Health Between choice pays off and solidarity



CPB Policy Brief | 2013/03

The future of health care

Casper van Ewijk Albert van der Horst Paul Besseling

The future of health care¹

Casper van Ewijk, Albert van der Horst and Paul Besseling CPB Netherlands Bureau for Economic Policy Analysis

Summary

The Netherlands knows two standard packages of uniform health care insurance for all its citizens: the Health Insurance Act (Zvw) for curative care and the Exceptional Medical Expenses Act (AWBZ) for long-term care. The quality and accessibility of Dutch health care are high, according to international standards, among other things because of the application of advanced but also more expensive medical technology, as well as the increasing numbers of well informed citizens who know where to go for which type of care. The likely continuation of this trend will also see a continuation of the current debate on the sustainability of the care system.

This study offers a framework for thinking on the future health care system. This framework consists of four different worlds along two fundamental dimensions: those of care solidarity and risk solidarity. Care solidarity concerns the health care itself and the consideration between systems with uniformly and publicly organised health care on the one side and those that offer more differentiated and personalised care on the other. The considerations for risk solidarity relate to the desire to insure the risks and the necessity of personal financial contributions to reduce any excessive use of health care. The core issue, here, is that of the large societal value of health insurance combined with the increasing demand for freedom of choice and personal management.

Specifically for the Netherlands we conclude that limiting the standard health care packages may call for better options for supplementary insurance. Some regulation may be needed in the markets for supplementary insurance, in order to prevent adverse selection. Currently, for old age care supplementary insurance in the Netherlands is totally absent. Research into this possibility would be warranted.

In the cure, there is scope for efficiency gains by expanding co-payments targeted to specific expenditures ('value based insurance'). For the long term care, a further increase in copayments is hardly possible within the current system, especially for the low incomes.

The study shows that prevention in the form of a healthy life style would deliver large benefits for people; they would enjoy a longer life, larger personal employability and pension. The government also benefits when people use their improved health to increase their labour input and retire later, as this would yield more tax revenue and pension premiums.

¹ This is an extensive English summary of the recently published Dutch study 'Toekomst voor de zorg' (see www.cpb.nl).

Large benefits and the increasing costs of health care

Health care delivers large economic benefits. People are becoming increasingly more healthy. Life expectancy, since 1950, has increased by nine years, half of which can be attributed to health care. Treatment of chronic illnesses is also continually improving. According to conservative estimates, health care alone delivers annual benefits of between 4% and 11% of GDP, as people live longer and stay healthier. It would be tempting to set these financial benefits against health care expenditures and show that benefits outweigh these expenditures (currently 7.5% for the cure and 13% for total care). Unfortunately, this would not be a fair comparison (see Chapter 2), although figures do indicate the value of human health, also from an economic perspective.

Health care expenditure is increasing fast, faster than could be explained by ageing of the population and faster than economic growth. New medical technology continues to offer new possibilities for treatment and diagnosis. Furthermore, ever higher demands are made of the quality of health care. In the last 10 years, real health care growth amounted to around 4% annually, while GDP increased by just over 1%, and around 1% of the increase in health care could be attributed to the ageing population. These figures indicate that the expansion of care services as well as new, improved technology have made a major contribution to the growth of health care expenditure.

Table 1 Health care expenditures rise according to both scenarios

	2010	2040	
		Structural growth	Improved health care
Life expectancy at birth (in years)			
Men	78.8	83	88
Women	82.7	86	90
Health care expenditure (% GDP)			
Total expenditure	13.2	22	31
of which on curative care	8.7	13	21
on long-term care	4.1	9	9
in public funding	10.9	18	25
Cost-covering premiums (% gross family income) ^a	23.5	36	47
Employment in persons (% total employment)	12.8	22	29
^a Cost-covering taxes and premiums (% of gross family incomincome.	e), for double-in	come families on one-and-	a-half times the average

The health care share of GDP increased from 9% in 2000 to 13% in 2012. If health care expenditure continues to rise at the current pace, its share of GDP will grow to 31% by 2040. The average household would then contribute 47% of its income to publicly funded health care; currently, this level is 23%. Under a more moderate scenario, the expenditure increases to 22% of GDP. For the average household, this would mean a contribution of 36% of its income.

2 Investing in health pays off

Good health and education form the main building blocks of human capital. Healthy people, on average, are happier, live longer and contribute more to the economy. Similar to the achievement of knowledge, good health also requires investment from an early age. A certain lifestyle, whether healthy or unhealthy, generally is adopted early in life.

