

# OECD Studies in Risk Management Sweden

SAFETY OF THE ELDERLY



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OECD STUDIES IN RISK MANAGEMENT

**Sweden**

**SAFETY OF THE ELDERLY**



ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT



## Foreword

The OECD Futures Project on Risk Management Policies aims to assist OECD countries in identifying the challenges of managing risks in the 21st century, and contributing to their reflection on how best to address those challenges. Its focus is placed on the consistency of risk management policies and on their ability to deal with the challenges, present and future, created by systemic risks. It is designed in two phases. In Phase 1, the countries participating in the project propose specific themes as case studies of their risk management policies. For each proposal, the OECD Secretariat prepares an overview of the issue covering both recent international developments of interest and the national policy context. In addition, the Secretariat elaborates a tool for self-assessment and review, consisting of one or several questionnaires following the methodological framework of the project. This prepares the ground for Phase 2 in which an in-depth review of the risk management issues will be conducted by a team of experts for those countries that wish it. Self-assessments will be used as the basis of these reviews. At the end of phase 2, a cross-country report will bring together the lessons learned from the project, and identify opportunities for sharing best practices and improving risk management.

In the framework of the OECD Futures Project on Risk Management Policies, the Swedish Rescue Services Agency has proposed a Phase 1 case study on the risks of fall accidents among the elderly. The issue is of particular importance to Sweden due to the high percentage of elderly in the population, and the particularities of its social security system, with a high degree of public risk sharing. The study will lay the ground for self-assessment and review of Sweden's policies concerning the safety of elderly persons, with particular focus on fall accident and injury prevention. Falls mostly occur in the private sphere, in or around people's homes, under the influence of a variety of personal and environmental factors. Fall prevention touches policy areas as diverse as health care, social services, urban planning, education and finance. In a highly decentralised country such as Sweden, this means that a myriad of actors are involved in this field: doctors, nurses, hospitals, private service providers, local, regional and central governments, non-governmental organisations, etc. The review of policies concerning the safety of the elderly will have to investigate how the various aspects of prevention are integrated in a consistent policy approach and how roles and responsibilities are shared by the different institutional actors.

This study has been prepared by Reza Lahidji and Marit Undseth from the OECD International Futures Programme. The authors have benefited from the support of Alf Rosberg, Thomas Gell and Ulf Bjurman at the Swedish Rescue Services, Jim Sandkvist, at SSPA, and Lothar Schelp at the National Institute of Public Health, and from the guidance of the Steering Group to the OECD Futures Project (see list of members in Annex 3). The study is issued under the responsibility of the Secretary General of the OECD.



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## Introduction

The elderly are a group of the population which deserves special attention in terms of risk and vulnerability management. For instance, both male and female elderly are highly overrepresented in terms of mortality due to unintentional injuries such as fires, poisonings or accidental falls – the primary topic of this study.<sup>1</sup> It has also been recorded that the elderly in OECD countries are less involved, but die more frequently in traffic accidents than other age groups.<sup>2</sup> These facts show that any society should deploy specific means to protect its elder persons.

In addition, the elderly belong to a class age which is growing dramatically – and will continue to do so in the coming decades – in all OECD countries. While ageing has been studied at length from the point of view of its economic and social implications, lesser emphasis has been placed on the need to adapt preventive actions and response structures in order to avoid that a growing number of old persons find themselves vulnerable to a variety of hazards. The tragic impact of the heat wave over Europe in summer 2003 shows that under unforeseen conditions, such vulnerability can lead to disaster. The 2003 heat wave was unprecedented both in temperature highs, especially night temperature, and duration, but it was not a first-time experience. France in particular had experienced excess death in relation with heat waves both in 1976 and 1983.<sup>3</sup> Still, preliminary records report a total account of about 22 000 deaths in England, Wales, Portugal, Italy and France. In Spain, the evaluation is still in process.<sup>4</sup>

The factors of vulnerability of elderly people to well-known hazards such as accidental falls are manifold: progress in age, deterioration of health, personal lifestyles, loneliness, poverty, or inadequate health and social structures are all elements which can contribute to the prevalence of falls-related injuries and fatalities among old persons. In the context of ageing societies, it is particularly important to bear these influences in mind when assessing and managing the risks related to accidental falls.

This study is divided into four sections. The first section presents an overview of the problem of fall accidents and injuries. The second section makes a brief overview of evolutions which might affect the vulnerability of the elderly in the years to come, with a particular emphasis on the lack of preparedness and adaptation of structures to the challenges of ageing. The third section discusses possible government responses to these challenges and reviews a number of recent policy initiatives in OECD countries and at the international level. The fourth part describes the Swedish context and the initiatives taken by Swedish

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<sup>1</sup> WHO, WHOSIS database, 2004.

<sup>2</sup> OECD (2001a), p. 52.

<sup>3</sup> Koppe *et al.* (2004), p. 29.

<sup>4</sup> Kovats *et al.* (2004).

authorities in the area of accident and fall prevention in recent years. Annex 1 to the study gives an overview of the main stakeholders and the regulatory framework following the project's methodological framework. Annex 2 presents the main lines of the questionnaires, designed as a tool for self-assessment and review. Annex 3 provides a list of the members of the Steering Group to the OECD Futures Project on Risk Management Policies.

### Falls among the elderly: Scope of the problem

Falls are often perceived as infrequent, random and relatively unimportant accidents, while in fact they represent a serious public health issue in an ageing society. Falls occur in all age groups – among children and adolescents as well in the working population – but they are particularly frequent and damaging among the elderly: each year, about one in three persons over 65 and half of those over 80 experience one or more falls, and the consequences of a fall may be very serious. Currently, the lifetime risk (*i.e.* over remaining years of life) of hip fracture in a Caucasian woman at the age of 50 is 17.5 percent, of vertebral fracture, 16 percent, and of Colles' fracture (fractures of the distal radius), 16 percent.<sup>5</sup> Half of all fractures experienced in OECD countries are hip fractures (95 percent of which are caused by falls<sup>6</sup>), which already account for more than half of all fracture costs. Research also shows that 20 percent of those who fracture their hips in a fall die within six months.<sup>7</sup> In Europe (countries with very low child and adult mortality, corresponding to the WHO's stratum A), accidental falls is, among all causes of unintentional injuries (fires, poisoning, traffic accidents, etc.), the one that leads to the highest mortality for elderly people, and also the one where the elderly are most over-represented in deaths (see table 1).

**Table 1 – Deaths by age and sex due to an accidental fall (2002)**

| Age          | Number of deaths | Share in total deaths due to falls (in %) | Share in population (in %) |
|--------------|------------------|---|----------------------------|
| Male 70-79   | 4 268            | 9.2                                       | 3.3                        |
| Male 80+     | 8 677            | 18.6                                      | 1.0                        |
| Female 70-79 | 4 717            | 10.1                                      | 4.6                        |
| Female 80+   | 19 547           | 42.0                                      | 2.6                        |

Source: World Health Organisation, WHOSIS, revised 2002 Burden of Disease estimates.

All in all, about 40 000 persons aged 65 and more die of falls and fall injuries every year in the European Union alone.<sup>8</sup> In terms of economic costs, fall-related fracture costs amounted to almost EUR 600 million in Sweden in 2000, or to EUR 1.1 billion in the UK in 1999. Even though the majority of falls do not result in fractures, the fact of having experienced a fall is a strong risk factor for falling again, as well as a source of insecurity and reduced life quality. As explained further in the paper, the significant growth in the number of elderly persons over the coming decades gives reason to believe that the human and economic

<sup>5</sup> Lips (1997), p. 5S

<sup>6</sup> WHO regional office for Europe (2004), p. 6.

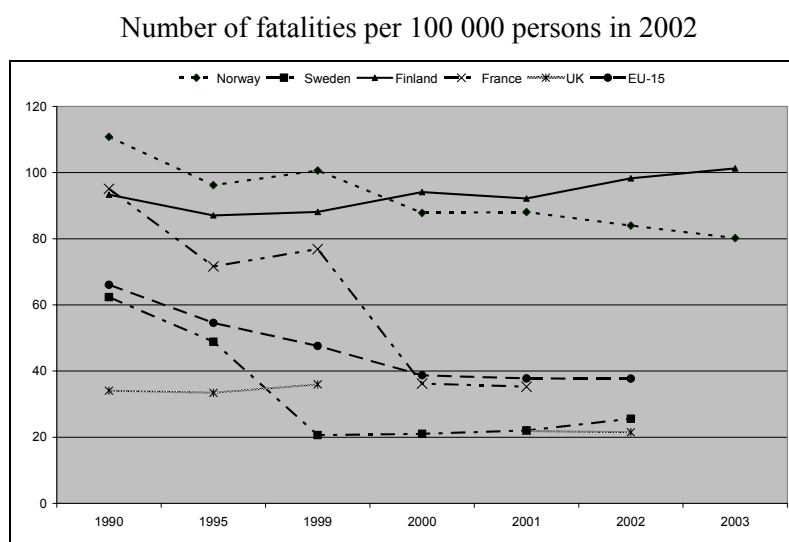
<sup>7</sup> WHO regional office for Europe (2004), p. 7.

<sup>8</sup> Working Party on Accidents and Injuries (2005), p. 1.

costs of falls will rise substantially. In Finland it has been estimated that the number of hip fractures will be almost three times higher in 2030 than in 1997.<sup>9</sup> The WHO also estimates that the number of hip fractures experienced in Europe in a single year will increase from 1.7 to 6 million between 1990 and 2050.<sup>10</sup>

Mortality rates due to fall-related injuries vary considerably from country to country. Figure 1 shows the standardised death rate (SDR) of accidental falls per 100 000 population in selected OECD countries in 2002. The table shows that the SDR is particularly high in Norway and Finland, and particularly low in Sweden and the United Kingdom.

**Figure 1 – Standardised death rates for accidental falls in selected OECD countries**



Source: WHO Europe Health for All Database, accessed July 2005.

Risks of falling can be affected by a variety of factors. They usually increase with age, female gender, cognitive and visual impairment, medical drug use, nutritional deficiencies and living patterns (e.g. sedentary lifestyle). They may also be negatively affected by a number of environmental factors, such as footwear and clothing, insufficient lighting, carpets, and inappropriate walking and assistive devices.<sup>11</sup> Some of these risk factors, from lifestyle to medicine use or environmental hazards, can clearly be prevented or significantly reduced by social care and public health initiatives, as demonstrated in various

<sup>9</sup> Kannus *et al.* (1999), p. 802.

<sup>10</sup> *Ibid.*, p. 2.

<sup>11</sup> *Ibid.*, p. 9.

cases in the past. As explained in the third section of this paper, the most successful efforts seem to be those which look at both intrinsic and extrinsic risk factors, with an interdisciplinary focus.<sup>12</sup>

Nevertheless, awareness and interest at the government level for injury and fall-preventive measures has been low in many countries, for different reasons. First, very few countries have approached the problem from an epidemiological standpoint, so that attention has remained focused on individual risk factors. Osteoporosis, for instance, has been singled out as the major risk factor when it comes to fall-related injuries. Some argue, however, that osteoporosis should be understood as a symptom rather than a cause, since osteoporosis and falls have many facilitating factors in common, like tobacco and alcohol consumption, an unfavourable diet and decreasing physical activity.<sup>13</sup> Environmental risks, on the other hand, seem to be underestimated. Yet, studies have reported that environmental causes may account for between 30 and 50 percent of falls among community dwelling elderly.<sup>14</sup>

Second, it has been difficult to detect the real scope of the problem. Incident and injury reporting practices for falls are incomplete, and in cases of mortality, it may be hard to identify the ‘triggering’ factors of increasing disability and finally death, especially if several months pass between the two. However, efforts have recently been made to quantify the existing costs and project these into the future to account for the effects of ageing (see table 2).

**Table 2 – Fall-related costs in selected OECD countries**

| Country   | Estimated fall-related costs                  | Projections                 |
|-----------|---|-----------------------------|
| Australia | AUD 498.5 million (2001)<br>≈ EUR 299 million | AUD 1 345.95 million (2050) |
| UK        | GBP 981 million (1999)<br>≈ EUR 1 491 million |                             |
| Sweden    | SEK 4 780 million (2000)<br>≈ EUR 574 million | SEK 7 869 million (2035)    |

Sources: Australia: Australian Department of Health and Ageing (2004), p.i..

UK: Scuffham, P. *et al.* (2003), p. 743.

Sweden: Nationellt Centrum för erfarenhetsåterföring från Olyckor (n.a), p. 2.

Australian projections suggest that health costs related to falls of persons aged 65 and over will increase 2.7 times by the year 2050. Equally, Swedish projections estimate that real costs will grow by 65%

<sup>12</sup> World Health Organisation (2004), p.11.

<sup>13</sup> Svanström (1990).

<sup>14</sup> World Health Organisation (2004), p. 9.

between 2000 and 2035. Still, these estimates are probably conservative, since they assume that prevalence will not increase and that the cost of treatments will remain stable.

Third and finally, institutional and sectoral barriers exist both at the local and national level when it comes to elaborating and implementing coordinated action plans which need to build on effective cooperation between a wide range of public services (including health, social affairs, consumer protection, rescue services, and urban planning) and private actors.

## **Factors of vulnerability of the elderly in the future**

Populations over the world are ageing, as the result of increased longevity and reduced birth rates. Their age structure gradually shifts from the traditional ‘pyramids’ to ‘pillars’, with larger cohorts reaching higher ages.

This section of the report will not make a comprehensive review of the large literature which has been devoted to the social, economic and political consequences of ageing. Rather, it will focus on some expected outcomes for the elderly population itself, with particular attention to the demographic, social and economic trends which might influence the vulnerability of old people in the future: the increase in their number, in particular at very high ages; their health conditions; the issue of active ageing and its consequences in terms of social inclusion; welfare programme reforms and their impact on the elderly’s income; developments in the care system; and finally evolutions in family structures.

*An unprecedented increase in the number of elderly people, in particular at very high ages*

The ageing of the world population has already started, and will continue in the coming decades with a speed and magnitude which, according to United Nations projections, are unprecedented.

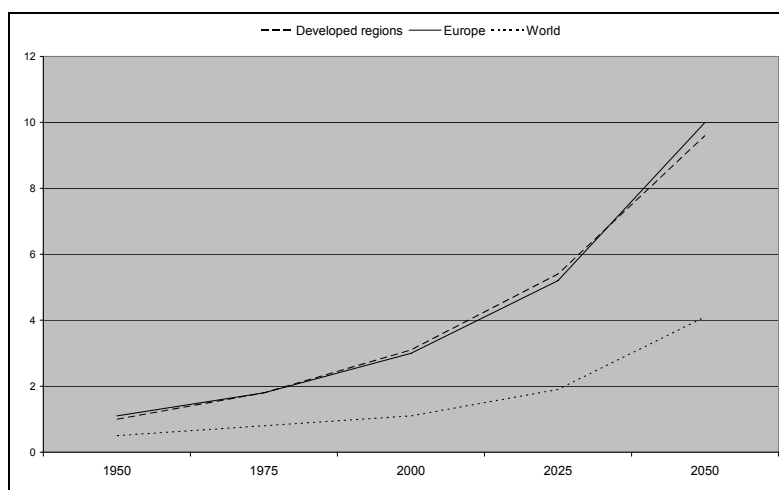
The number of people aged 60 years or more (60+) in the world was 205 millions in 1950. In 2050, it is expected to reach almost two billion. The 60+ population already grows at a significantly higher rate than the total population, and by 2025-30, it is estimated that it will grow more than three times as rapidly, with annual rates of 2.8 and 0.8 percent, respectively. By 2050, 1 in every 3 persons will be aged 60 or more in the OECD area, compared to 1 in every 5 at the global level. In Europe, this means an almost doubling of the share of the 60+ population, from 20 percent in 2000 to 37 percent in 2050.<sup>15</sup> Beyond 2050, the inter-generational balance is expected to be reinstated.

The first and foremost source of ageing is higher longevity. This is apparent in the dramatic increase in the size and relative share of older age cohorts. The share of the population aged 80 and more (80+) within the older age groups has increased gradually since 1950, and will rise even faster between 2025 and 2050. As can be seen in figure 2, this share is expected to grow rapidly from 3.1 percent in 2000 to 9.6 percent in 2050 in developed countries. In Europe, it is expected to reach 10 percent by that date, compared to a world average of 4.1 percent.

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<sup>15</sup> All figures in this paragraph have been drawn from the report of the United Nations *World Population Ageing 1950-2050*. See United Nations (2002).

