# Care dependency and non-medical care use in Flanders

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#### **Abstract**

Social care needs concern the daily functioning of persons and households in the community, e.g. the performance of instrumental tasks such as shopping and preparing meals, but also personal care tasks such as washing, eating and getting in and out of bed. Persons with specific deficiencies, be it instrumental and/or personal, will tend to adopt specific problem-solving strategies, such as self-help, calling on care from relatives, friends or professional workers (cleaning, household services, personal care, transport). For planning and budgeting purposes, specifically in the context of the introduction in Flanders of social care insurance, it is essential that a reliable estimation is made of the objective social care needs of the population. The Flemish social care insurance scheme not only contributes towards the cost of recognised professional care services, it also offers compensation for informal care provided by a partner, relatives, neighbours or friends. Accurate data about the use of different types of care are therefore also required. In order to arrive at a reliable estimation of social care needs in Flanders, we utilised data on chronic limitations and disabilities from the 1997 Belgian Health Interview Survey (1) and data from a Flemish survey of the aged (75 years or over) conducted in 1994 by the Department of Sociology and Social Policy, UFSIA (2). On this basis, we estimate the total number of care dependent persons in Flanders at approximately 259,000. This total is made up of 128,000 moderately dependent, 44,000 highly dependent and 79,000 very highly dependent

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individuals aged 15 or over, and 8.000 care dependent children. Roughly 80% of those requiring care are 65 years or older. Data regarding care use among the care dependent indicate that by no means all these people call on formal care.

#### 1. Introduction

The consequences of chronic ill-health and disabilities are not merely medical. If the person affected is severely restricted in his or her ability to perform daily activities, he or she will inevitably require practical help. Besides facing medical costs that are covered largely by mandatory health insurance, care dependent individuals are also confronted with the costs of non-medical care, which they must to a large extent bear personally. In Flanders, a decree on the introduction of a care insurance was passed on 30 March 1999. The scheme, which will take effect on 1 October 2001, applies to persons afflicted by a long-term and severely reduced ability to care for themselves as a result of which they rely on non-medical assistance. From a budgetary and planning perspective, it is necessary to know when introducing a care insurance system how many individuals may be eligible. The Flemish care insurance scheme, for example, not only contributes towards the cost of recognised, professional care services, it also offers compensation for informal care provided by a partner, relatives, neighbours or friends. Accurate data about the extent to which care dependent individuals opt for the different types of care available are therefore also required. Demographic developments - more in particular the ageing of the population, and life expectancy and morbidity trends – will inevitably have a profound impact on the size of the care dependent population. These and other demand factors will, in combination with supply-related aspects, influence the future development of the care insurance system. In this paper, we shall restrict ourselves to the present situation. We shall deal consecutively with two questions: i) How many individuals in Flanders require care? and ii) To what extent are they calling either on professional care services or on informal care sources? We shall rely on, among other things, data from the 1997 Health Interview Survey (1).

#### The inadequacy of existing estimations

In recent years, scholars and advisory bodies have made various estimations of the care dependent population of Flanders, with or without an assessment of the likely cost of a care insurance. Dooghe (3) arrives at an estimate of between 65,000 and 110,000 care dependent people, which would amount to an annual cost of between BEF 2.1 billion and 5.2 billion. Pacolet (4) estimates the care dependent population at approximately 162,000. Flanders' Social and Economic Council or SERV (5) has calculated that some 221,000 individuals may be eligible for care insurance, at a cost of between BEF 6.2 and 18.2 billion per year. Baekelandt (6) arrives at a much larger group of care dependent elderly persons. He estimates the number of care dependent elderly persons who are living at home at around 853,000. In contrast to the other estimates, however, this figure relates to Belgium rather than Flanders alone.