The benefits of healthy living are primarily reaped by the individual. One more year of life yields an increase in prosperity that equals 1% to 2% of income over the life course; depending on whether the individual uses his or her good health to learn and work longer as well as on the personal valuation of such an additional year of life (see Table 2). The Dutch National Institute for Public Health and the Environment (RIVM) has estimated that people may loose four years of their lives from smoking and three years from being overweight. Therefore, there seems to be much to gain from living a healthier life.

Table 2 Benefits of a longer lifespan of one year (per person) for government, pension funds and private citizens (% wage total)

Net income of the government ^a	Longer lifespan	Longer lifespan and employment	Longer lifespan, education and employment	
National government, incl. public health care ar	d			
state pensions	0.1	1.1	1.4	
Supplementary pensions (second pillar)	-0.3	-0.3	-0.3	
Private citizens				
Additional consumption	0.4	1.0	1.4	
Value additional life year ^b	0.7	0.7	0.7	
^a Net income received on balance by government and pension funds per year that an individual person lives longer, expressed as				
percentage of total wages (in the baseline).				
^b Calculated at 20,000 euros per quality-adjusted life year (QALY); for 50,000 euros per QALY, this would be 1.8%.				

A healthy life also contributes to the economy; annual costs related to health care and sickness absence would decline and healthy people, on average, keep working longer. Government does benefit when people live healthier lives and work longer, but this also costs more.

On the one hand, government spending increases, not because of changes in health care spending, but because of higher pension payments. The magnitude of these increases strongly depends on the institutions and particularly on the statutory retirement age. Without an increase in the retirement age, the fact that people live longer thus equals costs; after all, people who live longer receive more pension payments (both in old age pensions and supplementary pensions). Therefore, it is vital that increases in life expectancy are combined with an increase in the retirement age.

On the other hand, greater labour input and higher disposable income lead to increases in tax revenues for the government. If people live longer but do not work longer, the government's balance of higher expenditure on one side and income on the other ends up being negative (a loss of 0.2% of the national income). In contrast, if people learn or work

longer, or the government increases the statutory retirement age, the benefits for the government would increase to over 1% of the national income.

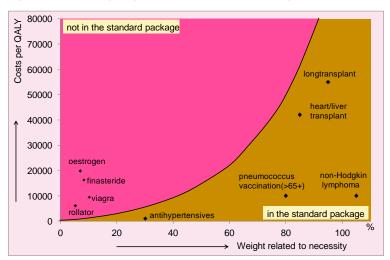
A healthy lifestyle pays off and can never be started too early. This is primarily the responsibility of the individual. Good health especially has personal benefits. Unfortunately, not all people choose a healthy lifestyle and parents are not always able to ensure optimal health for their children. Not enough exercise, unhealthy food and drinks, and smoking addiction are rampant; particularly among people of low socioeconomic status. Main causes of unhealthy lifestyles are lack of financial means, insufficient information, social standards, and short-sighted behaviour according to which people underestimate the value of possible future health benefits. This widens the social divide; people with higher educations and higher incomes, on average, invest more in their health than people with a lower education. In part, this has rational motivation; just as people choose for a larger investment in knowledge, they also choose to invest more in health. Another part is the gap in health between groups of different socioeconomic status, due to an unequal starting position of children. Prevention from a very young age is therefore important to ensure equal opportunities for all.

3 Setting limits for public health care

To date, all new medical technology could be included in the standard package of the Health Insurance Act (Zvw). Current medical care in the Netherlands is up to date and consistent with that in other countries. As a result of the continual improvements to medical technology, we live in an increasingly healthier way and grow older, but this also means that the number of people with a chronic condition is increasing. Although there appear to be no limits to technological progress, this is accompanied by increasing health care costs, possibly up to 31% of GDP by 2040 (Table 1).

As medical technology progresses in the future, a limit will have to be set to what could still be included in public health care. The current Dutch Cabinet has already decided to regulate the criterion of cost efficiency by law, thus restricting the Zvw insurance package. This requires explicitly weighing benefits against costs. The health benefits can be calculated by expressing them in quality-adjusted life years (QALYs) and subsequently calculating the value per QALY. In doing so, the weight attributed by society to certain conditions could also be taken into account (with necessary care receiving a high weight) by varying the value per QALY; for example, from 10,000 euros for a low disease burden to 80,000 for a high disease burden. Figure 1 illustrates such choices.

