Expenditure Management in Health Care

Recommendation issued by the Council for Public Health and Health Care to the Ministry of Health, Welfare and Sport.

The Hague, the Netherlands, 2008

Annex 1: Preparation of this Recommendation

Preparation by the Council

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Preparation by the civil-service project group

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The Council makes its recommendations independently. The discussions and committee meetings that take place during the preparation of a recommendation are not intended to build up support.
The discussion partners are not asked to formally approve the recommendation.

The procedure
The advisory project began with a launch meeting between representatives of the Ministry of Health, Welfare and Sport (namely the director general for long-term care, drs. M.J. Boereboom) and of the Council for Public Health and Health Care as the commissioning party. This launch meeting was held on 19 February 2008. A follow-up meeting took place on 10 June 2008.

A final meeting to discuss the content of the draft recommendation took place between the director-general for long-term care, drs. M.J. Boereboom, and the director-general for acute care, drs. D.M.J.J. Monissen, on 4 November 2008.

On 23 September 2008 a draft paper was discussed with Minister Klink and State Secretary Bussemaker from the Ministry of Health, Welfare and Sport.
Monthly consultations were held with the contact person at the Ministry, M.J. Aarnout.

The Council for Public Health and Health Care discussed the draft recommendation and adopted it on 20 November 2008.

Committees
The substantive committee is comprised of the following persons:

Prof. dr. G.H. Blijham	Chairperson of the management board, UMC Utrecht
Prof. dr. M.G. Boekholdt	VU University, Amsterdam
Prof. dr. Bovenberg	Tilburg University/NETSPAR
Drs. B. Dessing	Former chairperson of the management board, UVIT
Prof. dr. F.J.H. Don	Former director of the Netherlands Bureau for Economic Policy Analysis Erasmus University, Rotterdam
Drs. K. Erends	Chairperson of the management board, Stichting Baalderborg
Prof. dr. C.A. de Kam	University of Groningen

Prof. dr. P.J. van der Maas	Chairperson of the Advisory Council on Health Research
Prof. dr. F. Rutten	Erasmus University, Rotterdam/IMTA
Prof. dr. F.T. Schut	Erasmus University, Rotterdam
Prof. dr. L.G.M. Stevens	Erasmus University, Rotterdam
Prof. dr. H.A.A. Verbon	Tilburg University
Prof. dr. P.A.M. Vierhout	Former chairperson of the Orde van Medisch Specialisten (Dutch order of medical specialists)
Drs. Y.M. Wilders, RA	Member of the management board, Spaarne Ziekenhuis

This committee met on five occasions, namely:

- 3 March 2008 at the Council for Public Health and Health Care in The Hague;
- 26 May 2008 at the Woudestein complex in Rotterdam;
- 2 September 2008 at Stadskasteel Oudaen in Utrecht;
- 7 October 2008 at the Council for Public Health and Health Care in The Hague;
- 11 November 2008 at the Social and Economic Council in The Hague.

times to discuss and evaluate the quantitative data that was used.

The technical committee included the following person

Drs.. P.A. ten Cate	Ministry of Health, Welfare and Sport
O. van Hilten	Statistics Netherlands
Drs. M.P.D. Ligthart	The Netherlands Bureau for Economic Analysis
Ir. L.C.J. Slobbe	National Institute for Health and the Environment (RIVM)

They were assisted by:

Drs. P.J.G.M. de Bekker	Berenschot Groep B.V.
Drs. A.J. Boendermaker	Berenschot Groep B.V.

Background material

This recommendation is supported by a significant number of background studies, namely:

- PriceWaterhouseCoopers: *Risico's voor het uitgavenniveau in de zorg* (Risks to expenditure levels in health care) as published in the Council anthology *Uitgavenbeheer in de gezondheidszorg: achtergrondstudies* (Cost-containment through Managed Competition in Dutch Health Care: Background Studies)
- Marc Pomp Economische Beleidsanalyse: *Uitgavenbeheer in de ouderenzorg: drie beleidsopties* (Cost-containment in geriatric care: three policy options) as published in the Council anthology *Uitgavenbeheer in de gezondheidszorg: achtergrondstudies* (Cost-containment through Managed Competition in Dutch Health Care: Background Studies)
- Nyfer: *Economische effecten van de premiestructuur in de zorg* (Economic effects of the premium structure in health care), an online publication
- National Institute for Health and the Environment (RIVM): *Uitgavenmanagement in de zorg: literatuurstudie naar het effect van DiM en preventie op zorgkosten* (Cost-containment through Managed Competition in Dutch Health Care: a study of the academic literature on the effect of Disease Management and prevention on healthcare costs), an online publication
- Council for Public Health and Health Care: *Financiële druk bij de ziekenhuizen: theorie en praktijk* (Financial pressure on hospitals: theory and practice), an online publication
- The Secretariat of the Council for Public Health and Health Care took notes on developments in a number of sectors: integrated care, pharmaceutical care, General Practitioners, specialist medical care, health care for the disabled and mental health care. These were compiled as *Vignetten deelsectoren* (Vignettes on sub-sectors), an online publication.

Debates
The Council for Public Health and Health Care organised five debates during the advisory process. These debates – participated in by the acute care and long-term care sectors, independent experts, the autonomous administrative agencies and the sectoral organisations – all took place at Stadskasteel Oudaen in Utrecht.

The first debate – with the acute care sector – took place on 22 September 2008 from 10 am until 12 midday.

Participants in the acute care debate

J.A.S. van Breda Vriesman	Achmea, healthcare division
Drs. C.H. Donkervoort	Stichting Zorggroep Middenveld Drenthe
Dr E. Elsinga	Stichting Zorggroep Pasana
Dr H.C.M. Haanen	St. Antonius Ziekenhuis
Dr M. van Houdenhoven	Beatrixziekenhuis, Rivas Zorggroep
Prof. J.H. Kingma	Medisch Spectrum Twente
Drs. M.W.C. Udo	ZKN Zelfstandige Klinieken Nederland
Dr H.P. Verschuur	MCH (Medisch Centrum Haaglanden)

The debate with the long-term care sector took place on 22 September 2008 from 1 pm until 3 pm.

Participants in the long-term care debate

Drs. H.M. Don	Municipality of Eindhoven
Drs. E.G. van Doorn	HSK Groep
T. van Schie	Rudolf Steiner Verpleeghuis
G.B.F. van Weelden	Florence, The Hague
Drs. R. Wenselaar	Menzis Zorg en Inkomen
Meester dr T.A.M. Witteveen	Bartiméus, Management Board

The debate with the autonomous administrative agencies took place on 6 October 2008 from 10 am until 12 midday.

Participants in the autonomous administrative agency debate

Meester F.H.G. de Grave	Dutch Healthcare Authority (NZa)
Dr P.C. Hermans	Health Care Insurance Board
Dr A.B.M. van Poucke	DBC Onderhoud

The debate with the independent experts also took place on 6 October 2008 from 1 pm until 3 pm.

Participants in the independent expert debate

Drs. A.L.M. Barendregt	former member of the management board, Dutch Health Care Authority (NZa)
Prof. T.E.D. van der Grinten	Erasmus University, Rotterdam
Prof. J.A.M. Maarse	Maastricht University
Prof. J.J. Polder	National Institute for Health and the Environment (RIVM)
Dr C.A. Postema	Health Council of the Netherlands
Prof. J. van der Velden	UMC St. Radboud
Drs. S.P.M. de Waal	Public SPACE
Prof. R. de Wit	Maastricht University

The debate with the sectoral organisations took place on 14 October 2008 from 10 am until 12 midday.

Participants in the sectoral organisations debate

Drs. M.A.M. Barth	GGZ Nederland (Dutch Mental Healthcare Association)
M. Beljaars	GGZ Nederland (Dutch Mental Healthcare Association)
M. Brands	ANBO for the over-50s

Ir. H.M. Le Clercq	Nederlandse Federatie van Universitair Medische Centra (Netherlands Federation of University Medical Centres) The Netherlands
Prof. J. van Dalen	Federation of Patient and Consumer Organisations in the Netherlands
Drs. L.A.C. Goemans	NVZ Dutch Hospitals Association
Dr P.F. Hasekamp	Zorgverzekeraars Nederland
Drs. M. Koot	Vereniging Gehandicaptenzorg Nederland
Meester J.C. Korthals	MEE Nederland
Dr F.G.H. Oostrik	Vereniging Per Saldo
H.J. Reesink, General Practitioner	Landelijke Huisartsen Vereniging (National Association of General Practitioners)
G. Rutten	Actiz
Dr H.F. van der Velden	Federatie Nederlandse Vakbeweging (FNV)
Ir. G.R. Visser	Revalidatie Nederland
Drs. S.J.G.A. Weijenborg	NVZ Dutch Hospitals Association