**Figure 2 – Percentage of the population aged 80 and more**



Source: United Nations (2002).

**The increase in populations aged 80 or more is important, because it is particularly from this age and onwards that the elderly become dependent on health care and long-term care nowadays.** In OECD countries, health spending per head increases abruptly from about the age of 70 and onwards, before stabilising and even decreasing beyond the age of 85.<sup>16</sup>

#### *Uncertainties regarding the future health conditions of the elderly*

With the remarkable achievements of modern societies in term of life expectancy, more attention is paid to the quality of the years lived and to the costs of increased longevity:<sup>17</sup> can the quality of life be maintained throughout the old age, thanks notably to reduced disabilities and illnesses, and if yes, at what price?

In response to these concerns, different health expectancy models have been elaborated to measure the dynamics of population health, including functional status, disability level and quality of life. Some figures are now available – mostly for OECD countries. The results indicate that the increase in life expectancy does not lead to an increase in the time lived in severe disability. On the contrary, there is a positive association between life expectancy and disability-free life expectancy indifferent of gender, socio-economic status or geographic differentials.<sup>18</sup> There are therefore **strong indications that populations in OECD countries not only live longer, but also remain healthy longer.**

<sup>16</sup> OECD (2003).

<sup>17</sup> Robine *et al.* (1998), p. 1.

<sup>18</sup> *Ibid.*, p. 21.



Whether this trend can be extrapolated into the future, however, is debatable. There are indeed some important uncertainties regarding the future evolution of the populations' general health situation.

The higher prevalence of chronic diseases, which have become the first cause of death in Europe, may have a negative impact on disability rates. In high income countries, the diseases causing the most disability in 2002 for the population as a whole were first and foremost neuro-psychiatric diseases, followed by sense organ diseases, respiratory diseases, musculoskeletal diseases, and finally cardiovascular diseases.<sup>19</sup> The effects of pollution and lifestyles may also become significant. For instance, adult and child obesity levels are currently rising in developed and less-developed countries alike, and the effects of obesity on morbidity, disability – and eventually, on life expectancy – remain to be seen. Diabetes mellitus is an increasing health concern, especially among the elderly. Obesity is also a risk factor for musculoskeletal conditions, as are physical inactivity, stress and smoking.<sup>20</sup>

There are in addition growing concerns about communicable diseases, whose elimination as a serious threat has been a major success factor in the improvement of public health in developed countries. The SARS outbreak in 2000 showed how modern travel has considerably accelerated the pace of development of viral infections. Flu vaccine inadequacies question societies' capacity to tackle the next flu pandemic, widely considered as inevitable. The elderly would be the most vulnerable part of the population in such a scenario.

### *The challenges of active ageing*

Improving the degree of participation of old people to 'life activities' (i.e. remunerated work, but also involvement in community and civil society work, or leisure activities) is one of the most important challenges facing ageing societies, for both individual and collective reasons.

From an individual standpoint, it is now well established that remaining active is essential for the elderly's well-being, social inclusion, and physical and mental health. In addition to its well-known beneficial effects on physical health, activity may also represent a protective factor against the development of neurodegenerative diseases.<sup>21</sup> Life activities have, according to a recent Europe-wide survey, a significant positive effect on well-being and feelings of self-worth.<sup>22</sup> Australian research also indicates that there may

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<sup>19</sup> Data from the Global Burden of Disease Project, WHO Statistical Information System, WHOSIS.

<sup>20</sup> World Health Organisation, (2003), p. 3.

<sup>21</sup> Ferring, Dieter and Clare Wenger (2001), p. 13.

<sup>22</sup> Ibid., p. 34.

be a positive correlation between social networks and longevity.<sup>23</sup> By contrast, inadequate social support is associated with an increase in mortality, morbidity and psychological distress as well as a decrease in overall general health and well-being.<sup>24</sup>

From a collective standpoint, the importance of active ageing has been particularly emphasised by the large literature on the economic consequences of ageing.<sup>25</sup> In the developed countries, ageing leads to a trend increase in dependency ratios<sup>26</sup>, from 48.3 in 2000 to an estimated 73.4 in 2050. The equivalent numbers for the world are 58.4 in 2000 and 57.7 in 2050, the rise in old age dependency being offset by a decrease in youth dependency. Increasing numbers of dependent persons, mainly elderly, will depend upon decreasing numbers in working age. **Projections show that in OECD countries, the population aged between 16 and 64 years may be 4.5 per cent smaller in 2030 than at its peak level in 2010.**<sup>27</sup> For some countries, the decrease may be much more significant – the working-age population may fall by as much as 24 percent in Germany.<sup>28</sup> OECD estimates suggest that the average OECD labour supply may increase by five percent over the period 2000-25, then decline by nine percent until 2050.<sup>29</sup> A factor of great importance will be the evolution of participation rates<sup>30</sup> among specific groups of population, notably elder persons. This is why **increased participation of elderly people to economic activity will be a crucial economic issue in the coming years.** Many OECD governments have already implemented measures to delay the average age of retirement, notwithstanding their lack of popularity. Such measures includes increasing the normal retirement age, adjusting women's retirement age on that of men, prolonging contribution periods needed to qualify for full pensions, limiting access to early retirement schemes, and improving the 'actuarial neutrality' of pension systems (i.e. the proportionality between contributions and benefits).<sup>31</sup> In the future, pension systems schemes and labour market policies will, in all likelihood, increasingly tend to provide incentives for people to remain active longer.

More broadly, increased participation of the elderly in recreational, social and economic activities will be essential to societal dynamism and openness. It is important to emphasise that active ageing has other

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<sup>23</sup> Jorm (2005).

<sup>24</sup> WHO (2002a), p. 28.

<sup>25</sup> For an overview, see OECD (1998).

<sup>26</sup> i.e. the ratio between the population outside of working age and the working-age population.

<sup>27</sup> OECD (1996), p. 6.

<sup>28</sup> Ibid.

<sup>29</sup> Burniaux *et al.* (2003), pp. 14-17.

<sup>30</sup> i.e. share of the population which is employed, self-employed or considered as actively searching for employment.

<sup>31</sup> Ibid., p. 43.

positive societal effects than the purely economic advantages of reduced health costs and prolonged work incomes. A democratic society needs participation of and contributions from all members of society, including the elderly.

However, there will be challenges to overcome. Continuing to work at older ages will be more difficult for some persons and types of work than others. Ageing is associated with a series of physical and cognitive impairments such as the weakening of visual and auditory capacity, changes in motor skills and cognitive abilities, as well as declines in strength and endurance. It may thus be difficult and perhaps not desirable for the elderly to maintain physically demanding work. On the other hand, training and re-adaptation may also become more difficult with age. The ageing of the workforce will also demand an adaptation of the workplace and of human resource policies, such as age discrimination and training aimed at keeping ageing employees in pace with technological change. The specific abilities and constraints of the elderly will need to be better considered in the phase of development of new products and services. As illustrated by the case of information technology, the elderly might have difficulties to access a new technology which has been designed with younger user groups in mind.<sup>32</sup> Short of such efforts, ageing may have negative effects on productivity and on the working conditions and well-being of the ageing workforce.

#### *The future of welfare programmes and the elderly's income*

Ageing will have important financial consequences for public welfare programmes in OECD countries, in particular for pension systems, health care and long-term care.<sup>33, 34</sup> Table 3 shows projections of age-related expenditures (i.e. transfers to the population below and above working age). **Pension expenditures are estimated to reach 10.8% of the GDP of the OECD countries in 2050, compared to 7.4% in 2000.** In some countries such as Norway and Canada, the rise in pension costs will be dramatic. Age-related health care and long-term care expenditures are expected to grow even faster, reaching 9 percent of the GDP in 2050. All in all, age-related spending may represent more than a quarter of the GDP in OECD countries in 50 years.

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<sup>32</sup> Czaja and Moen (2004), in Pew and van Hemel (eds), pp. 150-162.

<sup>33</sup> It should be noted that the number of pension-eligible persons will soar not only due to ageing, but also to maturing pensions systems and the delayed effects of women's integration into the workforce.

<sup>34</sup> Casey *et al.* (2003), p. 8.

**Table 3 – Projections of age-related spending, 2000-2050<sup>1</sup>**

Levels in per cent of GDP, changes in percentage points

|   | Total age-related spending |                | Old age pensions |                | "Easy retirement" programmes |                | Health care and long-term care |                | Child/Family benefits and education |                |
|---|----------------------------|----------------|------------------|----------------|------------------------------|----------------|--------------------------------|----------------|-------------------------------------|----------------|
|   | level 2000                 | change 2000-50 | level 2000       | change 2000-50 | level 2000                   | change 2000-50 | level 2000                     | change 2000-50 | level 2000                          | change 2000-50 |
| Australia                               | 16.7                       | 5.6            | 3                | 1.6            | 0.9                          | 0.2            | 6.8                            | 6.2            | 6.1                                 | -2.3           |
| Austria <sup>2</sup>                    | [10.4]                     | [2.3]          | 9.5              | 2.2            | ..                           | ..             | [5.1]                          | [3.1]          | ..                                  | ..             |
| Belgium                                 | 22.1                       | 5.2            | 8.8              | 3.3            | 1.1                          | 0.1            | 6.2                            | 3              | 6                                   | -1.3           |
| Canada                                  | 17.9                       | 8.7            | 5.1              | 5.8            | ..                           | ..             | 6.2                            | 4.2            | 6.4                                 | -1.3           |
| Czech Republic                          | 23.1                       | 6.9            | 7.8              | 6.8            | 1.8                          | -0.7           | 7.5                            | 2              | 6                                   | -1.2           |
| Denmark <sup>3</sup>                    | 29.3                       | 5.7            | 6.1              | 2.7            | 4                            | 0.2            | 6.6                            | 2.7            | 6.3                                 | 0              |
| Finland                                 | 19.4                       | 8.5            | 8.1              | 4.8            | 3.1                          | -0.1           | 8.1                            | 3.8            | ..                                  | ..             |
| France <sup>4</sup>                     | [18.0]                     | [6.4]          | 12.1             | 3.9            | ..                           | ..             | [6.9]                          | [2.5]          | ..                                  | ..             |
| Germany                                 | [17.5]                     | [8.1]          | 11.8             | 5              | ..                           | ..             | [5.7]                          | [3.1]          | ..                                  | ..             |
| Hungary <sup>5</sup>                    | 7.1                        | 1.6            | 6                | 1.2            | 1.2                          | 0.3            | ..                             | ..             | ..                                  | ..             |
| Italy                                   | [19.7]                     | [1.9]          | 14.2             | -0.3           | ..                           | ..             | [5.5]                          | [2.1]          | ..                                  | ..             |
| Japan                                   | 13.7                       | 3              | 7.9              | 0.6            | ..                           | ..             | 5.8                            | 2.4            | ..                                  | ..             |
| Korea                                   | 3.1                        | 8.5            | 2.1              | 8              | 0.3                          | 0              | 0.7                            | 0.5            | ..                                  | ..             |
| Netherlands <sup>6</sup>                | 19.1                       | 9.9            | 5.2              | 4.8            | 1.2                          | 0.4            | 7.2                            | 4.8            | 5.4                                 | 0              |
| New Zealand                             | 18.7                       | 8.4            | 4.8              | 5.7            | ..                           | ..             | 6.7                            | 4              | 7.2                                 | -1.3           |
| Norway                                  | 17.9                       | 13.4           | 4.9              | 8              | 2.4                          | 1.6            | 5.2                            | 3.2            | 5.5                                 | 0.5            |
| Poland <sup>5</sup>                     | 12.2                       | -2.6           | 10.8             | -2.5           | 1.4                          | -0.1           | ..                             | ..             | ..                                  | ..             |
| Spain                                   | [15.6]                     | [10.6]         | 9.4              | 8              | ..                           | ..             | [6.2]                          | [2.5]          | ..                                  | ..             |
| Sweden                                  | 29                         | 3.2            | 9.2              | 1.6            | 1.9                          | -0.4           | 8.1                            | 3.2            | 9.8                                 | -1.2           |
| United Kingdom                          | 15.6                       | 0.2            | 4.3              | -0.7           | ..                           | ..             | 5.6                            | 1.7            | 5.7                                 | -0.9           |
| United States                           | 11.2                       | 5.5            | 4.4              | 1.8            | 0.2                          | 0.3            | 2.6                            | 4.4            | 3.9                                 | -1             |
| Average of countries above <sup>7</sup> | 21.2                       | 5.8            | 7.4              | 3.4            | 1.6                          | 0.2            | 5.9                            | 3.1            | 6.2                                 | -0.9           |
| Portugal <sup>8</sup>                   | 15.6                       | 4.3            | 8                | 4.5            | 2.5                          | -0.4           | ..                             | ..             | ..                                  | ..             |

1. Data for health care shown in parenthesis are drawn from EPC (2001). They are the result of an EC exercise using a common methodology for all countries. These health and long-term care projections assume that costs per capita rise in line with productivity/wages. They do not allow for technological change or other non-age-related factors.
2. Total pension spending for Austria includes other age-related spending which does not fall within the definitions in Cols. 3-10. This represents 0.9 per cent of GDP in 2000 and rises by 0.1 percentage point in the period to 2050.
3. Total for Denmark includes other age-related spending not classifiable under other headings. This represents 6.3 per cent of GDP in 2000 and increases by 0.2 percentage points from 2000 to 2050.
4. For France, the latest available year is 2040.
5. Total includes old-age pension spending and "early retirement" programmes only.
6. "Early retirement" programmes only include spending on persons 55+.
7. Sum of column averages. OECD average excludes countries where information is not available and Portugal where the data are less comparable than for other countries.
8. Portugal provided an estimate for total age-related spending but did not provide expenditure for all the spending components.

Source: Casey *et al.* (2003).

In response to the expected increase in fiscal pressures induced by ageing, a range of schemes have been either implemented or planned in OECD countries, including three types of measures regarding pension systems.<sup>35</sup>

<sup>35</sup> The following examples are taken from OECD (1998), p. 53.

First, reductions in public pensions payments by reducing final benefits; increasing the level of contributions and/or years of employment required for a given level of benefits; or increasing the number of years of earning used to calculate final pension payments. Several OECD countries have taken steps in this direction, including Norway, Finland, Canada, France, Germany and Sweden.

Second, increased advanced-funding, i.e. saving in private pension funds which can take the form of occupational schemes along sectoral or company lines, or of individual retirement schemes. Mexico, for instance, is moving to a fully-funded privately managed system of individual accounts, and other countries plan to increase the advance-funded element of their public earnings-related benefits. Yet other OECD countries encourage greater reliance on the private pension system (among others Australia, Denmark, Germany and the United States).

Third, as mentioned earlier, the extension of the working age and greater flexibility in the work-retirement transition (Sweden, Denmark, Germany, Japan, Luxembourg).

**The impact of the recent pension reforms on the revenue of the elderly, in particularly poor elderly, remains to be seen.** For some elderly with low earnings, public transfers are an essential if not unique source of income, and in many OECD countries, older people tend to be overrepresented in the lowest-earning quintiles of the population.<sup>36</sup> In fact, in OECD countries such as Canada, Finland, the United States and the Netherlands, **more than 50 percent of single women living alone, aged 75 and more, belong to the lowest income quintile in the adult population aged 18 and more, compared to 38 percent in Sweden.**<sup>37</sup> Moreover, the stronger emphasis on occupational schemes may have a negative effect on the income of people who have had been out of employment in some periods of their lives. Women may thus continue to be disadvantaged, as they will continue to carry the main responsibility of child-rearing, and because part-time working is more common among women than among men. Finally, the privatisation of pensions, and especially the shift from defined-income to defined-contribution types of advance-funded pensions, will to an increasing extent transfer the risks related to the future rate of return of investments to individuals.<sup>38</sup>

Notwithstanding the positive effects of ongoing reforms, such risks emphasise the need for a careful monitoring of the situation of vulnerable elderly, including those with disabilities.

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<sup>36</sup> Casey, Bernard and Atsuhiko Yamada (2001), p. 13.