There are a number of explanations for this great divergence. First, there is variation in terms of the categories of care dependent people that are included in the calculations. Researchers have generally based their estimations on the number of users of care provisions. There is however great variation in terms of the type of provisions (rest homes, nursing homes, home nursing, home help services) and the levels of care dependency that are taken into account. Second, different age limits are applied. Most studies merely calculate the number of care dependent elderly persons. The threshold age applied varies from 60 to 75 years.

A number of remarks are in place with regard to the methodology used in these studies. Not least because of a lack of data on the prevalence of long-term functional limitations, the existing estimations are based on the number of persons already making use of formal care. It should be pointed out, though, that estimating the number of care dependent persons on the basis of data regarding the use of home nursing or home help services and the number of care dependent people in rest homes, nursing homes or other residential care facilities, will inevitably result in an underestimation of the true extent of care dependency, as by no means all persons with a reduced capacity for self-care opt for one of the above solutions to fulfil their care requirements. Many rely instead on informal care provided by relatives or friends. As the precise number of care dependent persons in Flanders calling exclusively on informal care is unknown, we need to make an approximation. It appears from research (2) into social care among a representative sample of the aged in Flanders that 28.4% of those aged 75 or over who are living at home use informal care only (i.e. care provided by children, partner, relatives, friends, neighbours). 64.1% combine informal care with formal or commercial care. Some 74% of these individuals are elderly persons with a functional limitation.

Furthermore, researchers have restricted themselves to care dependent *elderly* persons. But while on 8 June 2000 the Flemish Regional

government opted to initially restrict the target group to people aged over 65, the decree on care insurance of 30 March 1999 does in fact prescribe no minimum age for care-insurance users. On 25 April 2001, the Flemish Regional government revoked its decision of 8 June 2000: in the first phase of the implementation of the care insurance, starting on 1 October 2001, very highly care dependent individuals, regardless of age, will be entitled to insurance benefits. Clearly it is important from a budgetary and a planning perspective that one should have insight into the prevalence of functional limitations in the elderly population, as members of the oldest age groups are particularly prone to physical dysfunctions resulting in a reduced ability to care for themselves. The ageing of the population will therefore have a profound impact on the number of people eligible for care insurance and consequently on its cost evolution. However, as the Flemish care insurance is intended for all age categories it would seem appropriate to calculate the age-specific prevalence of care dependency for the entire population.

#### 2. Methods

#### 2.1 Data

#### 2.1.1 Care dependency

In order to avoid underestimation of the number of care dependent persons, which seems inevitable if one proceeds on the basis of existing user data, we have based our approach on data regarding the prevalence of chronic functional limitations. To this end, we used figures from the 1997 Health Interview Survey (1), which contains a module on the presence of long-term functional limitations due to chronic conditions.

While this method is clearly an improvement over the approach based on user data, certain obstacles remain. One important drawback is that, in the Health Interview Survey, a large proportion of the selected individuals residing in institutions could not be interviewed. The findings regarding the prevalence of ill-health obtained through the survey are therefore representative for the non-institutionalised population only (7). This is problematic for the oldest age groups, as the proportion of people residing in institutions increases sharply by age. Figures from the National Sickness and Invalidity Insurance Institute (RIZIV) show that, at the beginning of 1999, a mere 0.8% of the Flemish population in the 60 to 74 age category was residing in rest homes or nursing homes. This proportion increases

to 4.1% of people aged between 75 and 79, and continues to increase sharply to 50.5% of those aged 95 or over. A large proportion of the elderly people in rest homes and nursing homes are highly care dependent. Due to the significant underrepresentation in the Health Interview Survey of institutionalised elderly persons, simply using data from the survey relating to persons from the age of 75 would result in a serious underestimation of the number of people requiring care. We have tried to overcome this obstacle as much as possible by combining the data from the Health Interview Survey with other sources of information. For the estimation of care dependency in the oldest age group, we used data regarding functional limitations from a 1994 survey of a representative sample of aged persons (75 years or over) in Flanders conducted by the Department of Sociology and Social Policy, UFSIA (2), in which the institutionalised population was adequately reached.