Figure 1 Weighing costs per QALY according to necessity



If such cost effectiveness would indeed be applied – with all its sensitivities (as was the case in recent discussions in the Netherlands on medication for Pompe disease and Fabry disease) – the value of QALYs will play an essential role. The lower the QALY value is set, the stricter the cost–benefit requirements for treatment or medication. In general, the value of QALYs increases along with the average income; as the Dutch become richer, the value of additional life years also increases. By letting the value of QALYs lag behind income growth, future cost developments could be kept within bounds.

Limited standard coverage: More supplementary insurance

If the level of care included in the standard package would lag behind the technical possibilities, some people (e.g. those on higher incomes) will turn to purchasing supplementary or superior health care that is not included in the standard insurance package. This tendency can be seen in countries with more limited standard health care, such as in the United Kingdom, the United States and Australia. Even if, from a solidarity viewpoint, one would like to discourage the private purchase of better health care, it is debatable whether or not this could be prevented. The provision of 'luxury' health care could be discouraged on a national level, up to a certain point, but in that case people are likely to search for such care in medical centres abroad.

Supplementary insurance will become more important in the future if the standard health package becomes relatively limited. People who are prepared to pay extra for a certain health care would prefer to buy additional insurance, rather than pay for the care directly, as cost levels would be uncertain and could potentially be high. Without government regulation the market for supplementary insurance moves slowly. Adverse selection whereby only people with a higher than average health risk would buy such insurance, in addition to limited transparency, would mean that the free market could only develop very slowly without some form of additional regulation. This could lead to imperfect results, with expensive insurances that would only appeal to people with the highest health risks.

Some government regulation could prevent this situation by making supplementary insurance more appealing and the market more transparent. An example of such regulation can be found in Australia, where the government, in addition to a basic health insurance, has regulated a well-functioning market for supplementary insurance, particularly aimed at people on higher incomes. For the Netherlands, such a type of insurance differentiation was argued in the Social Economic Council proposal that forms the basis of the current care system.

4 Risk solidarity and cost sharing

One of the main reasons for the public organisation of health care is that of risk solidarity, which refers to the financial risks of health care. Public regulation ensures that all people are insured against unexpected health care costs and thus have access to care they need. The prosperity gains from the removal of uncertainty could amount to a high percentage of the income (Table 3). The magnitude of such gains depends on three parameters: the degree risk aversion, the ratio between health care expenditure and consumption, and the spread of the distribution of health care expenditure. Usually, a value of 2 to 5 is assumed for risk aversion. To stay on the safe side, we used the value of 2. The share of health care costs in consumption comes to an average 0.20 for the Netherlands, of which two thirds is spent on curative care and one third on long-term care. Furthermore, we used a relative spread of 5 for old age care and 2 for curative care (defined as the standard deviation in costs compared to the average costs).

Table 3 Welfare gains of Insurance – illustrative calculation

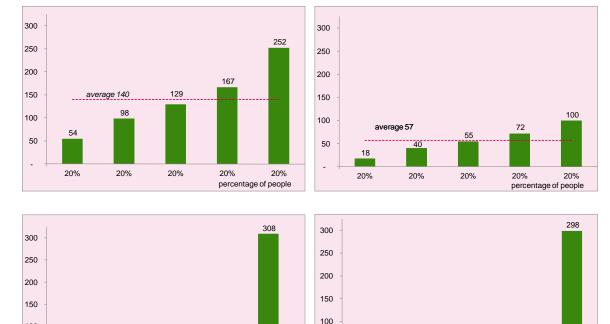
Parameters	Old age care	Cure
Risk aversion	2	2
RISK aversion	2	2
Share of health care expenditure in household consumption	0.07	0.13
Uncertainty about health care expenditure	5	2
Value of insurance		
Percentage of consumption	11	7
In billion euros, for the Netherlands as a whole	56	36

The results are purely meant as an illustration and represent only a rough and partial approach. For example, households' liquidity constraints were not taken into account, nor were ways of spreading the risks, such as by sharing costs between household partners, or financial contributions from adult children to their elderly parents. The disadvantages of insurance also were not included, such as those of moral hazard.

