EC, 2004)
	In general, training for health professionals includes little if any instruction about care for the elderly. However, they will increasingly spend time caring for this section of the population. WHO maintains that all health providers should be trained on ageing issues, regardless of their specialism (WHO, 2007)	Staff shortage, as a result of early retirement and high turn-over due to difficult working conditions (OECD, 2005)	Need for human resources, as elderly care is labour-intensive and requires skilled manpower (EC, 2001)
Financial sustainability	Striking a balance among support for self-care, informal support and formal care (most countries allot their financial resources on institutional care, although most care is provided by self-care or informal care (WHO, 2002)	Overlap in the elderly care sector results in inefficient use of resources (OECD, 2005)	Ensuring financial sustainability and cost-effectiveness (EC, 2002, 2004)
	Policy makers fear that rapid population ageing will lead to an unmanageable explosion in health care and social security costs BUT according to OECD data increasing costs are caused by inefficiency and ineffectiveness in care delivery and by the focus on formal and curative care instead of informal and preventive care (WHO, 2002)	Promoting value from money (OECD, 2005)	
	Rising healthcare costs (WHO, 2000)	Growing costs for long-term care (OECD, 2005)	Healthcare expenditures increases sharply after the age of 65 and even more sharply after the age of 80 (EC, 2001)
	Designing sustainable policies on long-term care (WHO, 2007)	Maintaining financial sustainability (OECD, 2005) Guaranteeing affordable care (OECD, 2005)	

2. Appendix B: survey

INNOVATION IN THE ELDERLY CARE SECTOR

This questionnaire is sent to research teams and governmental actors, who are focussing on elderly care provision (such as long-term care, home care, and etcetera) and innovation in the elderly care sector.

Goal of this questionnaire is to explore the attitude towards innovation within the elderly care sector within different countries and to make an inventory of innovative initiatives within different countries.

The questionnaire consists of
- 3 general questions regarding attitude towards innovation in the elderly care sector (question 1 to 3)
- 1 question regarding concrete examples of innovation in the elderly care sector within your country (question 4)

Please send the completed questionnaire back to katrien.verleye@vlerick.be

Thank you for filling out this questionnaire!

Name of your department/research team: .....

Your function and (research) focus: .....

What does innovation mean in the elderly care sector?

What is the added value of innovation in the elderly care sector?

What are the preconditions for innovation in the elderly care sector?

Can you give at least 3 concrete examples of innovative initiatives in the elderly care sector within your country?

Please fill in the tables below and **copy the table**
if you want to add more examples of innovative initiatives

EXAMPLE 1	
Short description of the initiative	
Link to website or interesting references	
To which aspects of the organization does this initiative refer? technological innovation innovative services and care forms innovative work design innovative personnel management structural innovation …	
Why was this initiative introduced?	
Which attributes are expected or which were the attributes?	
To what extent is this initiative worked out within the organization? - At the moment, this idea is not yet developed. - This idea is currently put into practice. - This initiative is implemented for some time now. - This initiative was implemented and evaluated. …	
Why is this initiative innovative?	
What are the preconditions to make this initiative successful within other elderly care organizations or countries?	

3. Appendix C: expert panel 24 October 2008

3.1. Experts

- Agnes Bode (Vlaamse Vereniging van Diensten voor Gezinszorg - chairwoman)
- Marc Clerkx (Flanders District of Creativity vzw - Senior Project Manager)
- Ingrid Lombaert (Vlaamse Ouderenraad and Vzw OOK – independent advisor)
- Elke Vastiau (VVSG – staff member elderly care policy and elderly care organizations)
- Tarsi Windey (VVI – sector coordinator elderly care)
- Dr. Koen Hermans (Lucas – KULeuven – PhD)
- Prof. Dr. Paul Gemmel (Vlerick Leuven Gent Management School - professor)

3.2. Programme

- Presentation participating initiatives
- Phase 1: evaluating innovativeness (perceived innovativeness)
- Phase 2: evaluating added value, concretization and potential for diffusion
- Run through top 3 of each of the experts
- Indication of nominated initiatives (*i.e.* each of the initiatives mentioned in the top 3 of the experts: min. 3 initiatives – max. 13 initiatives)

4. Appendix D: guidelines for interviews

Initiators of the initiative	how did you come to the realization of the initiative? which changes are/were needed within the organization to realize the initiative? - resources (human resources, material resources, financial resources) - processes / organizational structure / organizational culture - etcetera which are the preconditions to make the initiative successful? How do you evaluate the impact of initiative X? Which impact does this initiative have for elderly, their relatives, the employees, the management and the government?

Fourteen propositions for the initiators of the initiative*
New initiatives are constantly introduced within our organization.
Before new initiatives are introduced, a lot of brainstorming is done.
Brainstorming sessions often result in totally different ideas.
The development of ideas is a responsibility for everybody.
Participation in external networks is encouraged within our organization.
Attention is paid to the desires and needs of all employees.
Management of the organization is situated at the central level.
Innovators are supported by their colleagues.
Different parties communicate a lot with each other (management, employees, external actors,…)
In our organization, it is quite easy to get approval to implement new initiatives.
In our organization, it is quite easy to implement new initiatives.
New initiatives are easily integrated within the organization.
There is fate that the initiative will be continued in the future.
This initiative has a great impact.

* the participants indicated whether they rather agreed or rather disagreed by means of red and green cards

Other employees	How did this initiative arise? How were you involved in initiative X? - were you able to give feedback? - how did the initiators communicate about the initiative? How often are new initiatives introduced? How does the organization involve you in general? How do you evaluate initiative X? Which impact does this initiative have on your work? Which impact does this initiative have for elderly, their relatives, the employees, the management and the government?

Elderly and/or their relatives	How did this initiative arise? How were you involved in initiative X? - were you able to give feedback? - how did the initiators communicate about the initiative? How often are new initiatives introduced? How does the organization involve you in general? How do you evaluate initiative X? Which impact does this initiative have on your life? Which impact does this initiative have for elderly, their relatives, the employees, the management and the government?

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