There is also a problem at the other end of the age spectrum. The module in the Health Interview Survey on the presence of long-term functional limitations was only targeted at people aged 15 or over. Therefore, we relied on data from the Health Interview Survey regarding the prevalence of protracted ill-health, chronic conditions and disabilities in the youngest age group (0-14 years).

#### 2.1.2 Care use

People who experience difficulties in performing daily activities will inevitably need to find a solution to this problem. Some will develop self-help strategies and make use of technical aids, while others will call on relatives or friends, and others yet will turn for help to professional services (i.e. government organised or subsidised care or commercial care). People may also combine various forms of care.

It is important from a general planning and budgetary perspective, and certainly in the context of the introduction of a care insurance, that one should have insight into the extent that care requirements result in the actual use of various forms of care. We shall distinguish in this respect between users of home care and users of residential care provisions. In relation to the former, we relied in part on data regarding the age categories up to 75 years from the Health Interview Survey, which contains a module on care use including questions about certain first-line provisions. Additionally, we relied on the 1994 survey of aged persons, which offers more detailed information about care use. The group of residential care users, on the other hand, is so seriously underrepresented in the Health Interview Survey that this data is inadequate for our purpose. Instead, our

estimation of residential care use is based on data from the National Sickness and Invalidity Insurance Institute (RIZIV) regarding the number of persons in rest homes and nursing homes. These figures are complemented with data regarding the number of persons residing in other residential care facilities.

#### 2.2 Measures

#### 2.2.1 Care dependency

On the basis of the questions from the Health Interview Survey, one can define a number of indicators of care dependency. Care dependency refers to the presence of functional limitations, to a status of reduced individual autonomy or capacity for self-care due to certain conditions. Various instruments have been developed to measure such limitations. Usually, physical functioning is measured in terms of a person's ability to perform certain activities of daily living (ADLs). The activities concerned are selfcare activities, such as bathing, dressing and feeding oneself. Sometimes a number of domestic activities are included, such as cooking, shopping and housekeeping. These are referred to as instrumental activities of daily living (IADLs). The methods used for operationalising and measuring functional limitations, however, remain rather diverse due to conceptual confusion and assessment problems. An estimation of the number of care dependent persons will depend largely on the measures and the scaling method applied. If, for example, individuals with IADL-limitations but no ADL-limitations are taken into account, then the group of care dependent people will inevitably be much larger. In the following paragraphs, we shall calculate the prevalence of functional limitations, restricting ourselves to persons with ADL-limitations, as the presence of IADL-limitations was not gauged in the Health Interview Survey.

An approach often used in international comparative research (8, 9) is the estimation of the prevalence of severe functional limitations. The criterion used in this method is the presence of at least one ADL-limitation, which is too restrictive for our purpose: policymakers have opted for a phased introduction of care insurance, whereby priority will be given to the most needy, but ultimately less care dependent individuals will also become eligible. It is therefore necessary that our estimations reflect the various degrees of care dependency. A further complication is that, in the preparatory phase of the introduction of a care insurance, no decision was taken on an appropriate assessment procedure to determine eligibility. As in practice a derived version of the Katz index (10) is used to assess

care requirements in terms of both residential elderly care and home help, we feel it is justified to use the same index in the present research.

The number of care dependent persons in Flanders is estimated using a (derived) Katz-index of ADL. The Katz index (see appendix 1) consists of 6 items, one per ADL, i.e. bathing, dressing, transfer, going to the toilet, continence, and feeding, each of which are assessed in terms of four levels of functioning. No Katz index was used in the Health Interview Survey. On the basis of the Health Interview Survey module on long-term functional limitations<sup>1</sup>, where more or less comparable activities have been incorporated to those used in the Katz index, we have constructed an index that resembles the Katz index as closely as possible (see appendix 2). For the age category 75 years and older, we have used figures from the 1994 UFSIA-DSSB database on the aged, which were obtained by means of a questionnaire using a Katz index.