The following persons were consulted during the advisory process:

M.J. Aarnout	Ministry of Health, Welfare and Sport
J.P.G. Boelema	Dutch Healthcare Authority (NZa)
Drs. P. Boone	Ministry of Health, Welfare and Sport
Drs. P.A. ten Cate	Ministry of Health, Welfare and Sport
Drs. D. Dicou	De Nederlandsche Bank
Drs. H.A.C. Dokter	Ministry of Health, Welfare and Sport
Dr R.M.C.H. Douven	The Netherlands Bureau for Economic Analysis
Ir.. A.W. Faassen	Ministry of Economic Affairs
Drs. E. Gevers	Dutch Healthcare Authority (NZa)
Meester F.H.G. de Grave	Dutch Healthcare Authority (NZa)
Drs. M. Groothuis	Ministry of Finance
W.G.J.M. van der Ham	Orde van Medisch Specialisten (Dutch Order of Medical Specialists)
Drs. L.R.M. Hartveld	FNV
Dr O. van Hilten	Statistics Netherlands
Drs. J.J.G.M. van den Hoek	Health Care Insurance Board
E.L. Hooiveld	Salland Verzekeringen
Dr M.J. Kaljouw	V&VN Beroepsvereniging van zorgprofessionals (Professional Association of Nurses and Care Workers)
Meester H.J. van Kasteel	Ministry of Health, Welfare and Sport
N.J. Keuning	Ministry of Health, Welfare and Sport
R. Kommerij	De Friesland Zorgverzekeraar
Dr B. Kuhry	Social and Cultural Planning Office of the Netherlands
J. Massop	Achmea
P.E. van der Meer, MBA	MCH Haaglanden, Westeinde facility
Dr M.C. Mikkers, RA	Dutch Healthcare Authority (NZa)
A. Miro, Msc	De Nederlandsche Bank
Dr E.S. Mot	The Netherlands Bureau for Economic Analysis
Drs. R.A. Nieuwenhoven	VNO NCW
Meester M.E.M. Nuijten	VNO NCW
Drs. S.J. Oostlander	House of Representatives of the States-General - Bureau Onderzoek en Rijksuitgaven (Office for Research & Central Government Expenditure)
F.J. Paas	CNV
Prof. J.J. Polder	National Institute for Health and the Environment (RIVM)
Drs. E.J. Pommer	Social and Cultural Planning Office of the Netherlands
N. Pruijssers	Health Care Insurance Board
M. Saas	ONVZ Zorgverzekeraar
P. Schilp	De Nederlandsche Bank
A. Schipaanboord	NPCF
Drs. M. Sint	Isala Klinieken

Ir. L.C.J. Slobbe	National Institute for Health and the Environment (RIVM)
S. Tjeerds	Social and Economic Council
Drs. A. Thijs	Ministry of Health, Welfare and Sport
Dr H.F. van der Velden	FNV
Drs. F.W. Vijselaar	Ministry of Finance
A.J.J. Voorham	GGD Rotterdam area
Drs. A. de Vreeze	Social and Economic Council
J. Wehrens	Intrakoop
Drs. S.J.G.A. Weijenborg	NVZ Dutch Hospitals Association
Drs. M. van der Werf	Court of Audit
Meester B.E.M. Wientjes	VNO NCW
E. Wijnhof	Intrakoop
Drs. Y.M. Wilders, RA	Spaarne Ziekenhuis

The following persons were consulted for the background study on publicly funded geriatric care:

Prof. M.G. Boekholdt	VU University, Amsterdam
Drs. J. Broere	Ministry of Health, Welfare and Sport
Dr J. Jonker	Social and Cultural Planning Office of the Netherlands
Drs. J. van Veen	Social and Cultural Planning Office of the Netherlands

Participants in the expert meetings organised by PriceWaterhouseCoopers:

Drs. J.G.M. Hendriks	Stichting Bronovo-Nebo
Drs. F. Knuit	Zorggroep Rijnmond
P.H.E.M. de Kort	Rivas Zorggroep
Drs. M.J.G. van de Lustgraaf-Wielens	Coöperatieve Vereniging Partner Apotheken (Co-operative Association of Partner Pharmacies or 'CVPA')
H. van Noorden	UVIT
D. Tjalsma	former policy assistant at the Federation of Patient and Consumer Organisations in the Netherlands (NPCF)
Drs. R. Wenselaar	Menzis

Relevant positions and additional activities of council members:

Prof. drs. M.H. Meijerink, chairperson
Chairperson of the supervisory board of Het Groene Hart ziekenhuis, Gouda.
Chairperson for the committee for the reorganisation of housing associations – Central Government, Ministry of Housing, Communities and Integration.

Meester A.M. van Blerck-Woerdman
Member of the supervisory board of Elisabeth Ziekenhuis, Tilburg.
Member of the supervisory board of Zorg Consult Nederland, Bilthoven.

Prof. dr. W.N.J. Groot
Chairman of the Provincial Council for Public Health in Limburg.
Columnist for Het Financieele Dagblad.
Columnist for Economisch Statistische Berichten.
Columnist for Zorgvisie.

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The Council has decided to translate the main text of the recommendation. Additional research and papers to this study are available at www.rvz.net

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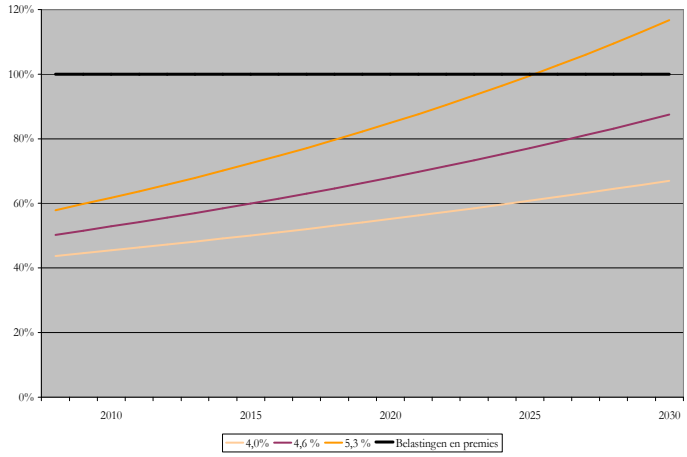
Summary

Responsible spending levels for the healthcare industry

Healthcare expenditure must be responsible

Each year, the Netherlands spends between 9.2 and 13.5 per cent of our GDP on health care, with the exact percentage depending on how we define health care. Whatever the exact percentage , however, it is undeniably a substantial amount for a country with a relatively young population – particularly since our collective health leaves much to be desired. Moreover, health care accounts for an increasingly large share of economic growth (currently, 20 per cent), as well as for 35 per cent of the increase in taxes and premiums. This share will increase even further over the next few decades (see figure 1). As there must still be financial resources available to cover other major expenses, we must spend the funds allocated for health care efficiently and set limits to what we intend to finance collectively.

Figure 1 What portion of the annual growth in collective revenues must be allocated for health care? (3 estimates)



Source: Council for Public Health and Health Care

What constitutes a responsible level of expenditure?

What constitutes responsible expenditure levels? It is impossible to provide a clear and unequivocal answer to that question. A formal response such as 'the global budget set by the government budget' does not suffice, as that would be equating what is responsible with what is politically feasible. There are additional factors we must take into account, such as social willingness-to-pay, economic strength, standard levels of care, an adequate level of improved health and international agreements. The key is to focus on what can be sustained in the long term.

Do not grow more than double the economic growth rate

The Council for Public Health and Health Care (RVZ) believes the maximum feasible increase in health care expenses is double the economic growth, an increase slightly below the medium-term projections of the Netherlands Bureau for Economic Policy Analysis (*Centraal Planbureau*). This estimate is higher than the historical trend. However, this is necessary due to the ageing of the population and the increased pressure on informal care in the long term, as well as the fact that technological advances often result in additional expenditure (as well as in improved health). Another factor is that the real cost of health care (or of some segments of health care) is .growing as a result of lagging productivity growth. The Council believes that higher growth than four percent per year would not be responsible particularly in the long term.
It is in the public interest that this be prevented – particularly for future healthcare consumers, who will have to make do with fewer benefits and significantly higher payments.