Despite the above limitations, the table does present certain interesting insights. In the first place, insurance appears to contribute considerably to welfare, even under the assumption of a low risk aversion. Furthermore, insurance seems particularly important for long-term care. The higher insurance value of old age care is related to the larger uncertainties about the costs (Figure 2). That the share of old age care in income is smaller does not outweigh this fact. For intensive nursing care, the annual costs are 60,000 to 80,000 euros per person,

which may cause the total costs for individual multi-annual care to amount to hundreds of thousands of euros. The probability that people may need this form of care is low. The figure shows the uneven distribution: half of the population hardly incurs any costs, while a group of 20% of people incur 80% of the costs of old age care. Saving money or using property value to prepare for such costs is not very efficient; this would force people to realise a nest egg worth several hundred thousand euros by the end of their lives.

Figure 2 Expenditures related to collective insurance of cure (upper) and old age care (lower), over the life course (left) and from the age of 70 (right) (in thousand euros, 2012 level)



Source: CPB calculations based on data from Wong (2011) 'Describing, Explaining and Predicting Health Care Expenditures with Statistical Methods', thesis University of Tilburg.

percentage of people

50

average 76

20%

20%

14

20%

20%

20%

percentage of people

66

16

20%

100

50

20%

Nevertheless, insuring all health care for the full 100% would not be the optimal solution either. It would be rather inefficient to also insure all smaller costs, and the benefits would not outweigh the administrative costs involved. And more importantly, insurance would remove the incentive for people to moderate their use of health care. This 'moral hazard' may lead to excessive demands on health care. This may be prevented by placing some of the financial risk with the consumer; co-payments and other cost-sharing arrangements would function as a constraint on the use of care.

The simplest form of cost sharing is that of co-payments. However, although this would put a brake on health care expenditure, it also does not distinguish between types of care. If designed according to the principles of 'value-based insurance', cost sharing may also induce people to go and seek treatment that provides the greatest added value or the best cost-benefit ratio. An example would be that of insurance companies waiving a co-payment when

the policy holder agrees to visit a care provider preferred by the insurance company. Another example is that of requiring a financial contribution from people who go to the accident and emergency (A&E) department of a hospital without first seeing their general practitioner. Generally speaking, cost sharing could be implemented in all situations where the risk of excessive use is the greatest.

Insuring all costs of old age care also would not be the most efficient way. Daily, small expenses often can be financed from people's personal budgets, also because consumption patterns change drastically when people become more reliant on care. Travel expenses and those related to sports and outings are greatly reduced, and often cars are also disposed of. Therefore, not all expenses need to be insured. From an economic perspective, it is better to save on premiums in times of good health rather than opting for receiving high payments in times of illness and disability. Furthermore, a health insurance may cause people to be less interested in cheaper, equally effective alternatives for regular health care options.

5 Health care solidarity and diverging preferences

Solidarity in health care is very important in the Netherlands. All people are insured for curative care according to the same standard package, which includes all types of regular medical care. Compared to other countries, also in old age care, a broad package of medical care is included. An important feature is the aim to create a uniform level of health care provision for all, irrespective of income. This is the way solidarity is perceived in the Netherlands. However, this does come at a price; the mandatory public health care regulation limits freedom of choice and lays claim on part of people's finances, for both high and low incomes.

Because of the public provision of health care, there are no choices regarding the amount and quality of care for which people would prefer to be insured. Thus, the health care system does not recognise the diversity in health care preferences between people or various groups within society. Such preferential differences are apparent in the residential housing component of old age care, in the nature of the care, the free choice of supplier, and/or in less urgent or less necessary medical treatments. Differences in preference related to urgent or necessary care are less probable.

Publicly funded health care lays a large claim on finances that could be used for other consumption, certainly at further increases in future health care expenditure. If these expenditures continue to increase at the rate of the last 10 years, 74% of the future income growth for lower income households will have to be spent on additional health care costs. This may increase the pressure on the solidarity of high income households. The current health care package does not distinguish between high and low incomes, although on average low income households use the provided health care more often. There are two possible explanations for this fact, with different consequences for the preferred care. The

first explanation for why people with a lower socioeconomic status use health care more often is that, generally speaking, they are less healthy. Insuring this difference is an expression of risk solidarity; healthy people are paying for less healthy people. The second explanation is that, under equal health conditions, low income households use the available health care more often. This applies, for instance, to publicly funded old age care, which is used relatively more often by people with a lower socioeconomic status. This care solidarity is in addition to the solidarity in the field of health care financing, which is for the large part dependent on income. However, solidarity is not cost-free, but comes at the expense of employment and economic growth.