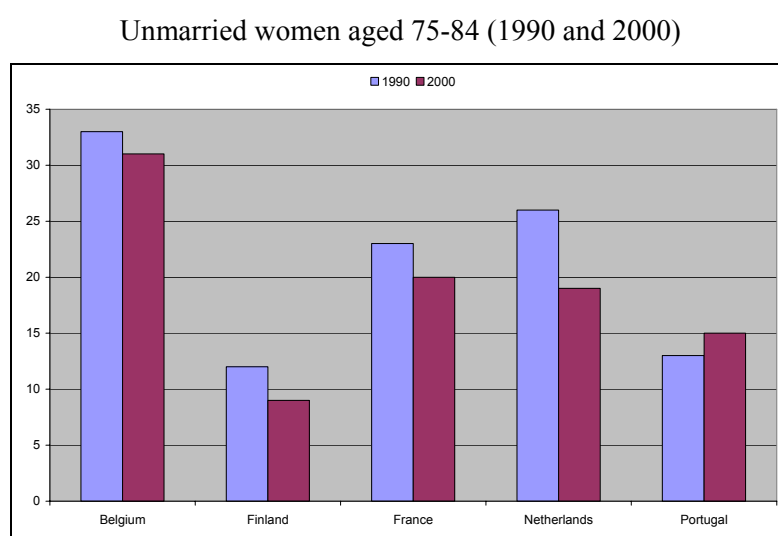
<sup>37</sup> OECD (2001b), p. 126.

<sup>38</sup> The reduction of the working-age population may lead to a reduced pool of financial investors, and thus depressed asset prices. In addition, the likely increase in the ratio between physical capital and labour force may lower the rate of return on investments. See OECD (1998), p. 66.

### *The changing patterns of the care system*

In many countries, the elderly now have a wide choice of different housing options and services according to their health and personal preferences. Economic empowerment, as well as progress in individual health and medical care and technologies, make it increasingly possible to receive care at home, and residential care (nursing homes and old-age homes) is declining in many OECD countries (see figure 3).

**Figure 3 – Share of population in residential care in selected OECD countries**



Source: Delbès *et al.*

In Denmark, no traditional nursing home has been built since 1987, in order to ensure individual treatment of the elderly, and to prioritise the wishes of the patient.<sup>39</sup> In France, where the share of nursing homes is still six times higher than that of home care (capacity of 420 000 compared to 67 000)<sup>40</sup>, reforms are being implemented to increase the variety of choice: the 2002 law renewing medical and social action aims at placing the user at the centre of health care; the “ageing and solidarity” action plan includes the creation of 13 000 new posts in recreation homes and day care.<sup>41</sup>

At the same time, the elderly population becomes increasingly heterogeneous. In addition to the evolution in preferences and lifestyles, one factor of heterogeneity is the large-scale ageing in minority immigrant populations. **According to British estimates for instance, the minority ethnic elder population will grow ten-fold between 1999 and 2030.**<sup>42</sup> Taking care of immigrant elders may pose specific challenges

<sup>39</sup> Danish Ministry of the Interior and Health, Ministry of Social Affairs and Gender Equality (2002), p. 6.

<sup>40</sup> Numbers from the French National Institute for Statistics and Economic Studies.

<sup>41</sup> Assemblée Nationale (2004), p. 207.

<sup>42</sup> Patel (1999), p. 25.

for care providers in terms of differences in health profiles and culture. Diabetes mellitus, for example, has a prevalence rate about 3-5 times higher among minority groups of Asian origin than for the Caucasian population, according to British research.<sup>43</sup> Although traditionally taken care of in the family, a high rate of the elderly live on their own: a recent European-wide study has found that 30 to 40 percent of elderly minority ethnic women live on their own in Finland, the Netherlands, and the UK.<sup>44</sup>

While the 'personalisation' of care helps to better respond to the diversity of needs and preferences of individuals, it comes at a price. Indeed, concerns have been raised in Netherlands that home care is less cost-efficient than residential care.<sup>45</sup> The British Royal Commission on Long Term Care also found that home-care is not always the most cost-efficient and appropriate alternative, pointing out that care for very disabled patients with multiple needs is more cost-efficient in residential structures.<sup>46</sup> Several factors could lead to a continuous increase of those costs in the future. In some cases, for instance, ageing societies will lead to local depopulation, creating additional challenges in terms of cost-efficiency and decentralisation of services. In the case of Germany, for which current estimates suggest that East Germany will lose about 14 percent of its population in the twenty-year time span between 1990 and 2010,<sup>47</sup> spatial planners have pointed out that the 'shrinkage' of communities is not taken into account in current legislation.<sup>48</sup> Technological change is also likely to drive up costs in the future, as may rising quality requirements. Similar developments were visible in the 1990s with an increasing number of surgical interventions for hip fractures, and it has also been observed that both the supply of services and the costs per patient have increased in long-term care in the last decade.

**If the widening of care options is not accompanied by increased resources, it can have a negative effect on access to care.** Swedish studies show that the share of people who need no help in their basic daily activities<sup>49</sup> has risen from 70 percent in 1988-89 to 78 in 2002 among the 65+. Among the 80+, the improvement has even been more pronounced, from 31 percent in 1988-89 to 57 in 2002.<sup>50</sup> On the other hand, surveys show that the public share of the total volume of help provided to elderly living in their homes has decreased from 40 percent in 1994 to 30 percent in 2002. It also found that the elderly who

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<sup>43</sup> British Diabetic Association (n.a.) Diabetes fact sheet.

<sup>44</sup> Policy Research Institute on Ageing and Ethnicity (2004), p.3.

<sup>45</sup> World Health Organisation (2002b), pp. 28-29.

<sup>46</sup> The Royal Commission on Long Term Care (1999), p. 13.

<sup>47</sup> Münz and Ulrich (1995), 19.

<sup>48</sup> Bucher and Gatzweiler (2004), p. 3.

<sup>49</sup> so-called activities of daily living, including grocery shopping, cooking, cleaning, tidying, getting out of bed, going to bed and washing.

<sup>50</sup> Socialstyrelsen (2004a), p. 21.

received home service (*i.e.* help with activities of daily living) in 2002 were frailer than in 1994, and also received fewer hours of help for a certain need.<sup>51</sup> Access to care therefore seems to have deteriorated.

In Finland, the number of people aged 75 and more who receive home help and nursing has decreased substantially between 1991 and 2001, from 32 to 20 percent. Similar trends in access are valid for the other main forms of elderly care and services in Finland, such as auxiliary services and residence in old people's homes and sheltered housing. A Finnish study finds that less than 50 percent of the people over 75 who need regular home services actually receive it.<sup>52</sup>

There is a risk that the trend increase in care costs aggravates this rationing of the needs (or makes care services unaffordable to a growing number of people), leaving the elderly dependent on informal care, often provided by family members. According to an OECD study, about three quarters of all care to the frail elderly is carried out by informal carers, normally female relatives of the person.<sup>53</sup>

#### *The private sphere*

When thinking about the future of informal care, one has to account for changing family relations – increasing rates of divorce, childlessness, and single households – as well as higher labour participation of women and the elderly. Table 4, describing existing living arrangements of elderly women in various OECD countries, shows that the share of elderly, unmarried women who live alone has risen between 1990 and 2000.

**Table 4 – Living arrangements of unmarried women aged 75-84 in 1990 and 2000 in some countries**

|              | Belgium |      | Finland |      | France |      | Netherlands |      | Portugal |      |
|--------------|---------|------|---------|------|--------|------|-------------|------|----------|------|
|              | 1990    | 2000 | 1990    | 2000 | 1990   | 2000 | 1990        | 2000 | 1990     | 2000 |
| Alone        | 41      | 45   | 63      | 72   | 53     | 57   | 55          | 64   | 39       | 38   |
| With others  | 21      | 18   | 25      | 17   | 20     | 19   | 13          | 12   | 48       | 47   |
| With partner | 5       | 6    | -       | 2    | 4      | 4    | 6           | 5    | -        | -    |

Source: Delbès *et al.*

Marriage and divorce patterns of the next generations of elderly will in some countries differ significantly from current practices. Union formation has become less stable. The chances of experiencing a divorce or a broken relationship in one's lifetime are high, and this can have repercussions for life in old age and

<sup>51</sup> Ibid. p. 22.

<sup>52</sup> Finnish ministry of Social Affairs and Health (2003), p. 98.

<sup>53</sup> Cited in AGE, the European Older People's Platform (n.a.), p. 2.



availability of informal carers. Divorce may have adverse effects on inter-generational relationships, and on resource flows between parents and children.<sup>54</sup> In the United States, it has been found that divorced parents are less likely to live with a child or to receive help with personal care or household chores than widowed parents are.<sup>55</sup> It has been suggested that non-family networks of friends may replace informal family carers and perhaps even increase the pool of available informal care, but this has so far not been documented.

The increasing presence of women in the paid workforce may also reduce the supply of informal care services to elderly parents or spouses. But such an influence has not received any empirical backing, and will probably depend on the future evolutions of working hours and part-time working.

Finally, the reduction in birth rates and the growing number of childless persons mean that less young relatives will be available to take care of the older generation – another facet of the increase in the dependency ratio.

### *Conclusion*

The trends reviewed in this section might contribute to more widespread dependency, poverty, frailty and loneliness among old people in the years to come: an unprecedented increase of the elderly population, both in magnitude and speed - in particular at very high ages; evolutions in health conditions which might not be all favourable, in particular due to changing lifestyles; the challenges of better involving elder persons in life activities; the impact of public welfare reforms on the income of the elderly; possible problems of access to care services; and the risk that the supply of informal care by relatives does not grow on a par with the needs of the elderly.

These trends will not necessarily affect all – or even a majority of – old people, and their impact might be mitigated by the actions of a variety of private and public stakeholders. They might, however, lead to the increased marginalisation of those with low incomes and a small social network. They must therefore be seen as factors of risk which could increase the vulnerability of some elder people to hazards such as fall accidents and injuries, and which therefore needs to be addressed by risk prevention policies.

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<sup>54</sup> Ibid., p. 37.

<sup>55</sup> Wolf (2001): op. cit., p. 37.

## **Policy issues and responses**

The broad array of evolutions which might make fractions of the elderly population increasingly vulnerable calls for a holistic approach to risk prevention, which sometimes needs to cut across traditional policy areas. In this perspective, risk prevention policies in areas such as accidental falls have to be integrated in a broader framework of vulnerability reduction among the elderly. This section of the paper reviews a number of policy initiatives of interest in this regard, under five general headings:

- Integrated policy approaches to vulnerability prevention and reduction;
- Risk preparedness and emergency response;
- Adaptation of the physical environment, comprising both private and public structures;
- Institutional change, in particular with respect to the changes that have taken place in elderly care in recent years;
- The promises and consequences of technological change.

### *Integrated policy approaches*

An increasing number of experts and specialised organisations advocate for such an integrated policy approach. The World Health Organisation, for instance, does so in its Active Ageing Policy Framework and its concept of Safe Communities.

In the policy document on active ageing which laid the ground for the Madrid Assembly on Ageing in 2002, the WHO called upon co-operation between sectors as varied as health, social services, education, employment and labour, finance, housing, transportation, justice, and spatial planning.<sup>56</sup> Integrating the three pillars of health, participation and security, the Framework proposes a wide range of measures, including improved accessibility to public buildings and transport, the creation of age-friendly and safe environments, increased focus on preventive health care, enhancement of the conditions for ageing at home, lifelong learning, provision of training to informal and formal caregivers, and adapted employment policies.

The WHO network Safe Communities promotes age-friendly and safe structures for injury and accident prevention, through the development of a community safety label. The concept emerged at the first World

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<sup>56</sup> WHO (2002a).

Conference on Accident and Injury Prevention in Stockholm, in 1989. Subsequently, a WHO collaborating Centre on Community Safety Promotion was established at the Karolinska Institutet in Sweden, and the network has now 83 members in 17 countries. Members can be a municipality, a county, a city or a district of a city which works with safety promotion and the prevention of injuries, violence or suicide. The *Safe Communities* network distinguishes itself through a structured methods-based approach, and membership applications are evaluated according to six criteria: 1) an infrastructure of governance based on partnership and collaboration; 2) sustainable long-term programmes covering both genders and all ages, environments and situations; 3) programmes that target high-risk groups and environments, and programmes that promote safety for vulnerable groups; 4) programmes that document the frequency and causes of injury; 5) evaluation measures to assess programmes, processes and the effects of change; and finally 6) ongoing participation in national and international Safe Communities network.<sup>57</sup>

Some countries have also created cross-sectoral plans to better prevent accidents. This includes Sweden, whose comprehensive injury and accident prevention programme will be further described in the next section. Norwegian authorities also launched in 1997 an action plan to prevent injuries at home, school and recreation. The plan was prepared by the Ministry of Health and Social Affairs, in cooperation with eight other ministries: Defence; Justice; Children and Family Affairs; Education, Research and Church Affairs; Local Government and Labour; Cultural Affairs; Environment; Transport and Communications. The plan for the prevention of home injuries, which is most relevant to our study, adopted a very broad approach, involving product control, building construction regulation and loans and subsidies for accident and injury prevention initiatives in construction; and information campaigns among the elderly and municipal employees. The same strategy was used for prevention of injuries in old-age homes.

Another example is the UK National Health Service (NHS) Service Framework for Older People (NSF) which has established a standard to prevent falls. In accordance with this standard, NHS is required to work in partnership with local councils to take actions aimed at reducing falls as well as resulting fractures. Furthermore, older people who have fallen shall receive effective treatment and receive advice on prevention through a specialised falls service. Local health and social care providers are obliged to have put in place risk management procedures by spring 2003, and all local health and social care systems should have established an integrated falls service by spring 2005. The British Department of Health has released a guideline to facilitate the implementation of this standard and indicates in the guiding principles of such an integrated falls service that it shall work with local acute hospitals as well as with housing, environment, leisure and transport services at the local level. In addition it shall work with private and

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<sup>57</sup> For further information, see [http://www.phs.ki.se/csp/index\\_en.htm](http://www.phs.ki.se/csp/index_en.htm).

voluntary providers.<sup>58</sup>The British Ministry of Trade and Industry also organised a 3-year long campaign against fall accidents, involving publicity, information and research activities. The official campaign has now stopped, but the ministry funds the fall prevention activities of a non-governmental organisation.

An interesting organisation is the Swiss Council for Accident Prevention, responsible for the promotion of safety in transports, sports, homes and leisure activities. It collects statistics, carries out research in safety, acts as an independent consultant and offers training courses to public and private bodies, coordinates preventive activities with other actors, diffuses information material and tests products.<sup>59</sup> The elderly and fall prevention are target areas.

### *Risk preparedness and emergency response*

The WHO asserts that most countries' public health systems are not designed for chronic conditions.<sup>60</sup> Historically created to combat infectious diseases, health systems are poorly adapted to face current epidemiological challenges. This leads to a range of problems, such as failure to empower patients, and organisational problems of screening and follow-up. Less than 60 percent of European countries have policies and plans in place to combat non-communicable diseases in general, or more specifically cardiovascular diseases, tobacco control or diabetes control.<sup>61</sup>

Furthermore, public health systems are not necessarily designed for emergency response, as was shown most recently by the SARS outbreak and the European heat wave. According to a review carried out by Canadian authorities, only very few agencies permanently cover the area of emergency preparedness and response.<sup>62</sup> This is now changing. Canada has just reformed its public health system and created a public health agency with wide responsibilities in this field, in addition to the control and prevention of infectious disease. The UK equally established a Health Protection Agency in 2002 to coordinate research and emergency management efforts concerning existing and potential public health threats. France is also currently redefining the role of its public health agency, including closer cooperation with weather reporting services, and contact points with civil protection actors. This framework will be most relevant in relation to outbreaks of infectious disease, but the creation of contacts with local entities and information channels is highly useful for any kind of crisis hitting a part of the population.

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<sup>58</sup> British Department of Health (2003b), p. 23.

<sup>59</sup> Information from the Council's website, [www.bpa.ch](http://www.bpa.ch), accessed 6 July 2005.

<sup>60</sup> World Health Organisation (2002b).

<sup>61</sup> *Ibid.*, pp. 36-37.

<sup>62</sup> Canadian National Advisory Committee on SARS and Public Health (2003), p. 77.