As the age group 0-14 years was excluded from the Health Interview Survey module that measures long-term functional limitations, we have employed available data from the Health Interview Survey on the prevalence of protracted illness, chronic conditions or disabilities for the youngest age group. Suffering from a protracted illness or chronic condition, or having a disability, is not necessarily an indication of a reduced capacity for self-care. Consequently, the data might slightly exaggerate the number of care dependent youngsters.

<sup>&</sup>lt;sup>1</sup> The Health Interview Survey contains a module that gauges the presence of long-term functional limitations due to chronic conditions. The module was aimed exclusively at people aged 15 or over. It consists of two parts. The first is a screening module composed of 10 questions, which together constitute the area of "physical functioning" in the SF-36 questionnaire. The questions relate to the ability to perform the following tasks: vigorous activities (e.g. running, lifting heavy objects, participating in strenuous sports); moderate activities (e.g. moving a table, pushing a vacuum cleaner, swimming or cycling); lifting or carrying groceries; climbing several flights of stairs; climbing one flight of stairs; bending or kneeling or stooping; walking for more than a kilometre; walking a few hundred metres; walking one block; bathing, showering or dressing yourself.

A further set of questions regarding long-term functional limitations was presented to all respondents over the age of 60 on the one hand and to all those aged between 15 and 59 indicating that they are restricted in at least one of the activities mentioned in the screening module through ill-health on the other. These questions relate to the following functions: locomotion, getting in and out of bed, sitting down and standing up, dressing and undressing, washing hands and face, eating and cutting food, using the toilet, urinary incontinence, hearing, sight, chewing hard foods.

#### 2.2.2 Care use

#### 2.2.2.1 Home Care use

The most commonly used forms of home care are home help, cleaning services and meals-on-wheels. In addition, many people also rely on home nursing. Although, besides medical assistance, home nursing also involves assistance in ADLs such as personal hygiene, dressing and undressing, and transfer within the home, we shall not take this type of care into consideration in our analysis, as home nursing is covered by mandatory health insurance and is therefore beyond the scope of a care insurance.

On the basis of data from the Health Interview Survey and the UFSIA-DSSB survey of the aged, it is possible to acquire insight into the extent to which care requirements result in care use. The Health Interview Survey contains a module in which respondents indicated whether they had used certain home care provisions in the past year. For the age categories up to 60 years, the only data available concerns the use of home help. Older people were also asked whether they had used cleaning services, meals-on-wheels, a day centre or other services. For the age category from 75 years, we rely on results of the 1994 UFSIA-DSSB Survey of the aged, which – in addition to data regarding use of the above services – also offers information about informal care use and the, mostly domestic, help available from local employment agencies (PWA – Plaatselijke Werkgelegenheidsagentschappen).

We shall ascertain what percentage of people not scoring 0 on the (approximate) Katz index actually use the various types of care. Subsequently we shall compare these figures with care use by the general population, including the segment that is not care dependent.

#### 2.2.2.2 Residential care use

Persons residing in institutions are seriously underrepresented in the Health Interview Survey. Therefore, we can not base our estimation of residential care use on data from this survey. We do however have official data at our disposal regarding the number of persons in rest homes and nursing homes and other institutional care facilities and their degree of care dependency according to health insurance criteria.

#### 3. Results and discussion

#### 3.1 Care dependency

Table 1 offers an overview of the percentages of four levels of care dependency for each of the age groups. We have distinguished between entirely independent persons (no assistance required in any of the six items), moderate care dependency (a score of 1 or 2 on the Katz index), high care dependency (a score of 3 or 4), and very high care dependency (a score of 5 or 6).