For many aspects of health care, however, differentiation is possible and perhaps also optimal. By distinguishing, for example, between cheaper and more expensive insurance packages, with basic or more elaborate care, with longer or shorter waiting lists (where medically possible), health care could be better attuned to individual preferences. People who value having a free choice of doctor can choose to take a more expensive policy, while others may prefer good but cheaper insurance without free doctors' choice. In this respect, Australia is an interesting example, as it offers a basic standard insurance policy without a free choice of doctor and supplementary policies for such freedom of choice as well as higher quality care services. An important disadvantage of differentiation, however, is the insurability of health care; because, as soon as the freedom of choice increases, so does the problem of adverse selection.

The Netherlands is already moving towards differentiation; for example, by accepting the separation between residence and care in old age care. Furthermore, the limits on domestic help in old age care will also lead to further differentiation. The same may happen in health insurance, when insurance companies begin to differentiate between cheaper and more expensive traditional health care policies and between so-called 'natura' policies (no choice of doctor and all costs paid directly to the care provider) and 'restitution' policies (with choice of doctor whereby costs are first paid by the consumer and refunded afterwards by the insurance company). In the future, a decision to restrict the addition of new treatment methods to the standard package will also lead to larger differentiation. Part of the care, thus, will be transferred from the publicly organised care to supplementary insurance and freechoice options for consumers.

6 Four different worlds for health care

6.1 The environment is changing

The future of health care is unpredictable. What can be predicted is that the environment will change and that also health care must respond to that change. We may assume that medical technology will continue to develop; increasingly more will become possible, which will also lead to higher expenditures. The rate at which this development will continue is unknown. Therefore, for this study, two scenarios for the development of health care expenditure were used: a baseline scenario based on the average growth between 1980 and 2010 ('Structural growth' in Table 1), and a high growth scenario in which the growth rate of the past 10 years is extrapolated ('Improved health care').

Consumers will also change. Future health care consumers will be well educated and have much and good information at their disposal. The average education level of the population is increasing; among the people aged 60 the number of people with only a preparatory secondary vocational education will be halved between now and 2040, while the share of people with a higher vocational or university education will double. Expert systems via the Internet and eHealth applications will provide future consumers with insight into their own health and into the array of medical options for curing diseases. The coming informational revolution in health care will make clear which providers are available and what type of quality they offer. All this will enable future consumers to make educated choices – in consultation with their doctors – about their health and optimal medical care. During this process, consumers will be critically aware of the type of care and insurance that they would prefer.

6.2 A sketch of four different worlds

The response to the changing environment will be closely related to the development of social preferences. This study sketches four different worlds along two fundamental dimensions: health care solidarity and risk solidarity. These dimensions are not black and white, but rather follow a sliding scale along which the appropriate balance must be discovered.

The first dimension of health care solidarity concerns the content of care. This relates to the choice between collective systems of uniformly organised health care and systems that offer more differentiated care, attuned to the diversity of individual preferences. In the first system, solidarity is key, with equal access to similar health care and a uniform insurance package. In the second system, the diverse preferences of consumers form the starting point, with greater personal responsibility and personal interpretation of health care. The basic health care insurance, here, is no longer a uniform package for all, but offers different options.

The second dimension is that of risk solidarity. This concerns the choice between fully insuring risks on the one side and the need to reduce health care use through cost sharing on the other. Small personal financial contributions together with a high degree of insurance suit a world in which solidarity between healthy people and the sick is deemed very important. However, when the emphasis is more on curtailing health care expenditures, the choice will be made for larger personal financial contributions. This may also involve a system of differentiated insurance contribution rates to encourage people to opt for a healthier lifestyle.

From these two dimensions, four worlds of future health care are sketched (see Figure 3). The vertical axis presents the choice between uniform care and having different options. In the lower half of the diagram equal care is the most important, while in the upper half there is a choice between various insurance packages, varying in size and quality. The horizontal axis represents the choice between a world with a high degree of insurance ('the insurance pays') and one in which the financial risks are placed with consumers ('the consumer pays'). On the right is the world in which risk solidarity is called for, and on the left the one that prefers a lower degree of insurance and an efficient use of health care.