In reaction to the disastrous impact of the heat wave in 2003, the French Senate has suggested to create, manage and regularly update at the local level a map or an overview of old and vulnerable persons living in each community.<sup>63</sup> Such a close monitoring, however, would not go without difficulties. The creation of a registry of the elderly may be incompatible with current data protection legislation. It may also prove challenging to find all persons in real need, as the most vulnerable are often the most difficult to reach. In this respect, it is important to mention the national legal obligation in Denmark for municipalities to organise home visits at least twice yearly to those aged 75 or more, giving them advice and informing them about activities that may help them to remain in good health and stay independent longer. The practice, which had taken place for some time at the local level, was extended to the national level by law in 1996 after the publication of the conclusions of a pilot project in the Danish town of Rødovre in the 1980s. The study showed that preventive home visits had a significant positive effect on health and functional ability among the elderly and were cost-efficient. In a 1999 evaluation of the new nation-wide practice, **80 percent of the responding municipalities reported that the scheme had helped them reach groups of ‘vulnerable’ elderly, which they had not formerly known.**<sup>64</sup> Sweden has also carried out a pilot project with home visits in selected municipalities, and some of the municipalities have decided to maintain the practice.<sup>65</sup>

#### *Adaptation of structures*

A number of studies have recognised the importance of adapting public infrastructures to the needs of the elderly, and the WHO Safe Communities network act in the same direction. But there is little evidence of large-scale national activity in this field. A study published by Dutch authorities estimates that only about 20 percent of total housing stock in the Netherlands are ‘zero-staircase dwellings’.<sup>66</sup> Demand is focused on single-family dwellings, and the prospects for improvement are poor. Furthermore, it is also questionable whether housing labelled ‘suitable for the elderly’ offers what it promises. There are therefore strong indications that the existing housing stock will have to be adapted to the elderly’s needs (installing lifts, etc.). However, if these improvements are not subsidised by government, they may lead to rent increases and place another burden on individual incomes. When it comes to individual dwellings, the Dutch Services for the Disabled Act (WVG) funds adaptations that permit the resident to continue living at home, a scheme that exists in other countries as well. This scheme remains nevertheless expensive, especially in view of the increasing share of elderly in the population in the future.

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<sup>63</sup> Sénat français (2004), p. 223.

<sup>64</sup> Den Sociale Ankestyrelse (1999), p. 25.

<sup>65</sup> Socialstyrelsen (2002), p. 46.

<sup>66</sup> De Klerk and Timmermans (2001), pp. 274-275.

Problems such as over-heating are a question of housing standards, but are also closely related to other public policies and spatial planning. Heat accumulation is especially an urban problem that can be partly tackled by the introduction of open spaces, water bodies, court yards, trees and parks. Furthermore, high real or perceived level of crime may discourage the elderly from spending time outdoors or opening windows.<sup>67</sup> French proposals after the heat wave in 2003 focus in particular on the need to introduce air-conditioning in residential housing, and Paris is at the moment considering an adaptation of public housing. Several examples exist of an integration of climate considerations in urban planning. It is, for instance, stipulated in German federal building legislation that climate, air pollution and health are important factors that must be taken into account in the planning process. The German city of Stuttgart has since 1983 collaborated with meteorologists to investigate the urban climate and to include this in its urban planning.<sup>68</sup>

### *Involving the elderly*

Local experiences have been made concerning the involvement of users or residents in designing and developing plans, with mixed results. UK examples cover research projects which bring together elderly and disabled people, designers and industry to develop better products.<sup>69</sup> There have also been initiatives in housing projects to consult residents in the planning and design process, which considered stakeholder involvement a prerequisite to success. On the other hand, a London borough project for accessible public transport found that the user group had difficulties communicating their needs – they were not used to being consulted and using professional language and terms. Efforts must be made to bridge the communication gap between users and professionals– one example from Japan are customer demonstration centres, where customers can experience and design different housing layouts.<sup>70</sup> Similarly, in the Swedish municipality of Lidköping, the municipality launched a project for housing adapted to the elderly in the early 1990s, including the building of models in full-scale which were then used for consulting the affected users and finding appropriate solutions.<sup>71</sup>

Overall, increasing consultation of the elderly in all areas should be a priority in the years to come. One example is participation in elected political institutions which decreases rapidly with age, although this is subject to variation across countries. **For instance, in the Scandinavian countries, only about 3 percent**

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<sup>67</sup> Christoffel (2004).

<sup>68</sup> Koppe *et al.* (2004), op.cit, p. 78.

<sup>69</sup> Russell (1999), p. 43.

<sup>70</sup> Ibid.

<sup>71</sup> Lidköping kommun (2003.), p. 11.

**of members of Parliament are aged 65 or more.**<sup>72</sup> In comparison, the European Parliament had in 2001 about 5 percent members above 65 years of age, whereas in France this percentage was 15 percent. In the US Senate, about 25 percent are aged 65 or more.<sup>73</sup> This under-representation of the elderly seems to have been eclipsed by efforts to raise participation among the young, women and ethnic minorities. Scandinavian countries nonetheless all have consultative bodies such as elderly councils, at state, regional and municipal level, but there have been complaints in both Sweden and Norway that the contact with local and central authorities is poor, and that the councils are not taken seriously.<sup>74</sup> The most frequent questions discussed in the Swedish councils were elderly care, health and traffic. 75% of the councils also considered housing questions for elderly.<sup>75</sup>

*Institutional reform in health care and old age care in response to ageing*

The assessment of vulnerability among the elderly is inseparable from the future evolution of health care and old age care. Looking more in detail into care services, health care needs to be separated into primary care (including health and safety promotion) and specialist care (secondary and tertiary care). Primary care is in the following defined as basic health care that does not require hospitalisation, provided most primarily by general physicians. Specialist care can both be in-patient (in hospitals or clinics), or outpatient. Long-term care is defined as the provision of maintenance and health services to the elderly, the chronically ill, and to the physically or mentally disabled. Services may be provided to in-patients (rehabilitation facility, nursing home, mental hospital), out-patients, or at home, and may include both health and social care. Home care can consist of home services (help with daily activities) and/or home nursing). The provision of long-term care is generally ensured by local government.

The financial pressures engendered by ageing have been discussed in the first section. A widespread response in many OECD countries has been to introduce some aspect of competition, and opt for services that are adapted to the needs of the recipient. Another approach has been to drastically cut the number of beds in residential housing, and provide more home nursing, while yet another option is to raise incentives

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<sup>72</sup> Swedish Ministry of Social Affairs and Health (2002), p. 263.

<sup>73</sup> Ibid.

<sup>74</sup> Ibid.; p. 271.

<sup>75</sup> Ibid., p. 270.

for informal care through benefits and tax credits.<sup>76</sup> What have been the consequences of these changes in terms of quality and accessibility of care for the elderly?<sup>77</sup>

Quality is traditionally measured in terms of structure, process and outcomes. Structural criteria refer to staff number, equipment, and formal competences of the staff. Most countries have developed structural quality criteria for hospitals and institutions, but this is more problematic for out-patient or at-home care. Quality criteria defined in ‘mainstream’ workplace legislation are not adapted when the workplace becomes the user’s home. Process quality criteria apply to the operation of the service and the performance of specific interventions, including the difficult task of evaluating the quality of interactions between the personnel and the user. Furthermore, in this area, governmental action has often relied on frame laws which are then to be implemented at the local or regional level. Alternative approaches include the creation of guidelines or voluntary standards. Finally, outcome criteria seek to measure the outcome of specific interventions. These criteria will probably increase in importance with the growing significance of cost-efficient health care and user satisfaction, but currently such criteria are applied only in certain EU Member States (ranking of hospitals according to quality of service), firstly because outcomes are very difficult to measure, and secondly because there may be ethical and political barriers to their application.

In the context of decentralisation of care services, local and regional actors generally have a high degree of discretion in the application of standards. This has led to concerns regarding the level of quality standards and the emergence of important differences within national borders. The UK, for instance, has taken measures to centralise the monitoring of social services rendered at the local level. A new body created in 2004, the Commission for Social Care Inspection (CSCI), brings together inspection, regulation and review of all social care services.<sup>78</sup> It replaces the work formerly carried out by the Social Services Inspectorate, the Audit Commission Joint Review Team and the National Care Standards Commission. At the basis of the work of the CSCI are national minimum standards for social care, which were developed by the Government in cooperation with the industry and users of social care, for the first time in UK history.<sup>79</sup> Such monitoring bodies are also common in other Member States, but the CSCI seems to combine the work of several institutions.

France has introduced a “Home Services Standard”, which went into force in 2000. It covers all of the services provided by government-authorized providers. The standard aims to ensure quality services for

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<sup>76</sup> Information taken from Lundsgaard, 2003.

<sup>77</sup> This part of the paper is in part based on answers from a questionnaire issued in 2002 by the European Commission on national strategies for the future of health care and long-term care for the elderly.

<sup>78</sup> Nolan *et al* (2004), p. 64.

<sup>79</sup> UK Department of Health (2004), p. 55.



users at every stage: receiving customers, processing requests (analysing needs and the services available), providing services in the home (preparing and providing services). The standard also defines the principles for measuring ongoing service quality improvements (dealing with complaints, assessment of service quality as perceived by users), and the skills requirements for different jobs. The certification system which was adopted in 2001 foresees the use of an external organisation for verification of compliance with the standard.<sup>80</sup>

The Danish approach gives an example of a decentralised system. Danish legislation requires the local authorities to prepare quality standards, including a description of the service level decided by the local authority. The quality standards must describe the services available to citizens who need personal or practical help and assistance, physical rehabilitation or general physical exercise to be provided at the local level. Descriptions of the nature, scope and performance of help and assistance must be concise and must include quality objectives (operational objectives), which the local authority can subsequently use to evaluate performance and results. The quality standards must be adopted by the local authority, which at least once a year must follow up on the quality and management of the services provided. The follow-up should be based on the operational objectives formulated in the quality standards, so that it is also a follow-up on political targets relating to the services provided by the local authority, including political targets for absenteeism and health and safety standards in service provider organisations.<sup>81</sup> Another approach is to develop recipients' rights. In decentralised systems, these rights tend to comprise the right to claim treatment and the right of needs assessment within certain time limits. Finland is considering adding to current legislation provisions giving elderly rights to a 'service plan', adapted to their functional capacity and need for help.

Finally, and most significantly, public care systems seem to rely increasingly on informal care options, especially for long-term care, something which poses new challenges for quality assurance. In some cases this is now left to the user. Germany, for instance, has a system of double quality assurance:<sup>82</sup> before allocating financial care support, the medical service of the health insurer evaluates the care needs of the user at the user's home, and checks equally that the required basic care and household services are provided in an appropriate manner; the insurer is legally obliged to make a second evaluation at a later stage; receivers of financial care support must report at least every 3-6 months (depending on the amount of support received) to an authorised care support unit. In this way, shortcomings in the care may be

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<sup>80</sup>French Answer to Questionnaire on Health and Long-term Care of the Elderly , 2002, p. 16.

<sup>81</sup> Danish Answer to Questionnaire on Health and Long-term Care of the Elderly, p. 11.

<sup>82</sup> German Answer to Questionnaire on Health and Long-term Care of the Elderly , 2002, pp.20-21.

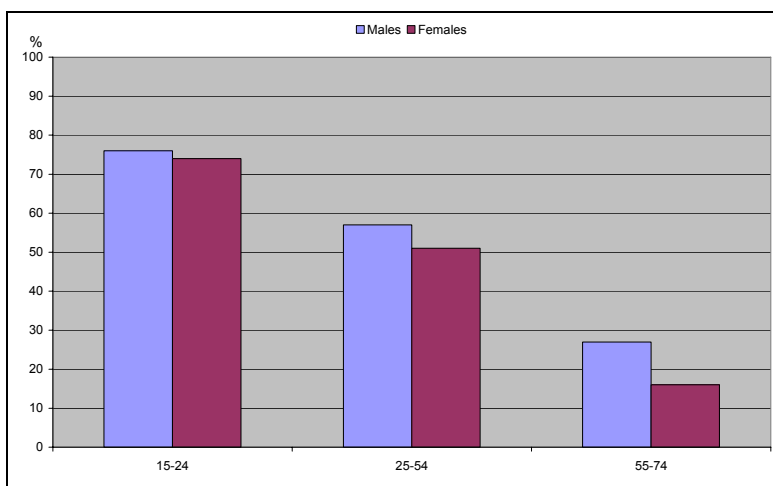
detected early and measures of improvement can be taken. This also serves as a support for and protection of the informal carer. Training is also available to the informal carer.

It is a matter of discussion whether quality is better assured directly by the user or by public authorities. However, from a vulnerability reduction point of view, it is a source of concern that informal care is becoming more prevalent in a period of dramatically ageing populations which coincides with a reduction in the workforce, especially that of health care professionals, and potentially with a reduction in the availability of family informal care. Quality seems to be closely related to the availability of competent carers.

### *Technological responses*

Technology is a two-bladed sword when it comes to elderly empowerment. As the situation is today, the elderly lag behind the younger generations when it comes to technology use, especially digital technologies. According to a recent Eurobarometer survey on Internet usage, 27 percent of European males and 16 percent of females aged 55-74 use the Internet, compared to the general average of 51 percent and 43 percent, respectively. The gap is bigger when comparing the oldest and youngest age groups (see figure 4). In terms of gender differences, elderly women lag behind all other user groups, with only 16 percent using the Internet. However, the gender gap narrows considerably in the younger age groups.

**Figure 4 – Internet usage by age and sex**  
in percent, 2004



Source: Eurostat, 2005.

It is uncertain whether this situation will continue in the future. There are those who think that the digital revolution is a one-time experience which requires a certain transition period, and that future generations which are comfortable with computers will adapt more easily to similar technologies when they grow old. However, it may also be that with the current pace of technological change technology will continue to create barriers for the elderly population in the years to come. If the latter is the case, technology could contribute to increased isolation among the elderly, and political disempowerment, if planned e-government projects are implemented.

In a more optimistic scenario, technology could become an important ally in the day-to-day life. Three major applications can be identified: communications, health and living environment. By means of rapid broadband communication technologies, transferring image and sound, the elderly can maintain close and affordable contact with family and friends, take care of daily activities such as shopping from home, and participate in societal activities on equal terms as other more mobile citizens. In that respect, e-government initiatives are of particular importance. Secondly, health applications of technology such as tele-health and tele-medicine make it possible to treat and monitor patients at a distance. This can be interesting from a cost-saving point of view, especially in sparsely populated areas, and it may also constitute a useful and relatively cheap supplementary tool in the follow-up of patients with chronic conditions. Current technology can furthermore be used to monitor post-operative and post-stroke conditions, emerging as a possible substitute or complement to hospitalisation. Products already on the market offer video patient stations with possibilities to connect a hand-held colour camera, telephonic stethoscope, blood pressure and pulse metres as well as glucose metre and digital thermometer.<sup>83</sup>

Other health-related technologies include decision support systems, emergency response systems, sources of health-related information for consumers, as well as compliance-enhancing technologies for treatment and lifestyle regimens. Information technologies can be used to transmit reminders of treatment – reminders that could be embedded into everyday objects and devices (television, computer or other household devices).<sup>84</sup> Diagnostics can be plugged into computers and personal digital assistants (PDAs). This is particularly well developed for diabetics with glucometres and nutrition analysis programmes available for such mobile devices.<sup>85</sup>

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<sup>83</sup> Information from American Telecare, <http://www.americantelecare.com/>, accessed 10 January 2005.

<sup>84</sup> Pew and Van Hemel (eds.), 2004, p. 29.

<sup>85</sup> *Ibid.*, p. 187.

‘Living environment’ technology applications also have to do with enablement of the elderly, and aims at compensating for reduced motor and sensory capabilities, as well as cognitive declines.<sup>86</sup> Prototypes of ‘smart’ homes have already been developed in the UK, which include control systems to monitor access, (lock or unlock doors), smoke and fire detectors and security systems and electric appliances.<sup>87</sup> Surveillance functions could also be added with sensors measuring room temperatures and motion; video surveillance is another possibility, all of which could trigger an emergency response if it seems that the user is particularly inactive.

A widespread application of such technologies raises a series of concerns. The most important of these is access, both in terms of economic cost and facility of use. It must thus be a high priority to reduce costs as much as possible in order to allow for a wide distribution. Equally important is the product’s design and ‘cognitive accessibility’, i.e. that the facility of use is equal for persons with different technical skills. The technology must be reliable. Life or death may rely upon it in the most extreme cases, and the whole objective is to decentralise health care and long-term care and to make the elderly more independent. Reliability can be enhanced through the use of self-healing or fault-tolerant systems.<sup>88</sup> Ethical and privacy questions are also raised by the increased use of monitoring, perhaps around the clock, and digitalisation of highly personal information. Finally, the decentralisation of treatment also raises liability questions. Does this shift more responsibility to the patient? If the technology does fail, who is responsible? A possible solution to parts of this problem is the so-called ‘managed risk’, in which case the user contractually acknowledges the risks involved in this type of less conventional care. This type of regime is emerging in certain less supervision-intensive types of in-patient long-term care.<sup>89</sup>

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<sup>86</sup> Ibid., p. 33.