TABLE 1

Percentage of care dependent individuals by age group and by degree
of care dependency – Flemish Region

		Age category					
Degree of care dependency*		0-14 year	15-44 year	45-59 year	60-74 year	75+	Total
Fully self-dependent	95% C.I.	99.2 <i>98.5-99.9</i>	99.7 <i>99.4-100</i>	98.4 <i>97.4-99.4</i>	88.4 <i>85.5-91.3</i>	69.9 <i>95.8-74.0</i>	95.6
Moderately care dependent	95% C.I.	_	0.1 <i>0.0-0.3</i>	0.5 0.0-1.1	5.0 <i>3.0-7.0</i>	18.6 <i>15.1-22.1</i>	2.2
Highly care dependent	95% C.I.	_	0.1 <i>0.0-0.3</i>	0.2 0.0-0.6	2.7 1.2-4.2	3.7 2.0-5.4	0.7
Very highly care dependent	95% C.I.	_	0.1 0.0-0.3	0.9 0.1-1.7	3.9 2.5-5.6	7.8 5.7-9.9	1.3
Total care dependent	95% C.I.	0.8 <i>0.1-1.5</i>	0.3 0.0-0.6	1.6 0.6-2.6	11.6 <i>8.7-14.5</i>	30.1 <i>26.0-34.2</i>	4.4
N		548	1488	613	482	485	

Source: 1997 Health Interview Survey – own calculations (age categories under 75 years). UFSIA-DSSB – 1994 Survey of the Aged (75 years or over).

Determination of care dependency in age categories under 75 years: see Appendix 2. Determination of care dependency in age categories from 75 years: see Appendix 1 Empty cells: no data available.

<sup>\*</sup> Determination of care dependency in age category 0-14: prevalence of protracted ill-health, chronic conditions and disabilities.

Extrapolation of these data to the entire population yields the following absolute numbers of care dependent persons:

TABLE 2
Estimation of the number of care dependent persons by age group and by degree of care dependency – Flemish Region

Degree of care dependency *	Age category							
	0-14 year	15-44 year	45-59 year	60-74 year	75+	Total		
Fully self-dependent	1.007.763	2.500.022	1.084.983	794.771	280.799	5.668.338		
Moderately care dependent	_	2.508	5.513	44.953	74.719	127.693		
Highly care dependent	_	2.508	2.205	24.275	14.863	43.851		
Very highly care dependent	_	2.508	9.924	35.063	31.334	78.829		
Total care dependent	8.127	7.524	17.642	104.291	120.916	258.500		
	1.016-	0-	6.616-	78.218-	104.446-			
95% C.I.	15.238	15.045	28.668	130.364	137.387			
Total	1.015.890	2.507.545	1.102.625	899.062	401.716	5.926.838		

Source: 1997 Health Interview Survey – own calculations (age categories under 75 years). UFSIA-DSSB – 1994 Survey of the Aged (75 years or over).

NIS. – population figure on 1/1/1999.

Determination of care dependency in age categories under 75 years: see Appendix 2. Determination of care dependency in age categories from 75 years: see Appendix 1.

We estimate the total number of care dependent persons in Flanders at approximately 259,000. This total is made up of 128,000 moderately dependent, 44,000 highly dependent, 79,000 very highly dependent individuals aged 15 or over, and approximately 8.000 care dependent children. Roughly 87% of those requiring care are 60 years of age or older, while approximately 80% are 65 or over.

#### 3.2 Care use

#### 3.2.1 Home care use

Table 3 offers insight into the extent to which care requirements result in care use. From table 3 we can ascertain what percentage of persons with care requirements (i.e. not scoring 0 on the approximate Katz index) actually use the various types of care. These figures are compared with

<sup>\*</sup> Determination of care dependency in age category 0-15: prevalence of protracted ill-health, chronic conditions and disabilities.

data regarding care use among the general population, including the segment that is not care dependent.

It appears from these figures that by no means all individuals with care requirements actually call on formal care services. For example, only 9.7% of all persons with care requirements in the 60-74 age group call on home help, just 8.7% make use of cleaning services, and 15.2% rely on meals-on-wheels. Among care dependent people aged 75 or over, some 19% call on home help, 21% make use of cleaning services, and 12.9% rely on meals-on-wheels.