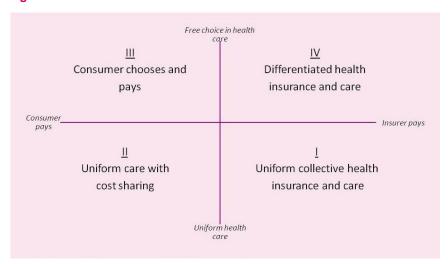


Figure 3 Four different worlds of future health care

The quadrants in this diagram correspond with the four different worlds, each with their own characteristics. Starting on the lower right, and moving clockwise, these worlds can be characterised as follows:

<u>I. Uniform collective health insurance and care</u> In this world, health care solidarity and risk solidarity are of paramount importance, with entitlement to equal health care for all and accessibility being guaranteed by ample insurance.

<u>II. Uniform care with cost sharing</u> Equality in health care is maintained to the largest degree possible, but the use of care is reduced by placing more of the financial risks with the consumer. This world is characterised by health care solidarity. Here, risk solidarity is reduced because, for reasons of efficiency, more financial risks are carried by consumers.

<u>III. The consumer chooses and pays</u> In this world, both health care solidarity and risk solidarity have been placed on the back burner. Consumers align health care with their personal preferences and pay for their choices. Collective insurance is reduced to a minimum provision; supplementary insurance is scant due to market imperfections.

<u>IV. Differentiated health insurance and care</u> Risk solidarity is important in this world; consumers wish to be insured against unexpected costs. Government provides the appropriate regulation of the insurance market, with the option of choosing for various insurance packages. By means of insurance packages, health care is attuned to the preferences for a variety of collectives.

6.3 Economic impacts

Each of the four worlds offers a plausible and consistent image of the future, each clearly with its own, different outcome. The four different worlds can be summarised on the basis of four characteristics. Table 4 provides an overview of the qualitative scores of the alternative worlds. Scores were derived from the positions in the four quadrants of the coordinate system, and concern the scores relative to each other (measured from the centre where the two axes cross). Naturally, many other aspects are also important, such as quality of care, impact on human health, and amount of total health expenditure. The scenarios could be completed further, but that was not the object of this study. Therefore, the scores were limited to the four characteristics related to the axes of the diagram.

Table 4 Four worlds, assessed according to four characteristics

	Financial security (insurance value)	Attuned to preferences (allocative efficiency)	Equality in care	Employment and GDP
I - Uniform collective health				
insurance and care	+	-	+	-
II - Uniform care with cost sharing	-	-	+/-	+/-
III - Consumer chooses and pays	-	+/-	-	+
IV - Differentiated health				
insurance and care	+	+	-	+/-

In world *I – Uniform collective health insurance and care –* a high degree of insurance and solidarity are paramount. This scenario, therefore, scores high on financial security and equal chances related to health care and good health. The downside here is that incentives for efficiency are smaller and health care is less in tune with people's personal preferences. This causes the scores for employment, GDP and allocative efficiency to be low. In world *II – Uniform care with cost sharing –* uniformity in health care is maintained, but more financial risk is placed with consumers. This causes financial security to be reduced. The score for equality is uncertain, because although the package is the same for everyone, cost sharing may hamper access to health care. The score for GDP is equally uncertain; on the one hand, personal financial contributions reduce the level of health care use, while, on the other hand, premiums are higher as the insurance package in this world is extensive. In world III – *Consumer chooses and pays* –equality in health care is abandoned. Financial security is also low because of the lack of insurance. Premiums are low, which has a positive impact on

employment. For allocative efficiency, the picture is mixed; there is a greater degree of choice which enables attuning to personal preferences, while the imperfect insurance market disrupts matters, keeping many people from obtaining the insurance that they would prefer. In world IV – *Differentiated health insurance and care* – allocative efficiency is preferred over equality in health care. Simultaneously, financial risks are reduced by organising insurances per group. This differentiation in insured health care prevents the disruptive impact on employment and GDP. The incentive to limit health care expenditure, however, is smaller, which may cause part of this positive impact to be lost.

6.4 Prevention, cure and old age care in four different worlds

The government has two main reasons for intervening in people's lifestyles. The first reason is that people may not always be capable of making the right choices. For example, smoking is entered into without people having a full grasp of the consequences. The second reason for intervention is the fact that an unhealthy lifestyle has negative impacts, also on others. The spreading of disease among the population is one example of this. Differences in lifestyles are also undesirable because they may perpetuate the health gap between groups of people from different socioeconomic backgrounds. In particular in worlds I and II, with uniform health care, both reasons for government intervention carry a great deal of weight, and intervention for example may consist of directing attention in schools to the benefits of a healthy lifestyle, of banning or pricing additive substances, or taxation of sugars and fats. In worlds III and IV, with free choice in health care, the same freedom of choice applies to lifestyle, and a healthy lifestyle is largely the responsibility of citizens themselves.