<sup>87</sup> Russel (1999), *op. cit.*, p. 47.

<sup>88</sup> Pew and Van Hemel (eds.), *op. cit.*, p. 34.

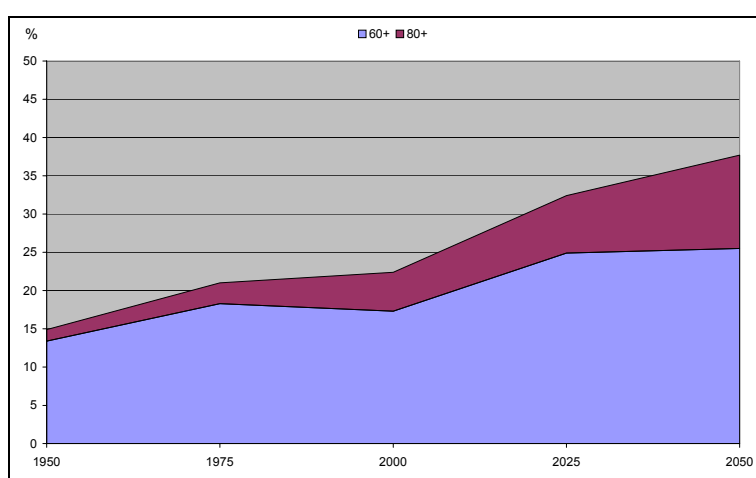
<sup>89</sup> Brodsley, Habib and Hirschfeld (eds.), 2003, p. 73.

## The Swedish context

### Population

Sweden has one of the oldest populations in Europe. The share of the 60+ population, for which Sweden is second only to Italy in Europe, is growing fast: from 22% in 2000, it is expected to rise to 32% in 2025. Within the elderly, the very old is the fastest growing age group. **The share of the 80+ population of the total population is projected to grow from 5.1% to 7.5% between 2000 and 2025.** Birth rates are high compared to the European average, at 1.5 births per reproductive woman, but below reproduction level.

**Figure 5 – Share of the 60+ and the 80+ in total population in Sweden, 1950-2050**



Source: United Nations (2002).

The Swedes are among the healthiest people in Europe according to various indicators. Life expectancy is high for both men and women, among the highest in the reference group, at birth and at 65 years, as is the disability-adjusted life expectancy.

**Table 5 – Life expectancy indicators, Sweden**

|                                     |      |
|-------------------------------------|------|
| Life expectancy at birth            | 79.6 |
| Life expectancy at 65               | 18.4 |
| Disability adjusted life expectancy | 71.8 |

Source: WHO (2003).

In terms of lifestyle, the Swedish population scores very well on alcohol consumption, which is among the lowest in Europe, and on smoking, with only 18 percent smokers among the adult population (15+). On the

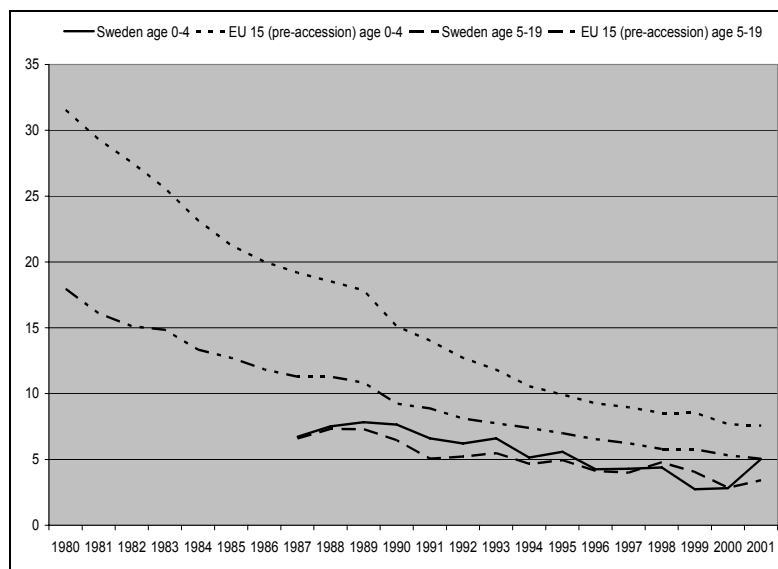
other hand, obesity levels are rising.<sup>90</sup> In 2003 about 44% of the male adult population was overweight, compared to 30% of female adults, an increase by respectively 32 and 37 percent from 1980-81.<sup>91</sup> For persons in the age groups 16-24 and 25-44, overweight prevalence has almost doubled.

Main causes of death in Sweden are cardio-vascular diseases and cancers for all age groups. For those aged 65 or more, cardio-vascular diseases are dominant. The number of deaths from cancer for those aged 25-64 is the third-lowest of EU countries, at 96.7 deaths per 100 000 inhabitants.

When it comes to deaths from external causes of injury and poison, Swedish performances are mixed. Figure 6 shows that standardised death rates among children aged 0-4 is very low compared to the EU-15 average, and has halved since systematic recording started in the mid-1980s. Similar progress has been made in the subsequent age group 5-19. Standardised death rates among the elderly (65+), dropped significantly in the early 1980s, but have since then stagnated and even slightly increased. This places Sweden in the mid-range of EU-15 countries, but well ahead of other Nordic countries such as Denmark and Finland, according to the last available complete set of figures from 2001. However, as noted in the first section of the study, this mixed performance is not related to fall-related injuries, where Sweden has low mortality rates, but to other accidents (fires, drownings, etc.).

**Figure 6 – Standardised death rates for external cause of injury and poison**

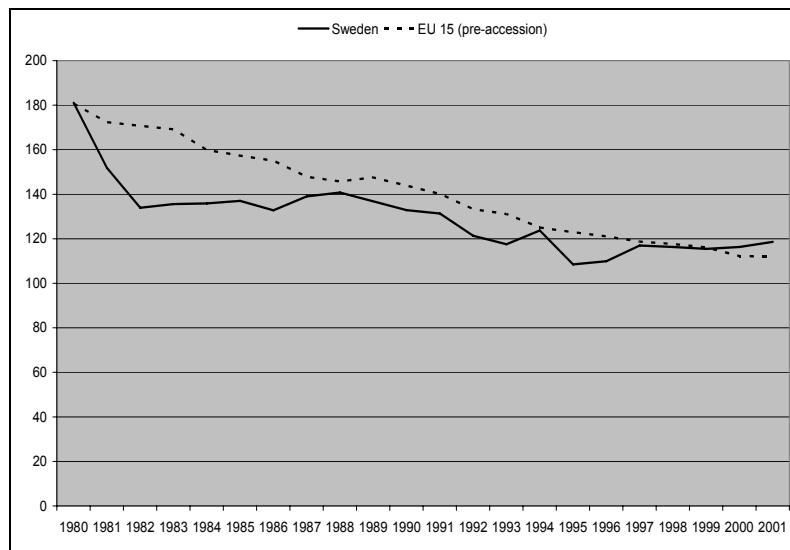
(a) Number of fatalities per 100 000 persons in 2002, ages 0-4 and 5-19



<sup>90</sup> According to WHO definitions. Overweight: with a body mass index between 25 and 29.9. Obese: with a body mass index equal to or above 30.

<sup>91</sup> Institutet för hälso- och sjukvårdsekonomi (2004), p. 15.

(b) Number of fatalities per 100 000 persons in 2002, age 65+



Source: WHO regional office for Europe: European Health for All Database.

### *Health and welfare system*

Swedish health care for the elderly is characterised by high accessibility – it is universal – and high quality of the services provided. Health care is to a major degree decentralised and managed by two major actors, the municipalities and the county councils. There are 289 municipalities in Sweden, with populations varying from about 3 000 to 740 000 individuals, and 21 county councils. The municipalities and county councils have quite far-reaching discretion in their health policy and set standards according to available funds and local political objectives. Cooperation between these two administrative units has been the subject of several studies and reviews in the last decade, but still seems to have room for improvement. User satisfaction with the health services are relative low compared to European figures. According to a Eurobarometer study performed in 1998, 57.5 percent of Swedes were satisfied with the health services provided, and 26.1 dissatisfied.<sup>92</sup> Less satisfied users were only found in Italy, Portugal, Greece and the UK.

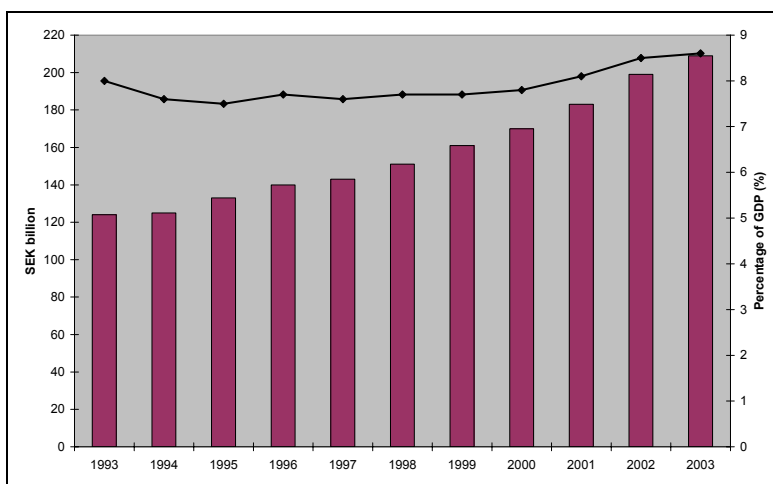
The health care system has gone through a series of reforms in the 1990s, most notably the transfer of care for the elderly and the physically and mentally disabled from the county councils to the municipalities in 1992. This transfer is in large part responsible for the decline in the share of health expenditures (excluding care financed by municipalities) in the GDP between 1992 and 1995 (see figure 7). The Swedish National Board of Health and Welfare estimated in 2000 municipal spending for care to the elderly and the disabled

<sup>92</sup> Cited in European Observatory on Health Care Systems (2001), p. 57.

represents 15 percent of human resources in the municipal health and social care, or about 0.7 percent of GDP.<sup>93</sup>

**Figure 7 – Health care expenditures in Sweden\***

In 2003 prices (bars, left scale) and as percentage of GDP (line, right scale)



\* The costs for municipally financed care and nursing are not included

Source: Socialstyrelsen, 2004b.

Provision of both health care and long-term care is a public responsibility, but it involves different institutional actors. Health care is in general a regional mission of the county councils, but in the specific case of the elderly, the responsibility is shared with the municipalities. The government and the Parliament make legislation and formulate guidelines shaping the provisions of the care given. The county councils employ general physicians for primary care and are responsible for hospitals. Municipalities are responsible for long-term care in all types of residential housing (long-term care hospitals, nursing homes, old-age homes, service homes, group homes and day care facilities). Municipal long-term care can be extended to elderly living in their own homes, through home nursing and the provision of assistive devices. However, such out-patient municipal health care does not include general physicians. Furthermore, municipalities have to pay for all patients in hospitals who have finished their treatment and are waiting for adequate municipal housing.

The public health system is funded by local (municipal or county) taxes, in addition to state grants. Users pay only a share of the real cost – admittedly, a share which has substantially risen in recent years. The cost of a visit to a doctor varies between SEK 100-150 for primary care and about SEK 200 for specialist care (the prices are set by the counties). The upper ceiling of payment on doctor fees is set at SEK 900

<sup>93</sup> Socialstyrelsen (2004b), p. 11.



during a twelve-month period. All in all, an average user spent SEK 2 100 on health care in 1999 (including drugs and dental care).

Long-term care charges are individually set by the municipalities, but the Social Services Act has set maximum rates for both home services and in-patient care recipients. The rates vary with the recipient's level of income.<sup>94</sup>

Municipalities also provide social services. This includes most significantly around-the-clock home services, *i.e.* help with daily activities such as shopping, cooking, cleaning, etc., and personal care (getting in and out of bed, getting dressed, bathing, etc.), in addition to home nursing. In 2001, about 7.9 percent of the population aged 65 and over received such services. Of those aged 80 and more, 18 percent received home help.<sup>95</sup> However, the number of persons receiving help has decreased, whereas the service input has increased.<sup>96</sup> In 2001, about 7.7 percent of the 65+ and more than 20 percent of the 80+ lived in different forms of residential housing.<sup>97</sup>

The legal framework consists of the Health and Medical Services Act (HSL) for health care and long-term care, and the Social Services Act (SSL) for social services. The HSL prescribes rules for the prioritisation of patients, underlying values and the nature of the care given. In terms of access to treatment and time delays, it is, for instance, indicated that patients must be given access to good care within reasonable time, without further defining the waiting time.<sup>98</sup> Persons have no explicit right to health services as such, but they may claim services, a claim which is then evaluated at the municipal level, and they may also appeal the decision in the administrative court. The number of appeals is, however, very low.<sup>99</sup> Municipalities also determine the level and range of service, and eligibility criteria for access.

As patients' rights are developed only to a certain degree within both legislations, monitoring is an important task of the central administration to ensure a satisfactory service level. This is undertaken by the *National Board of Health and Welfare* (Socialstyrelsen) for health care and by the *County Administrative Boards* for social services (see annex 1 for other stakeholders).

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<sup>94</sup> Swedish Social Services Act, Socialtjänstlag (2001:453) 8. kapitel, 5§ , 1 and 2.

<sup>95</sup> Swedish Ministry of Social Affairs (2002): Answer to Questionnaire on Health and Long-term Care of the Elderly, p. 9.

<sup>96</sup> Ibid.

<sup>97</sup> Ibid.

<sup>98</sup> Swedish Ministry of Social Affairs (2002), *op. cit.*, p. 3.

<sup>99</sup> Ibid., p. 10.

Health care and long-term care to the elderly have been subject to many reforms and reviews in the last 15 years. The most wide-reaching reform (*Ädelreformen*) took place in 1992, when the responsibility for housing of the elderly and the disabled were transferred from the county councils to the municipalities in order to **integrate social and care services**, and to provide good housing and living conditions. Second, there was the National Action Plan for the development of health and medical care, launched in 1999. The plan aimed at increasing the number of general physicians in primary care, and to strengthen the participation of general physicians in municipal health care. Each citizen should have the right to choose their own general physician. The plan further obliged the municipalities and county councils to cooperate in order to give adequate treatment to the users. It had been observed ever since the reform in 1992 that the **cooperation between municipal home nursing services and primary care general physicians was incomplete**. General physicians had and still have a tendency to prioritise patients well enough to show up at the emergency room or the medical centre, and not carry out home visits to severely ill patients who receive home nursing from the municipality.<sup>100</sup> It is appropriate to mention that the average Swede consults a general physician 2.9 times per year, a number which is very low compared to the EU-15 average of 6.2.<sup>101</sup>

Swedish authorities have since the 1980s been active within the field of accident and injury prevention as a result of the Health and Medical Services Act and the following important official health policy document “Health Services in the 1990s” (HS 90). The HSL urges the health services to become more involved, not only in disease prevention but also in safety promotion. Based on these documents and the experiences and success of the first comprehensive evaluation of a community intervention programme in the Falköping municipality, aiming at promoting safety and preventing injuries at the local community level, the first “Health for all” programme covering all areas and all levels of accident and injury prevention and safety promotion was established at the national level in 1986. It started off as a governmental initiative against unintentional injuries within the framework of the National Board of Health and Welfare (Socialstyrelsen). In its initial phase, it focused on monitoring and analysing the magnitude of the problem and causal pattern, prevention-orientated classification of injury data, as well as establishing cross-sectoral cooperation on local, regional and national level. During that period, and on a Swedish initiative, the concept of a Safe Community as an important part of the programme was launched in collaboration with the World Health Organisation (WHO).

In 1992 a new National Institute of Public Health (NIPH) was established. The programme was reorganised and became one of the main national public health programmes at the NIPH, the National

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<sup>100</sup> Swedish Ministry of Health and Social Affairs (2004), p. 60.

<sup>101</sup> European Observatory on Health Care Systems (2001): op. cit., p. 41.

Safety Promotion and Injury Prevention Programme. It was enlarged and included since then also intentional injuries like suicide, self-harm and violence. Safety for the elderly was given high priority and a nationwide project “Stay on your legs!” (Håll dig på benen!) with focus on prevention of fall-related injuries was initiated. In 2000 the NIPH was designated as a WHO Affiliate Safe Community Support Centre. After institutional reorganisation of the National Institute of Public Health in 2002, due to the new national public health targets, the programme was transferred to the Swedish Rescue Services Agency.