It is noticeable that levels of care use among people without ADL-limitations are often not much lower than levels among the care dependent population. People often experience problems in executing domestic chores before they experience any difficulty in performing ADLs, so that they already call in assistance. Also, it is striking that informal help is very widespread. Many studies have found that the bulk of care for the elderly is provided by informal sources, while the contribution from formal care providers is relatively limited, a fact that is now also generally accepted by policymakers and politicians. This again underlines that estimating the care requirements of the population on the basis of data regarding formal care use will result in serious underestimations. This is clearly significant in the context of a care insurance that is intended also to cover informal care.

TABLE 3
Care-use by all individuals and by persons with ADL-limitations – Flemish Region

Type of service	Age category							
	15-44 year		45-59 year		60-74 year		75+	
	ADL- limitations *	all **	ADL- limitations	all	ADL- limitations	all	ADL- limitations	all
home help cleaning services meals-on-wheels informal care day centre pwa other services		0.4	7.5	0.3	9.7 8.7 15.2 1.9	2.3 2.6 2.1 0.2	19.0 21.0 12.9 98.4 1.5 3.6 11.5	7.7 19.3 7.7 92.3 0.8 2.8 12.6
N	6	1473	16	611	48	480	144	389

Source: 1997 Health Interview Survey – own calculations (age categories under 75 years). UFSIA-DSSB – 1994 Survey of the Aged (75 years or over). Empty cells: no data available.

<sup>\*</sup> ADL-limitations: care use by people not scoring 0 on the (approximate) Katz index.

<sup>\*\*</sup> All: care use by all respondents, including the segment that is not care dependent (scoring 0 on the (approximate) Katz index.

#### 3.2.2 Residential care use

Table 4 gives an overview of the number of persons in rest homes and nursing homes, and their degree of care dependency according to health insurance criteria

It appears from Table 4 that there are 8,983 moderately care dependent, 11,478 highly care dependent and 23,796 very highly care dependent persons residing in rest homes and nursing homes, which adds up to a total of 44,257 individuals. These figures are based on the assumption that persons in category O are not care dependent, those in category A are moderately care dependent, those in category B are highly care dependent, and those in category C are very highly care dependent. This definition does not correspond entirely with the previously applied definition on the basis of the (approximate) Katz index, as the categories in residential elderly care include persons affected by dementia. Individuals who, besides suffering from physical limitations, are also spatially and temporally disoriented are automatically assigned to a higher category. This again underlines that the assessment criteria are important.

If one applies the criteria used in health insurance, a significant proportion (21.6%) of the total population of rest homes and nursing homes appears not to be care dependent. Clearly, though, this does not mean

TABLE 4
Persons in rest homes and nursing homes – situation on 31 March 1999 –
Flemish Region

	<60	60-74	75-79	80-84	85-89	90-94	95+	Total
0	170	1.818	1.931	2.576	3.492	1.774	437	12.198
Α	130	1.111	1.309	1.833	2.678	1.581	341	8.983
В	219	1.346	1.733	2.272	3.484	1.922	502	11.478
С	310	2.514	3.222	4.644	7.173	4.506	1.427	23.796
Total	829	6.789	8.195	11.325	16.827	9.783	2.707	56.455
Total								
A+B+C	659	4.971	6.264	8.749	13.335	8.009	2.270	44.257

Source: RIZIV (1999) - 1300/DC.

Category O: Independent persons, not suffering from dementia.

Category A: Assistance in washing and dressing + persons suffering from dementia with no functional limitation.

Category B: Assistance in washing and dressing and assistance in getting to the toilet and/ or assistance in transfer + persons suffering from dementia needing assistance in washing and dressing.

Category C: Assistance in washing, dressing, getting to the toilet, moving about and assistance in eating and/or incontinence + persons suffering from dementia meeting criteria of category B.

that these persons are care independent according to the IADL-criteria. In the UFSIA-DSSB survey of the aged, some 38% of the elderly residing in rest homes had no ADL-limitations. Only 7% of these elderly people without ADL-limitations had no IADL-limitations either.