Curative care is insured and should continue to be insured. In worlds I and II, which award great importance to health care solidarity, an extensive, uniform standard package is offered. In world III, which values personal responsibility, the basic insurance is limited and functions as a safety net for health care costs. People may choose to purchase any supplementary care they would prefer; markets for supplementary insurance are scant due to market failures. In world IV, with differentiated health care, options are explored to offer various insurance packages that would fit the diversity in preferences related to health, health care and other expenditures (through the level of premium payments). This would require regulation of the market of supplementary insurances in order to prevent adverse selection.

Differentiation between public services and private care is more common for old age care than for curative care. In worlds III and IV, with free choice of care, an even greater variety in long term care services and matching insurance premiums would be on offer. This variety could be offered through private insurances for long-term care, according to which citizens could choose from an extensive range of long-term care insurance policies, possibly combined with retirement insurance. In worlds I and II, with uniform care, the choice is made for a national organisation of old age care, with national standards and a premium paid through national health insurance.

A high level of cost sharing (with matching low premium) has the advantage of reducing unnecessary use of health care services, because of the required financial contribution by these users. This advantage is very important in worlds II and III, with a strong emphasis on the personal responsibility of patients. The disadvantage of such a system would be that people carry more financial risks and may also make the wrong choice of health care just because it is cheaper. This disadvantage carries great weight in worlds I and IV, where health insurance is very important.

A part of people's personal contributions to old age care may be funded from savings in other areas when they become infirm or sick. In worlds I and IV, with a large degree of risk solidarity, these contributions are limited to the amount that would otherwise be spent on living independently. In worlds II and especially III, patients and their families are required to contribute more than that. In contrast to a situation of curative care, in old age care family members and friends would contribute to this care. This could be 'hands on', for example, by spending time helping elderly people in need, or in the form of financial contributions to hire this type of help. In both cases, the elderly and their immediate circle of friends and family are primarily responsible for the old age care.

6.5 International illustration

These four different worlds present an indication of the direction into which the health care system could develop. They are not complete recipes for future health care. The final chapter of this study further elaborates on these worlds, providing illustrations based on certain typical international examples, for both curative and old age care.

Free health Free health care choice United States Germany Australia Insurer pays Consun pays Singapore Singapore Germany Netherlands Switzerland Switzerland United Kingdom Netherlands.Sweden Uniform health care Uniform health care

Figure 4 Insurance of cure (left) and old age care (right), internationally compared

Figure 4 presents the various choices for curative and old age care made in a number of countries. This is only a snapshot in time, as the landscape is continually changing. As the Zvw in the Netherlands is an extensive basic insurance for all citizens, its system of curative care fits into the lower right quadrant, together with those of Germany and the United Kingdom. The United States and Australia are examples of countries with greater

differentiation in health service levels. Singapore and Switzerland both have systems with higher levels of cost sharing.

In most countries, the degree of insurance is lower for old age care than for curative care. Often, only a safety net provision is used. Instead of having insurance for old age care, in many countries children contribute to the care for their parents, both financially and in the form of physical care. The Netherlands and Sweden, however, have an extensive service system for old age care. Both Switzerland and Australia also have an extensive basic care system, but the required personal financial contributions are such that children often have to contribute, as well. The old age care systems in the United States and the United Kingdom provide only an elementary safety net. The German system has two old age care levels, with a modest personal budget in case of severe need through the national health insurance system (*Pflegeversicherung*), and means-tested supplements by the municipalities.

7 The future of health care

The different worlds sketch certain choices for health care, the results of which partly will depend on social and technological developments. A fast growing medical technology and a trend of ever more critical and assertive citizens could be incorporated more simply in a world in which consumers carry greater responsibility and where health care is more attuned to personal preferences. A moderate development of health care costs and a larger social willingness to share, offer a greater perspective for a world that has a strong public health care system. The organisation of health care in the future, therefore, must be made to measure, depending on social preferences and economic circumstances.

Publisher:

CPB Netherlands Bureau for Economic Policy Analysis P.O. Box $80510 \mid 2508$ GM The Hague T +31 (070) 3383 380

May 2013 | ISBN 978-90-5833-597-5