Work at the national level is coordinated in a cross- sectoral working group (the SAMS group) comprising major stakeholders within child care, physical environment (roads, work safety and housing), consumers, municipalities and county councils, as well as SRSA and the National Institute of Public Health. The SRSA leads the national awareness-raising work relating to accident and injury prevention and co-operates on the local level closely with current and potential Safe communities by providing advice and training. Implementation of the programme, now called the Swedish Safety Promotion Programme, is thus concentrated at the local level, and some municipalities have had great success in their accident and injury-prevention work. One example is the municipality of Lidköping which experienced a halving of persons receiving hospital treatment for hip fracture between 1995 and 2001.<sup>102</sup>

Yet, there are still some problems to solve. In a 2003 evaluation of the accident and injury prevention work of these municipalities, **shortcomings were detected in the level of cooperation with county councils** with low participation of clinics and hospitals in child safety work and registry of injury mentioned as concrete example.<sup>103</sup> A local report on injury registry gives a detailed description of problems encountered in this type of activity. The municipality of Nacka tried out injury registration at primary healthcare emergency rooms in the year 2000. The experience was deemed negative because of the low quality of the injury reporting questionnaire (it lacked a specific box for gender and age, for instance) and the lack of information from the municipality as to how the registry would be used.<sup>104</sup> There are, however, positive experiences from other parts of Sweden. In the former county of Skaraborg in western Sweden, comprising 17 municipalities, there is since 1998 a well operating population based injury surveillance system with high data quality operated by the Health Services.

Another problem mentioned in the SRSA report was that **accident and injury prevention was rarely integrated into everyday work**, and that a holistic approach was lacking. Furthermore, cooperation with other sectors within the municipalities could be difficult; the fire and rescue services were not always

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<sup>102</sup> Lidköping kommun (2003), op. cit., p. 5.

<sup>103</sup> Swedish Rescue Services Agency (2004), p. 7.

<sup>104</sup> Eckerman (2001), p. 4.

committed. SRSA suggested in their evaluation that Safe Community work and work stipulated in the Civil Protection Act should be joined together.

A recent development in preparedness work is the adoption in January 2004 of the Civil Protection Act (2003:778), which replaces the Swedish Rescue Services Act and aims at clarifying the roles, tasks and responsibilities of the different actors in the field of civil protection. The Act sets national objectives to ensure equivalent and satisfactory civil protection for life, health, property and the environment, although with consideration for local conditions; and furthermore stipulates the different responsibilities of individuals, municipalities and the State in risk prevention and emergency response. Municipalities are from now on obliged to establish programmes of action for emergency response and prevention; promote safety for the population living in the municipality, and also plan for other emergencies than fire. Evaluation of response operations as well as investigation into causes shall be strengthened. Meanwhile, individuals are obliged to draw up written accounts of fire prevention measures, which is to be supervised by the municipalities. The State is responsible for rescue operations and general emergency organisation, and supervises the municipalities through the County Administrative Boards of the Swedish Rescue Services Agency. There is a particular focus on fire prevention, but preventive measures must also be taken against other emergencies. Another interesting development is the 2003 adoption of a national public health policy. It aims to reduce social, ethnic and gender disparities in health as well as promote societal conditions which ensure good health, for all. One of the eleven domains of objectives specified in the National Public Health Objectives Bill is “Healthy and safe environments and products”, with direct reference to accident prevention.

### *Sources of concern*

A growing challenge is **the increasing gap between available resources and needs of the ageing population**. County councils and municipalities have reached the maximum local taxation levels, while facing increasing health costs. Meanwhile, budgetary discipline is becoming increasingly important. The Government has the intention to raise regional and local transfers, but this is not considered sufficient. The current institutional reality with shared responsibility between municipalities and county councils seems to be negative in terms of cost-efficiency, and also in terms of risk prevention. It is hard to find sufficient funds for risk prevention in times of economic stress, and furthermore, a functioning risk prevention policy depends on a stable and good relationship between social and primary care actors. General physicians must be better included in the preventive work at the local level.

Several reviews have been carried out to measure the results of these reforms and the quality of health care in general. The State Audit Institution concluded in their report (*Vård och omsorg för äldre – analys av*

*problem och förslag till åtgärder*, Riksrevisionsverket, RRV 2002:28, 2002) that there were still serious problems of coordination and cooperation between the county councils and the municipalities (especially within the fields of home health care, rehabilitation and the provision of assistive devices), and that this may have negative economic effects, in the sense that each care unit has short-term economic incentives to reduce their own budget, and transfer the patient on the budget of somebody else. Furthermore, municipalities had problems finding highly-qualified personnel for their home nursing and rehabilitation services. As observed by a previous study, as a result of the shortened treatment periods in hospitals the care burden of people with substantial care needs has been transferred to municipality care services and to primary care functions (general physicians).<sup>105</sup>

Another commission (*Samverkansutredningen*, SOU 2000:114, 2000) looked more closely into the cooperation between county councils and municipalities and suggested solutions within the current institutional framework. The panel found that increased coordination was particularly necessary in the shared responsibility for home nursing, rehabilitation and assistive devices, and suggested increased cooperation through special ‘cooperation groups’ (*gemensam nämnd*). A new law of 1 July 2003 opened up for this new type of cooperation, but it is too early to observe any positive effects.

The most recent commission dealing with health care is the review Commission of the 1992 Elderly Reform (*Ädelreformen*), SOU 2004:68. It found that **the reform had been largely successful; unnecessary stays in hospital had been reduced or eliminated**, as well as the number of hospital beds, and home nursing services had been extended. Meanwhile, **problems remained in the shared responsibility of home nursing** (nursing and rehabilitation). For instance, general physicians very rarely made home visits to patients who receive home nursing services. The Commission proposed that social service and medical care should be integrated also for patients living in their own home. The care must be holistic and multi-disciplinary. Second, although medical care should remain the responsibility of the county councils, they would have to improve their cooperation with the municipalities and assure a stable provision of general physicians for home visits. Third and finally, collaboration between hospital care, primary health care and home nursing must be ensured as well as multidisciplinary interventions.

Finally, a Parliamentary Committee report on the future policies for the elderly in Sweden: Senior 2005 (SOU 2003:91) was finalised in 2003. This was a very comprehensive study, which made all in all 100 recommendations, under five different headings:

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<sup>105</sup> Socialstyrelsen (1996), p.132.

- Create flexible life patterns: This recommendation is closely related to the concept of lifecycles, in which it is suggested to break the collective association of age with a certain role or activity, not only professionally. It should be possible to take time off from work during what is currently considered the most work-productive ages of 30 and 40, or to develop a professional career or take adult learning courses at the age of 50. Specific recommendations include the introduction of a national project to strengthen the position of older workers and encourage work participation among those aged 50 and more; and encourage increased participation of the elderly in political groups and civil society through improved physical access to public places and more widespread consultation.
  
- Break age barriers: Negative discrimination due to ageing is widespread. The image of the elderly presented in the media should be evaluated and the needs of the elderly should be taken into account in the development of new technology, design, etc.
  
- Plan for active ageing: This general recommendation is of particular relevance to our study. A number of measures have been suggested. There should be more focus on preventive health care and ways to improve people's ability to take responsibility for their own health while ageing. This implies that the preventive health work should be inter-sectoral. Furthermore, people's ability to take responsibility for their own living and environment while ageing should be improved through better and more targeted planning in municipal housing, better physical accessibility to houses and public spaces, not only for the elderly but also for the disabled. The State should make sure main communication services are maintained in rural and scarcely populated areas. Another focus area is home care and services and their impact on older persons' health and independence. The government should thus consider a pilot project with increased access to home care and services within the framework of current legislation and improve and diversify procedures for needs assessments. Finally, people with care needs should also benefit from active ageing. Prevention and rehabilitation should be given more emphasis, as well of mainstreaming of these persons' needs in the development of leisure activities, etc.
  
- Strengthen intergenerational solidarity and responsibility. The relationship between age groups should be taken into account by policy-makers and in societal planning (increase emphasis on consequences for particular age groups in connection with questions of welfare, growth and sustainable development; support local planning through better distribution of information on market surveys and long-term effects of demographic developments; inclusion of intergenerational questions in regular population surveys), and encourage encounters across generations (increase number of meeting places, introduce mentors in the workplace).

• Clarify and secure public responsibility for elderly care. The public sector should continue to carry the main responsibility for elderly care, but it must be clarified what ‘main responsibility’ entails. It is thus suggested to widen and deepen political processes that shape public action for elderly care and improve communication of the consequences of ageing, and of public goals and objectives in elderly care. Furthermore, the government should follow up priorities made and develop individually based statistics in a way that facilitates follow-up measures and evaluations. The improved statistics should also be used to elaborating more complete and detailed analyses of how the money and resources are spent. Finally, the government should formulate a principle of ‘staying at home’. An evaluation of the term should be made both for ordinary and ‘special’ housing (different varieties of residential housing) both from an individual perspective (including ethical questions) and from a socio-economic perspective.

## Conclusion

The study has given a short overview of current and future trends and challenges that may affect the elderly's well-being and vulnerability to both unexpected and daily incidents, and different OECD countries' policy responses to these challenges. As has been shown, the issue is very complex, involving a range of different actors from different sectors, at all political levels, and is, in addition, currently subject to quite radical reform. The construction of a coherent risk management policy concerning the elderly across time and policy divisions is therefore a difficult task.

In the specific case of Sweden, the review in Phase 2 will concentrate on risk management of falls among the elderly. This is a major societal problem with both an economic and human dimension. The costs engendered by falls in Sweden have been discussed above, amounting to some SEK 4.8 billion per year. What is not included in this calculation is the high degree of human suffering, the increased feeling of insecurity after a fall and the high risk of permanent disability or even death after a fracture. The management of falls involves several public service sectors, including the health care and long term care sector, housing and spatial planning, as well as more typical emergency management sectors such as SRSA and the equivalent services in the municipalities, including the fire brigades.

The review process will be introduced by the application of the self assessment and review tool briefly described in Annex 2. The questionnaire will be based on the Project's methodology, scrutinizing separately each functional layer<sup>106</sup> with regard to the coherence of its organisation (definition of roles and responsibilities, communication and co-ordination between the major players, links with other pertinent layers, etc.), effectiveness in achieving its objectives (adequate consideration of all tasks, use of relevant tools, etc.), and openness on external sources (communication with stakeholders, international cooperation).

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<sup>106</sup> This means that in practice, a specific part of the questionnaire will be developed for each layer (assessment, decision-making, etc.), and addressed to all the major actors involved in that layer. For actors intervening in more than one layer, the various parts can naturally be joined in a single document.



## Bibliography

AGE , the European Older People's Platform (n.a.): *Social Inclusion of Older People*, Age Working Paper.

Appleton, Nigel. J.W. (2002): *Planning for the majority: The needs and aspirations of older people in general housing*, Joseph Roundtree Foundation, York.

Assemblée Nationale (2004): *Commission d'enquête sur les conséquences sanitaires et sociales de la canicule*, Rapport No 1455, volume 1, Paris.

Australian Department of Health and Ageing (2004): *An analysis of research on preventing falls and falls injury in older people: Community, residential care and hospital settings*, 2004 update, p i., available at [http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-publth-publicat-document-falls\\_community-cnt.htm/\\$FILE/falls\\_community.pdf](http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-publth-publicat-document-falls_community-cnt.htm/$FILE/falls_community.pdf), accessed 19 November 2004.

Bontout, O. et al. (2002), *Personnes âgées dépendantes et aidants potentiels: une projection à l'horizon 2040*. DREES, *Etudes et résultats* n. 160 (February).

British Department of Health (2003): *National Service Framework – for Older People*.

British Department of Health, (2003): *Implementing the NSF for Older People Falls Standard – Support for commissioning good services*, Best Practice document, London.

British Diabetic Association (n.a.): *Diabetes Fact Sheet 2*, available at <http://www.diabetes.org.uk/infocentre/fact/fact2.htm#23>, accessed 19 November 2004.

Brodsky, J., J. Habib and M. Hirschfeld (eds.) (2003): *Key Policy Issues in Long-term Care*, World Health Organisation, Geneva, p. 73.

Bucher, Hans-Jörg and H.P. Gatzweiler (2004): "Raumordnungsprognose 2020: Regionen und Städte im demographischen Wandel," *Informationen zur Raumentwicklung*, No. 3, issue 4.

Burniaux, Jean-Marc; Romain Duval and Florence Jaumotte (2003): "Coping with Ageing: A Dynamic Approach to Quantify the Impact of Alternative Policy Options on Future Labour Supply in OECD Countries", *Economics Department Working Paper No. 371*, OECD, Paris.

Cambois, E. and J.-M. Robine (2003), *Viellissement et restrictions d'activité : l'enjeu de la compensation des problèmes fonctionnels*. DREES, *Etudes et résultats* n. 261 (September).

Canadian National Advisory Committee on SARS and Public Health (2003): *Learning from SARS: Renewal of Public Health in Canada*, Health Canada, Ottawa.

Casey, Bernard, and Atsuhiko Yamada (2001): "Getting older, getting poorer? A study of the earnings, pensions, assets and living arrangements of older people in nine countries", *Labour Market and Social Policy – Occasional Papers*, No. 60, OECD, Paris.

Casey, Bernard et al. (2003): "Policies for an Ageing Society: Recent Measures and Areas for Further Reform", *Economics Department Working Paper No. 369*, OECD, Paris.

- Christoffel, Katherine (2004): "On not cooking clients", *Architecture Week*, No. 206, 25 August, [http://www.architectureweek.com/2004/0825/environment\\_1-1.html](http://www.architectureweek.com/2004/0825/environment_1-1.html), accessed 26 November 2004.
- Danish Ministry of the Interior and Health, Ministry of Social Affairs and Gender Equality (2002): Answer to Questionnaire on Health and Long-Term Care for the Elderly, European Commission, available at [http://europa.eu.int/comm/employment\\_social/soc-prot/healthcare/dk\\_healthreply\\_en.pdf](http://europa.eu.int/comm/employment_social/soc-prot/healthcare/dk_healthreply_en.pdf), accessed 2 December 2004.
- Delbès, Christiane *et al.* (n.a.): *Determinants of living arrangements among older people: a European comparison*, Institut national d'études démographiques, Paris.
- Den Sociale Ankestyrelse (1999): *Rapport om kommunernes praksis ved forebyggende hjemmebesøg*, Copenhagen.
- Eckerman, Ingrid (2001): *Kan man lyckas med lokal olycksfallregistrering? Erfarenheter från Nacka 2000*, Södra länets produktionsområde, Stockholm.
- European Observatory on Health Care Systems (2001): *Health Care Systems in Transition – Sweden*, London.
- European Opinion Research Group (2003): "The Mental Health Status of the European Population", *Eurobarometer 58.2*, European Union, Brussels.
- Economic Policy Committee (EU) (2001): *The Budgetary Challenges posed by Ageing Populations: the Impact on Public Spending on Pensions, Health and Long-term Care for the Elderly and Possible Indicators of the Long-term Sustainability of Public Finance*, Brussels. EPC/ECFIN//655/01-EN Final.
- Eurostat, 2005: "Internet usage by individuals and enterprises 2004", *Statistics in Focus*, issue 18/2005, European Communities, Luxembourg.
- European Union Osteoporosis Consultation Panel (2003): *Osteoporosis in the European Community - Action Plan: A report of the key next steps towards a Europe free from fragility fractures*, p. 30. Citation from: Kanis JA *et al.* (2002): "Ten-year risk of osteoporotic fracture and the effect of risk factors on screening strategies", *Bone*, No. 30.
- Finnish Ministry of Social Affairs and Health (2003): *Trends in Social Protection in Finland 2003*, Helsinki.
- Fortuijn, Joos Droogleever *et al.* (2003): *Comparative Report on Ageing and Well-being*, p. 70, available at <http://www.bangor.ac.uk/esaw/life%20activities%20final%20report.pdf>, accessed 19 November 2004.
- French Answer to Questionnaire on Health and Long-term Care of the Elderly, European Commission, 2002, p. 16, available at [http://europa.eu.int/comm/employment\\_social/soc-prot/healthcare/fr\\_healthreply\\_en.pdf](http://europa.eu.int/comm/employment_social/soc-prot/healthcare/fr_healthreply_en.pdf), accessed 4 January 2005.
- French National Institute for Statistics and Economic Studies, available at [http://www.insee.fr/fr/ffc/chifcle\\_fiche.asp?ref\\_id=CMRCCV06101&tab\\_id=351](http://www.insee.fr/fr/ffc/chifcle_fiche.asp?ref_id=CMRCCV06101&tab_id=351), accessed 8 December 2004.