On the basis of the data from Table 4, we have calculated for each age category separately which proportion of the total population consists of care dependent persons in rest homes and nursing homes.

TABLE 5

Care dependent persons in rest home and nursing homes
(percentage of total population per age category) – Flemish Region

	<60	60-74	75-79	80-84	85-89	90-94	95+
Α	0,0028	0,12	0,65	1,89	3,74	6,15	6,36
В	0,0047	0,15	0,86	2,34	4,87	7,47	9,37
С	0,0067	0,28	1,59	4,78	10,03	17,52	26,62
Total	0,0142	0,55	3,1	9,01	18,64	31,14	42,35

Source: RIZIV (1999) - 1300/DC - own calculations.

NIS population figure on 1/1/1999.

In order to complete the picture of the number of care dependent persons in a residential setting, the figures in Table 5 need to be complemented with data regarding the number of persons residing in other residential care facilities. As far as disabled adults are concerned, at the end of 1998 there were 7,337 places available in facilities for non-working persons, and 1,141 in facilities for working individuals (11). Between 70 and 75% of residents of these institutions may be considered care dependent on the basis of the ADL-criteria. On 1 November 1998, the number of places available in psychiatric nursing homes stood at 3,177. In addition, figures show that at the end of 1997 there were 5,033 places available in residential homes for underage disabled persons. It seems likely that in the two latter types of institutions, too, only a small percentage of the individuals concerned are not care dependent on the basis of the ADL-criteria.

#### 4. Conclusions

In contrast to most estimations of the number of care dependent persons in Flanders, we have not based our calculations on data regarding the number of users of formal care provisions in order to, among other things, avoid an underestimation. After all, it appears that many care dependent persons do not call on formal services such as home help, cleaning services or meals-on-wheels. Instead, we based our estimations on data regarding the age-specific prevalence of functional limitations in the total population obtained from the 1997 Health Interview Survey. These data were complemented with data from our own representative survey of the aged (75 years or over) and with data regarding the number of under 15-year-olds affected by protracted illness, chronic conditions or disabilities. On this basis, we estimate the total number of care dependent persons in Flanders at approximately 259,000, some 128,000 of whom are moderately dependent, with 44,000 highly dependent and 79,000 very highly dependent individuals aged 15 or over. In addition, there are approximately 8.000 care dependent children. About 87% of the care dependent population is 60 years of age or older, while approximately 80% is 65 or over.

Data regarding care use among the care dependent indicate that by no means all these people call on formal care provisions. In fact, only 9.7% of all care dependent persons in the 60-74 age group call on home help, just 8.7% receive cleaning assistance, and 15.2% rely on meals-on-wheels. Of the care dependent persons aged 75 and over, 19.0% rely on home help, with 21% using cleaning services and 12.9% receiving meals-on-wheels.

By contrast, informal care is used very frequently: some 98.4% of care dependent elderly people aged 75 or over rely on informal care.

A health interview survey is not only a valuable instrument for gathering information about the strictly medical consequences of health problems, but also about the implications of ill-health in terms of people's ability to perform daily activities and the need for non-medical assistance due to functional limitations. In the 1997 Health Interview Survey, a large proportion of the institutionalised population could not be reached. However, levels of care dependency are especially high in this population segment. Certainly in the case of people belonging to the oldest age group, who often reside in institutions (rest homes or nursing homes), the findings of the survey with regard to the prevalence of ill-health are less representative. For this reason, we believe it to be crucially important that in the next Health Interview Survey an effort is made to try and reach the institutionalised population more adequately.