- German Answer to Questionnaire on Health and Long-term Care of the Elderly, European Commission, 2002, available at [http://europa.eu.int/comm/employment\\_social/soc-prot/healthcare/de\\_healthreply\\_de.pdf](http://europa.eu.int/comm/employment_social/soc-prot/healthcare/de_healthreply_de.pdf), accessed 5 January 2005.
- Institutet för hälso- och sjukvårdsekonomi (2004): *Kostnadsutveckling i svensk sjukvård relaterad till övervikt och fetma — Några scenarier: vårdens resursbehov och utmaningar på längre sikt*, Landstingsförbundet, p. 15.
- Jacobzone, Stephane; E. Cambois and J.M. Robine (2000): "Is Health of Older Persons in OECD Countries Improving Fast Enough to Compensate for Population Ageing?", *OECD Economic Studies*, No. 30, 2000/1.
- Jorm, Anthony F. (2005): "Social Networks and Health": It's time for an intervention trial", in *Journal of Epidemiology and Community Health*, Issue 59, pp. 537-538.
- Kannus, Pekka et al. (1999): "Hip fractures in Finland between 1970 and 1997 and predictions for the future", in *The Lancet*, Vol. 353.
- Koppe, Christina et al. (2004): "Heat-waves: Risks and Responses", *Health and Global Environmental Change Series*, No. 2, WHO Regional Office for Europe, Copenhagen.
- Kovats, Sari et al. (2004): "Heatwave of August 2003 in Europe: Provisional estimates of the impact on mortality", *Eurosurveillance Weekly surveillance report*, volume 8, issue 11, 11 March 2004, online edition at [www.eurosurveillance.org](http://www.eurosurveillance.org).
- Lawlor, Debbie A. (2001): "The health consequences of fuel poverty: what should the role of primary care be?", in *British Journal of General Practice*, Editorial, June 2001.
- Lidköping kommun (2003): *Lidköping ansöker om fortsatt status/utmärkelse som en säker och trygg kommun i Räddningsverkets nationella och WHO:s globala nätverk "Safe Communities"*, Lidköping.
- Lips, Paul (1997): "Epidemiology and Predictors of Fractures Associated With Osteoporosis", *American Journal of Medicine*, Volume 103(2A).
- Lundsgaard, Jens (2003): "Competition and Efficiency in Publicly Funded Services", in *OECD Economic Studies No. 35 2002/2*, OECD, Paris.
- Münz Rainer and R. Ulrich (1995): "Depopulation After Unification? Population Prospects for East Germany, 1990-2010". Berlin Humboldt University Working Paper, published in German *Politics and Society*, Vol. 13, No. 4.
- Murray, Christopher J.L. and Alan D. Lopez (eds.) (1996): *The Global Burden of Disease*, World Health Organisation, Geneva.
- Nationellt Centrum för erfarenhetsåterföring från Olyckor (n.a.): *Fallolyckor bland äldre – Samhällets direkta kostnader*, Swedish Rescue Services Agency, Karlstad.
- Nationellt centrum för erfarenhetsöverföring från olyckor (NCO) (2003): *Äldres skador i Sverige*, Swedish Rescue Services Agency, Karlstad.

- Nolan, Mike et al (2004): *National Background Report for the United Kingdom*, within the framework of the EU-supported project EUROFAMCARE, p. 64, available at [http://www.uke.uni-hamburg.de/institute/medizinsoziologie/ims2/gerontologie/eurofamcare/documents/nabare\\_uk\\_rc1\\_a5.pdf](http://www.uke.uni-hamburg.de/institute/medizinsoziologie/ims2/gerontologie/eurofamcare/documents/nabare_uk_rc1_a5.pdf), accessed 25 November 2004.
- Norwegian Ministry of Health and Social Affairs (1997): *Plan of action 1997-2002: Prevention of injuries at home, school and recreation: Short report*, Oslo.
- OECD (1996): *Policy implications for ageing populations*, unpublished document, note by the Secretariat.
- OECD (2000): *Reforms for an Ageing Society*, OECD, Paris.
- OECD (2001a): *Ageing and Transport: Mobility Needs and Safety Issues*, OECD, Paris.
- OECD (2001b): *Ageing and Income: Financial Resources and Retirement in 9 OECD Countries*, OECD, Paris.
- OECD (2003), *Ageing, Housing and Urban Development*, OECD, Paris.
- OECD (2004): *Strengthening Growth and Public Finances in an Era of Demographic Change*, background paper for the Ministerial Council 13-14 May 2004, available at [http://www.oilis.oecd.org/oilis/2004doc.nsf/linkto/c-min\(2004\)5](http://www.oilis.oecd.org/oilis/2004doc.nsf/linkto/c-min(2004)5), accessed 13 December 2004.
- Patel, Naina (1999): *Ageing matters - Ethnic concerns*, Report for Ethnic Minorities Steering Group, Age Concern, London.
- Pew, Richard W. and Susan B. Van Hemel (eds.) (2004): *Technologies for Adaptive Aging, Board on Behavioral, Cognitive and Sensory Sciences*, National Academies Press, available at <http://www.nap.edu/books/0309091160/html/>, accessed 30 November 2004.
- Riksrevisionsverket (2002): *Vård och omsorg för äldre – analys av problem och förslag till åtgärder*, RRV 2002:28.
- Robine, Jean-Marie, Isabelle Romieu and Melissa Jee (1998): “Health Expectancies in OECD countries”, *Reves Paper n° 317*, REVES/INSERM, Montpellier.
- Royal Commission on Long Term Care (1999): *With Respect to Old Age: Long Term Care - Rights and Responsibilities, Research Volume 2: “Alternative Models of Care for Older People”*, Chapter 8, The Stationery Office, London.
- Russell, Louise (1999): “The Future of the Built Environment”, *The Millennium Papers*, Age Concern England, London.
- Scuffham, P. et al. (2003): “Incidence and costs of unintentional falls in older people in the United Kingdom”, *Journal of Epidemiological Community Health*, Issue 57.
- Sénat français, mission commune d’information (2004): *La France et les Français face à la canicule: les leçons d’une crise*, Rapport d’information, Annexe au procès-verbal de la séance du 3 février 2004.

SNAPS, Samnordisk Arbetsgrupp för Prognos- och Specialistutbildningsfrågor (2004): *Den framtida läkararbetsmarknaden i de nordiska länderna*, available at [http://www.slf.se/upload/arbetsmarknad\\_2004\\_webb.pdf](http://www.slf.se/upload/arbetsmarknad_2004_webb.pdf), accessed 24 November 2004.

Socialstyrelsen (1996): Ädelreformen. Slutrapport.

Socialstyrelsen (2002): *Förebyggande hembesök: Erfarenheter från 21 försök med uppsökande verksamhet bland äldre*, Lägesbeskrivning, Stockholm.

Socialstyrelsen (2004a): *Äldres levnadsförhållanden 1988-2002 – Hälsa, funktionsförmåga och vård- och omsorgsmönster*, Underlag från experter.

Socialstyrelsen (2004b): *Statistik över kostnader för hälso- och sjukvården 2003*, Stockholm.

SOU 2000:114: *Samverkansutredningen*

SOU 2004:68: *Sammanhållen hemvård*

Svanström, L. (1990): "Simply osteoporosis – or multifactorial genesis for the increasing incidence of fall injuries in the elderly? The need for a scientific approach to reducing injuries", in *Scand J Soc Med.*, 18:3.

Sveriges Pensionärförbund (2004): *Kommentarer til slutbetänkandet av den parlamentariska äldreberedningen SENIOR 2005 SOU 2003:91*, available at [http://www.spfpension.se/pdf/040928\\_remissvar\\_senior\\_2005.pdf](http://www.spfpension.se/pdf/040928_remissvar_senior_2005.pdf), accessed 24 November 2004.

Swedish Ministry of Social Affairs (2002): *Answer to Questionnaire on Health and Long-term Care of the Elderly, European Commission*, available at [http://europa.eu.int/comm/employment\\_social/soc-prot/healthcare/sv\\_healthreply\\_en.pdf](http://europa.eu.int/comm/employment_social/soc-prot/healthcare/sv_healthreply_en.pdf), accessed 23 November 2004.

Swedish Rescue Services Agency (2004): *Observations following visits by the Swedish Safety Promotion Programme to the Swedish Safe Communities*, available at <http://www.srv.se/upload/f%C3%B6rebyggande/skade%C3%B6rebyggande/infomaterial/swedish%20safe%20community.pdf>, accessed 9 December 2004.

Swedish Social Services Act (2001), Socialtjänstlag (2001:453).

UK DEFRA (2004): "Fuel Poverty Monitoring – Indicators", Annex to the Government's *UK Fuel Poverty Strategy, Second Annual Progress Report 2004*.

United Nations (2003), *World Population Prospects: The 2002 Revision. Highlights*, United Nations, Department of Economic and Social Affairs, Population Division, New York.

United Nations (2002): *World Population Ageing 1950-2050*, United Nations, Department of Economic and Social Affairs, Population Division, New York.

University of Bangor (2003): *European Study of Adult Well-Being*, reports available at <http://www.bangor.ac.uk/esaw/index.htm>, accessed 19 November 2004.

- University of Bangor (2003): European Study of Adult Well-Being, reports available at <http://www.bangor.ac.uk/esaw/index.htm>, accessed 19 November 2004.
- Wangberg, Arvid (2001): *Folkehelseprosjektet – Sluttrapporten*, Østfold fylkeskommune, Sarpsborg.
- Wilkinson et al. (2004): “Vulnerability to winter mortality in elderly people in Britain: population based study”, in *British Medical Journal*, papers, available at [www.bmj.com](http://www.bmj.com), citing reference: 2004, 329:647 (18 September), doi:10.1136/bmj.38167.589907.55 (published 17 August 2004)
- Wilkinson, Paul et al. (2001): *Cold comfort: The social and environmental determinants of excess winter deaths in England, 1986-1996*, Joseph Roundtree Foundation, available at <http://www.jrf.org.uk/knowledge/findings/housing/pdf/N11.pdf>, accessed 22 November 2004.
- Wolf, Douglas A. (2001): “Population Change: Friend or Foe Of The Chronic Care System?”, *Health Affairs*, Volume 20, No. 6.
- Working Party on Accidents and Injuries (2005): Focus on elderly safety, part 1, *Newsletter of the Working Party on Accidents and Injuries*, Volume 1, Issue 2, European Union, Luxembourg.
- World Health Organisation (2003): *Atlas of health in Europe*, Regional Office for Europe. Geneva: WHO.
- World Health Organisation (2002a): *Active Ageing – A Policy Framework*. Geneva: WHO.
- World Health Organisation (2002b): *Innovative Care for Chronic Conditions: Building-Blocks for Action*, WHO, Geneva.
- World Health Organisation, WHOSIS database, revised 2002 burden of disease statistics.
- World Health Organisation regional office for Europe: European Health for All Database, available at <http://www.who.dk/hfadb>, accessed 5 January 2005.
- World Health Organisation, regional office for Europe (2004): *What are the main risk factors for falls amongst older people and what are the most effective interventions to prevent these falls?*, Copenhagen.

**Annex 1. Description of the risk management system regarding the elderly**

| Functional layers      | Actions   | Authorities   |
|------------------------|---|---|
| Assessment             | Sector-specific vulnerability assessment              | Ministry of Defence<br>Swedish Rescue Services Agency<br>Swedish Emergency Management Agency<br>National Institute of Public Health   |
|                        | Development and promotion of risk assessment tools    | Swedish Rescue Services Agency  |
| Policy decision-making | Resource allocation (and cost-benefit considerations) | Ministry of Health and Social Affairs<br>Municipalities (290)<br>County Councils (21)<br>Ministry of Finance<br>Ministry of Industry, Employment and Communication<br>Ministry of the Environment and Community Development |
|                        | Strategic co-ordination and supervision               | Swedish Rescue Services Agency<br>SAMS group<br>National Institute of Public Health<br>National Board of Health and Welfare<br>National Social Insurance Board  |

|                                    |  |  |
|------------------------------------|--|--|
| Framework conditions               | Development and use of standards and certification | National Board of Housing, Building and Planning<br>National Board of Health and Welfare<br>Swedish Consumer Agency<br>Swedish Road Administration<br>National Post and Telecom Agency |
|                                    | Legal and regulatory framework                     | National Board of Health and Welfare<br>County Administration Boards<br>National Social Insurance Board  |
|                                    | Research and development                           | National Board of Health and Welfare<br>National Institute of Public Health<br>Swedish Institute for Transport and Communication Analysis  |
|                                    | Education  | Swedish Rescue Services Agency   |
| Protection                         | Create, improve and adapt protective mechanisms    | Swedish Rescue Services Agency<br>Local fire brigades<br>SAMS group<br>Swedish municipalities and county councils  |
| Information                        | Awareness-raising among public actors and users    | Swedish Rescue Services Agency<br>National Institute of Public Health<br>National Board of Health and Welfare<br>Swedish municipalities and county councils                            |
| Feedback and organisational change | Feedback and learning mechanisms                   | NCO/Swedish Rescue Services Agency<br>National Board of Health and Welfare<br>National Institute of Public Health  |



## **Annex 2. Self-assessment and review tool**

Three questionnaires are proposed for public administrations to self-assess and take stock of their practices in the management of risks among the elderly:

- A general questionnaire on risk assessment, strategic decision-making, protective measures and policy feedback regarding the safety of the elderly. The questionnaire addresses in particular the clarity and consistency of the way roles and responsibilities are defined; the provisions made by the various laws concerning public safety and social welfare and their possible discrepancies; actual practices; and expected implications of recent legal reforms.
- Two “twin” questionnaires to a selection of municipalities and county councils and their national federations, with particular focus on available resources and capabilities; perceived needs and challenges; and cooperation issues.

In addition, a specific questionnaire is addressed to experts from Academia and Non-Governmental Organisations which play an important role in the prevention of and response to accidents among the elderly in Sweden. The emphasis of the questionnaire is placed on the complementarity between their actions and those of public administrations.

In these questionnaires, safety management is understood in a broad sense, including injury and accident prevention, preventive spatial planning and health care, civil protection policies, etc. Any measure aimed at assessing, preventing, mitigating and responding to risks to old persons in the context of the ongoing demographic changes should be considered as relevant (see also the note introducing each questionnaire).

## *A. General Questionnaire*

The following questionnaire aims at gathering information on the management of the elderly's safety in Sweden. Here, safety is understood as preservation from harm caused by a variety of daily hazards (falls, traffic accidents, fires, etc.) or by unusual circumstances which can be hazardous for elderly people (heat waves, frost, a disruption in power supply, etc.). Vulnerability, by contrast, is exposure and susceptibility to that harm. Finally, safety management encompasses all activities aimed at identifying, preventing, and mitigating accidents and addressing their consequences, such as home care, health care, fall prevention programmes, etc. *which are specifically directed towards the elderly.*

Each section of the questionnaire is primarily addressed to the main actors listed at the top. However, other relevant actors are welcome to respond.

Respondents are welcome to provide any additional data or documentation that they find appropriate.

### A.1. Risk assessment

*Main actors: Swedish Rescue Services Agency; National Institute of Public Health; National Board of Health and Welfare; National Social Insurance Board; municipalities; county administration boards; Statistics Sweden; selected NGOs.*

#### A.1.a. Roles and responsibilities in risk assessment

- Please describe the role and responsibilities of your organisation with regard to the assessment of the elderly's safety situation.
- Please describe the way in which your organisation is structured and the resources that it devotes in order to fulfil this role. In support of your reply, please provide organisational charts, statistics, activity reports and any other information deemed useful.
- Which other actors cooperate with your organisation in assessing the safety of the elderly at national level? At local level? Please describe the coordination and communication channels.
- Does the current legislation create any obligations to monitor the safety situation of the elderly, maintain registries and investigate the causes of injuries and health problems among them? Please provide details.