One of the objectives of the Health Interview Survey was to estimate the prevalence of health indicators in order to offer elements for a proactive health policy. The indicators of functional limitations incorporated into the survey are based on internationally applied instruments (SF-36, WHO-indicators). A significant advantage of this approach is that it allows international comparison. However, in our opinion it was a missed opportunity not to incorporate the instrument for measuring functional limitations which is used in practice in our country, i.e. the Katz index. Incorporation of the Katz index, which is already used in health insurance for determining care-requirement categories in rest homes, nursing homes and in home nursing, as well as in home help and in co-operation schemes regarding home care, would have yielded information that is more adequately geared to the present policy requirements.

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## **Appendix 1**

Katz index Score on 6	="				
Washing	Able to wash without assistance	Needs assistance in washing lower part of body	Needs assistance in washing upper and lower part of body Score: 1	Needs total assistance in washing	
	Score: 0			Score: 1	
Dressing	Gets completely dressed without assistance Score: 0	Needs assistance in dressing (lower part of body) Score: 1	Needs assistance in dressing (upper and lower part of body) Score: 2	Needs total assistance in dressing Score: 2	
Transfer	Moves in and out of chair and in and out of bed without assistance and is able to move about without assistance Score: 0	Moves in and out of chair and in and out of bed without assistance. Uses object for support when moving about Score: 1	Needs assistance in moving in or out of bed or chair and in moving about Score: 3	Does not get out of bed or sits in wheelchair and is entirely dependent on other people for moving about Score: 3	
Going to the toilet	Able to go to the toilet without assistance Score: 0	Needs some assistance in going to the toilet Score: 1	Needs total assistance in going to the toilet Score: 4	Is not able to go to the toilet or use commode Score: 4	
Continence	Full control over urination and bowel movement Score: 0	Has occasional "accidents"  Score: 1	Incontinent (urination) Score: 5	Incontinent (urination and faeces) Score: 5	
Eating	Eats and drinks without assistance Score: 0	Needs assistance beforehand Score: 1	Needs some assistance during eating and drinking Score: 6	Patient is fed Score: 6	

Fully self-dependent: Katz index = 0.

Moderately care dependent: Katz index = 1 or 2. Highly care dependent: Katz index = 3 or 4. Very highly care dependent: Katz index = 5 or 6.

### **Appendix 2**

Score on 6 items – these questions were presented exclusively to persons who had indicated in the first screening module that they were restricted through ill-health in at least 1 of 10 activities and to persons aged 60 or over.

washing: Can you wash your hands and face on your own?

Yes, without difficulty Yes, with some difficulty I can only wash my hands

and face with someone

to help me

Score: 0 Score: 1 Score: 1

**dressing:** Can you dress and undress yourself on your own?

Yes, without difficulty Yes, with some difficulty I can only dress and

undress myself with someone to help me

Score: 0 Score: 2

transfer Are you permanently confined to bed, even though there may be help to get you

out?

Yes No Score: 3 Score: 0

Do you sit in a chair (not a wheelchair) all day even though there may be help to

walk?

Yes No Score: 3 Score: 0

Can you get in and out of bed on your own?

Yes, without difficulty Yes, with some difficulty I can only get in and out

of bed with someone

to help me

Score: 0 Score: 3

Can you get in and out of a chair on your own?

Yes, without difficulty Yes, with some difficulty I can only get in and out

of a chair with someone

to help me

Score: 0 Score: 3

**toilet:** Can you get to and use the toilet on your own?

Yes, without difficulty Yes, with some difficulty I can only get to and use

the toilet with someone

to help me Score: 4

Score: 0 Score: 0

continence: Do you sometimes lose control of your bladder?

Yes No

Score: 0

How often do you lose control of your bladder?

At least once a week Less than once week, Less than once a month

but at least once a month

Score: 5 Score: 1 Score: 0

eating: Can you, without the help of someone else, feed yourself and cutting up food your-

self?

Yes, without difficulty Yes, with some difficulty I can only feed and

cutting up food myself with

someone to help me

Score: 0 Score: 6

Fully self-dependent: score = 0.

Moderately care dependent: score = 1 or 2. Highly care dependent: score = 3 or 4. Very highly care dependent: score = 5 or 6.