#### A.1.b. Risk assessment methods

- Please describe existing programmes aimed at collecting data on the vulnerability and safety of the elderly, in particular regarding: causes of disease, injury and death; care needs; socio-economic situation and vulnerability. Please specify in each case the scale and scope of the programme (e.g. national/local, comprehensive/based on samples, etc.).
- Please provide further details if any of these programmes address specifically risks related to falls.
- Please describe ongoing or planned research programmes regarding the vulnerability and safety of the elderly, both in Academia and in governmental departments or agencies.
- Please provide further details if any of these programmes address specifically risks related to falls.
- Please describe any other tools used to assess risks to the safety of the elderly or conditions increasing the vulnerability of the elderly (scenarios, etc.).

#### A.1.c. The safety situation of the elderly

- Recent years have witnessed several national plans and reforms regarding the management of the safety of the elderly. What is the assessment of the elderly's safety situation in Sweden underlying these initiatives?
- What are the major threats to the safety of the elderly? What are the major concerns related to falls? To the extent possible, please provide data in support of your response.
- In your opinion, what will be the major threats to the safety of the elderly in twenty years? Why?
- In which area do you feel that more information would be needed regarding the safety and vulnerability situation of the elderly?

#### A.2. Principles of strategic decision-making

*Main actors: Ministry of Health and Social Affairs; Ministry of Finance; Ministry of Industry, Employment and Communication; Ministry of the Environment and Community Development; Ministry of Defence; county councils.*

##### A.2.a. Roles and responsibilities in decision-making

- Please describe the roles and responsibilities in designing and implementing national strategies for the health, well-being and safety of the elderly.

- What are the coordination and communication channels between these entities?

#### A.2.b. The decision-making process

- How are priorities defined and (if relevant) targets set at national level?
- Which stakeholders are consulted during the decision-making process, and how?
- At what stage, if any, are the costs, benefits and risks of alternative solutions considered (e.g. developing new regulations vs. providing additional resources to care services)?
- How are financial resources allocated to the measures in support of the elderly's safety? Please make a distinction between the various levels of government (central, county, municipal), and between sources of funding (general taxes, ear-marked grants, etc.).

#### A.2.c. Strategic goals

- What are the current strategic goals of the Swedish government regarding the health, well-being and safety of the elderly? Please provide further details regarding the prevention of falls.
- What are the programmes and implementation plans related to these goals?
- What are the overall public resources devoted to policies for the elderly? What is the amount of public expenditures per elderly person? In both cases, please provide a breakdown by level of government (central, county, municipal) and by type of expenditure (health care, long term care, safety-enhancing devices and works, etc.).

### A.3. Protection and care

*Main actors: SRSA; National Institute of Public Health; National Board of Health and Welfare; National Social Insurance Board; National Board of Housing, Building and Planning; the Swedish Road Administration; the Swedish Research Council; National Board of Consumer Protection; municipalities; county councils.*

#### A.3.a. Risk prevention

- Please describe the role and responsibilities of your organisation with regard to the prevention of accidents for the elderly, from the supply of assistive and protective devices to the promotion of healthy lifestyles.

- Please describe the way in which your organisation is structured and the resources that it devotes in order to fulfil this role. In support of your reply, please provide organisational charts, statistics, activity reports and any other information deemed useful.
- Please provide further details in the specific case of falls.
- To what extent do these responsibilities result from legal obligations? Please provide complete references to the laws in question.
- Are these actions coordinated with those of other organisations? If yes, please describe.
- What is the role of the SAMS group and how is it articulated with other actions in this area?

#### A.3.b. Structural adaptation

- Please describe the role and responsibilities of your organisation with regard to the adaptation of housing structures and public infrastructures to improve their accessibility and safety of use for elderly people.
- Please describe the way in which your organisation is structured and the resources that it devotes in order to fulfil this role. In support of your reply, please provide organisational charts, statistics, activity reports and any other information deemed useful.
- To what extent to these responsibilities result from legal obligations? Please provide complete references to the laws in question.
- Are these actions coordinated with those of other organisations? If yes, please describe.

#### A.4. Feedback and learning from experience

*Main actors: SRSA/NCO; National Institute of Public Health; National Board of Health and Welfare; selected NGOs; selected academic experts.*

##### A.4.a. Learning capacities

- What are the institutions in charge of investigating the causes of accidents or dysfunctions in safety management? Please describe their mandate, scope of action and legal investigation powers in detail. What are their means for reporting or communicating their findings?
- What are the channels for exchanging experience with other countries?

- How are the lessons from national and foreign experiences integrated into policy-making?
- Please provide the recent examples of policy measures triggered through this channel.

#### A.4.b. Recent evaluations and reforms

- What are the results of the adoption of the Civil Protection Act in 2004? Please distinguish between observed and expected results.
- Has there been any systematic evaluation of prevention and/or structural adaptation measures (in terms of harm avoided, increased lifespan, cost savings, etc.)? If yes, please provide details and references.
- Several evaluations of health and long-term care for the elderly have been carried in Sweden in recent years, notably: the *Samverkansutredningen* (2000), *Vård och omsorg för äldre – analys av problem och förslag till åtgärder* (2002), the report of the review Commission of the *Ädelreformen* (2004), and the Parliamentary report Senior 2005. Please describe the institutional context in which each of these evaluations has been decided, as well as its tangible consequences (if any).

#### A.4.c. Local experiences

- Is there any national monitoring of prevention and care measures at the level of counties? of municipalities? If yes, on which type of information is it based?
- What is the degree of disparity observed in care and social services provided to the elderly at the local level? What are the sources of these disparities?
- To what extent do these disparities match with differences in safety records at the local level?
- Are local or geographically delimited experiences often used as a basis for the design of national policies in the field of safety management for the elderly? Please provide examples.
- What are the institutional mechanisms for learning and sharing lessons from these experiences?
- In particular, how is the experience of the Safe Communities Network used?
- What are the tools used by national authorities in order to identify and promote good practices at the local level?

#### A.5. Self-assessment

*All actors*

Please identify the major strengths and weaknesses of the management of the elderly's safety in Sweden in the following areas. Please provide data and examples wherever possible.

- Identification of hazards for the safety of the elderly
- Detection of vulnerable individuals or groups of individuals
- Vulnerability reduction measures targeted at specific groups
- Awareness-raising on the old-age vulnerabilities and the risks related to falls
- Holistic approaches to fall prevention and mitigation
- The early detection of and response to potential crises for the safety of the elderly (e.g. due to extreme weather conditions, power blackouts, etc.).

*B. Questionnaire to selected municipalities, to 'Landstingsregionala pensionsråd (committees for elderly people) and the Swedish Association of Local Authorities*

The following questionnaire is addressed to a selection of municipalities and to the Swedish Association of Local Authorities. Here, safety is understood as preservation from harm caused by a variety of daily hazards (falls, traffic accidents, fires, etc.) or by unusual circumstances which can be hazardous for elderly people (heat waves, frost, a disruption in power supply, etc.). Vulnerability, by contrast, is exposure and susceptibility to that harm. Finally, safety management encompasses all activities aimed at identifying, preventing, and mitigating accidents and addressing their consequences, such as home care, health care, fall prevention programmes, etc. *which are specifically directed towards the elderly.*

Respondents are welcome to provide any additional data or documentation that they find appropriate.

Note for the Swedish Association of Local Authorities: In responding to the following questionnaire, please provide available information for the Swedish municipalities in general (instead of “your municipality”).

B.1. Role and organisation

B.1.a. Please describe the various responsibilities of your municipality or committee with regard to the safety of the elderly in areas such as health care, long-term care, social services, public infrastructures, accident prevention and others if relevant.

B.1.b. What is the organisational structure in place to fulfil these responsibilities?

B.1.c. Which other actors does your municipality or committee cooperate with in these areas (services of the central government including the SRSA, the National Board of Health and Welfare, county councils, civil protection services, non governmental organisations, etc.)? In each case, please give a brief account of the sharing of responsibilities between your municipality and the actor in question.

B.1.d. Please provide the available statistics on the amounts and budget shares devoted by your municipality to those functions, broken down by type of expenditure (staff costs, benefits paid, equipment, etc.).

B.1.e. Please provide available data on the municipality's specific resources corresponding to those functions (grants from the central government, specific taxes, etc.).

B.2. Self-assessment



### B.2.a. The general situation

- What are the major challenges faced by your municipality or committee in ensuring the safety of the elderly? What are their causes?
- How have the elderly's safety situation and needs evolved in the past ten years in your municipality?
- How do you expect the elderly's safety situation and needs to evolve in the next ten years in your municipality?

### B.2.b. Own capacity

- How do you evaluate your municipality's capacity to fulfil its responsibilities regarding the safety of the elderly?
- Please indicate if your municipality has adequate access to each of the following resources to ensure the safety of the elderly, or on the contrary if the resource is lacking. In both cases, please provide explanations.
  - Funding
  - Human resources
  - Expertise
  - Partnerships with the private sector
  - Information regarding the situation and needs of the elderly under your jurisdiction
  - Information regarding available programmes and grants from the government.

### B.2.c. Cooperation issues

- What are the major difficulties experienced by your municipality in its cooperation with other actors involved in the elderly's safety?
- What are, in your opinion, the sources of these difficulties?

### B.2.d. The policy framework

- How do you evaluate the overall policy framework in Sweden regarding the safety of the elderly?

Please provide details for each of the following items:

- Legislation
- Degree of decentralisation
- Financial and technical support from the central government to local actors
- Local cooperation
- Sharing of information and best practices nationally and internationally
- Degree of responsibility which is left to the individuals, with regard to their actual capacity to ensure their own safety.

- Please provide your appreciation regarding the performance of existing policies in each of the following areas. Please explain:

- Knowledge of the elderly's situation and needs
- Overall balance between prevention and response
- Risk awareness of the elderly population
- Education and training.

### *C. Questionnaire to selected county councils and the Federation of Swedish County Councils*

The following questionnaire is addressed to a selection of county councils and to the Federation of Swedish County Councils. Here, safety is understood as preservation from harm caused by a variety of daily hazards (falls, traffic accidents, fires, etc.) or by unusual circumstances which can be hazardous for elderly people (heat waves, frost, a disruption in power supply, etc.). Vulnerability, by contrast, is exposure and susceptibility to that harm. Finally, safety management encompasses all activities aimed at identifying, preventing, and mitigating accidents and addressing their consequences, such as home care, health care, fall prevention programmes, etc. *which are specifically directed towards the elderly.*

Respondents are welcome to provide any additional data or documentation that they find appropriate.

Note for the Federation of Swedish County Councils: In responding to the following questionnaire, please provide available information for the Swedish county councils in general (instead of “your council”).

#### C.1. Role and organisation

C.1.a. Please describe the various responsibilities of your council with regard to the safety of the elderly in areas such as health care, long-term care, social services, public infrastructures, accident prevention and others if relevant.

C.1.b. What is the organisational structure in place to fulfil these responsibilities?

C.1.c. Which other actors does your council cooperate with in these areas (services of the central government including the SRSA, the National Board of Health and Welfare, municipalities, civil protection services, non governmental organisations, etc.)? In each case, please give a brief account of the sharing of responsibilities between your council and the actor in question.

C.1.d. Please provide the available statistics on the amounts and budget shares devoted by your council to those functions, broken down by type of expenditure (staff costs, benefits paid, equipment, etc.).

C.1.e. Please provide available data on the council’s specific resources corresponding to those functions (grants from the central government, specific taxes, etc.).

#### C.2. Self-assessment

C.2.a. The general situation

- What are the major challenges faced by your council in ensuring the safety of the elderly? What are their causes?
- How have the elderly's safety situation and needs evolved in the past ten years in your county?
- How do you expect the elderly's safety situation and needs to evolve in the next ten years in your county?

#### C.2.b. Own capacity

- How do you evaluate your council's capacity to fulfil its responsibilities regarding the safety of the elderly?
- Please indicate if your council has adequate access to each of the following resources to ensure the safety of the elderly, or on the contrary if the resource is lacking. In both cases, please provide explanations.
  - Funding
  - Human resources
  - Expertise
  - Partnerships with the private sector
  - Information regarding the situation and needs of the elderly under your jurisdiction
  - Information regarding available programmes and grants from the government.

#### C.2.c. Cooperation issues

- What are the major difficulties experienced by your council in its cooperation with other actors involved in the elderly's safety?
- What are, in your opinion, the sources of these difficulties?

#### C.2.d. The policy framework

- How do you evaluate the overall policy framework in Sweden regarding the safety of the elderly? Please provide details for each of the following items:

- Legislation
  - Degree of decentralisation
  - Financial and technical support from the central government to local actors
  - Local cooperation
  - Sharing of information and best practices nationally and internationally
  - Degree of responsibility which is left to the individuals, with regard to their actual capacity to ensure their own safety.
- Please provide your appreciation regarding the performance of existing policies in each of the following areas. Please explain:
- Knowledge of the elderly's situation and needs
  - Overall balance between prevention and response
  - Risk awareness of the elderly population
  - Education and training.

#### *D. Questionnaire to selected experts from Academia and Non-Governmental Organisations*

The following questionnaire is addressed to a selection of academic experts and Non-Governmental Organisations working in the field of the safety of the elderly. Here, safety is understood as preservation from harm caused by a variety of daily hazards (falls, traffic accidents, fires, etc.) or by unusual circumstances which can be hazardous for elderly people (heat waves, frost, a disruption in power supply, etc.). Vulnerability, by contrast, is exposure and susceptibility to that harm. Finally, safety management encompasses all activities aimed at identifying, preventing, and mitigating accidents and addressing their consequences, such as home care, health care, fall prevention programmes, etc. *which are specifically directed towards the elderly.*

Respondents are welcome to provide any additional data or documentation that they find appropriate.

##### D.1. Role and relations with other actors

D.1.a. Please briefly introduce yourself (or your organisation), and describe your past and present work related to the safety of the elderly.

D.1.b. Please delineate the geographical area in which your interventions take place.

D.1.c. Which other actors do you cooperate with in your work (services of the central government including the SRSA, the National Board of Health and Welfare, municipalities, civil protection services, hospitals, etc.)?

D.1.d. In each case, please describe the respective roles and responsibilities as well as the context of this cooperation (institutional links, contractual arrangements, informal contacts, etc.).

##### D.2. Self-assessment

D.2.a. The general situation

- What are the major challenges that you or your organisation face in ensuring the safety of the elderly? What are their causes?
- How have the elderly's safety situation and needs evolved in the past ten years in your area of work?
- How do you expect the elderly's safety situation and needs to evolve in the next ten years in your area of work?

#### D.2.b. Cooperation issues

- What are the major difficulties experienced by you or your organisation in cooperating with other actors involved in the elderly's safety?
- What are, in your opinion, the sources of these difficulties?

#### D.2.c. The policy framework

- How do you evaluate the overall policy framework in Sweden regarding the safety of the elderly?  
Please provide details for each of the following items:

- Legislation
- Degree of decentralisation
- Financial and technical support from the central government to local actors
- Local cooperation
- Sharing of information and best practices nationally and internationally
- Degree of responsibility which is left to the individuals, with regard to their actual capacity to ensure their own safety.

- Please provide your appreciation regarding existing policies and the performance/expertise of policy- and decision-makers in each of the following areas. Please explain:

- Knowledge of the elderly's situation and needs
- Overall balance between prevention and response
- Risk awareness of the elderly population.
- Education and training.





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# OECD Studies in Risk Management

## Sweden

### SAFETY OF THE ELDERLY

Looking back on the disasters of recent years alone (the Indian Ocean tsunami disaster, Hurricane Katrina, terrorist attacks in New York, Madrid and London, avian flu, the 2003 heat wave in Europe), one could be forgiven for thinking that we live in an increasingly dangerous world. A variety of forces are helping to shape the risks that affect us, from demographic evolutions to climate change, through the development of mega-cities and the rise of information technology. These changes are clearly a major challenge for risk management systems in OECD countries, which have occasionally proved unable to protect the life and welfare of citizens or the continuity of economic activity.

The OECD Futures Project on Risk Management Policies was launched in 2003 in order to assist OECD countries in identifying the challenges of managing risks in the 21st century, and help them reflect on how best to address those challenges. The focus is on the consistency of risk management policies and on their ability to deal with the challenges, present and future, created by systemic risks. The Project covers a range of risk management issues which were proposed by the participating countries and together form three thematic clusters: natural disasters, risks to critical infrastructures, and the protection of vulnerable population groups. In the first phase of the Project, the OECD Secretariat prepared a case study for each issue. The studies cover both recent international developments of interest and the national policy context, and come with a tool for self-assessment to be used later in the Project in order to review the national policies in question.

This work is now published as the OECD Studies in Risk Management.

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