How are we doing?

For many years, the government kept healthcare expenditure at a responsible level by budgeting these expenses and setting standards for supply and prices. Now that the government has relaxed such policies and health insurance companies and healthcare providers have more freedom to compete with one another, it is time for us to look at other methods for cost-containment. While insurers and providers have been given greater freedom, this also comes with greater responsibility for healthcare expenditure. Under these conditions, it is no longer the government that bears financial risk, but those insuring healthcare services. This recommendation addresses the issue of how this transition is to be realised.

Which problems call for a solution?

The estimates are continuously exceeded

Virtually every year, healthcare expenditure exceed the amounts agreed to in the government agreements and coalition agreements signed by most recent Dutch governments, with the gap tending to increase over the course of the government's term in office. The government itself often has insufficient control over this process, and political parties only have limited insight into how funds allocated for health care are spent. This means it is necessary to improve the methods and tools to control costs.

These are the bottlenecks

An indicative – but, according to the Council, sound – analysis of the development of expenditure in the various segments of health gave rise to the following findings:

1. In acute health care (i.e. hospitals and General Practitioners) and in long-term care, production and expenses are increasing at a faster rate than might be expected based on trends in the composition or health of the population. This is due to new technologies, but most certainly also to the budgetary guidelines, which induce healthcare providers to increase their production.
2. Need for mental health care rises severely.
3. Although the Dutch do not visit the doctor frequently, they are significant consumers of long-term care and mental health care. On top of that, the unit price for some services appears to be rather high compared to other countries. In acute care, this is partly due to the high remuneration paid to medical professionals. In long-term care for the elderly; a relatively large portion of health care in the Netherlands is provided within relatively expensive institutions when compared with provision of care at home.
4. The government must increase labour productivity in each sector, otherwise unnecessarily high prices and healthcare expenses will result.

The demand on people's solidarity is also increasing…

Health expenditures are incurred by a small group of people, and the majority of these expenses are paid from public funds. Consequently, compulsory solidarity plays a key role in health-care funding. Since expenses are rising, healthy individuals will increasingly have to pay for their less healthy counterparts in order to maintain the healthcare system in its current form. The Council has previously argued that this is not self-

evident,[1] and it therefore believes it is important that expense management in health care be critically assessed as well.

… while informal care is becoming unaffordable

Volunteers and family caregivers provide a substantial amount of informal care, and without this additional care, traditional health care will come under considerable pressure. The government is committed to ensuring that volunteer work and informal care remain attractive options. To prevent informal and family carers from becoming overwhelmed with work, the government has set standards for the amount of unpaid work family members and friends can be expected to perform. This 'customary care' is taken into consideration in assessing the professional care needs of patients. Beneficiaries who elect to receive insurance benefits in the form of personal budgets (in Dutch: *persoonsgebonden budget*, i.e. payment for health care provided to individual healthcare consumers) can choose to engage the services of family members, friends and acquaintances, which a great many of them do. If this care continues to be funded and reimbursed through the insurance system this constitutes a substantial cost burden, raising the question as to whether such reimbursement will be sustainable in the future.

How can we control expenditure levels?

Increase efficiency in a competitive environment

Healthcare must be affordable, and to ensure that it is, a system has been introduced that was implemented in a competitive environment as much as possible, in which healthcare providers and healthcare organisations respond to the needs of patients and the demands of health insurance companies: managed competition of the healthcare system helps create opportunities to improve the quality and efficiency of our health care. Insurance companies contribute by purchasing only high-quality and low-cost care for their policyholders. Specific savings develop from providing more effective treatment for certain chronic illnesses (such as stroke and COPD).[2]

Risk induces insurers to purchase effectively

Health insurance companies must be able to promote quality of care and improve efficiency; however they also will be required to assume more of the financial risk. This is a valid reason to rapidly phase out the main budgetary safety-net ex-post equalisation, which reduces the need to fully compete. In maintaining the cost restraining effect on utilization of requiring the beneficiary to pay 50 percent of the premium of the basic insurance package, efficiency is more important than curbing demand, to the extent that the latter *is* appropriate in

the first place. The Council therefore supports the policy under which insurers are entitled to rebate premiums if policyholders are willing to be directed to a more efficient type of care or a more efficient provider.

The government regulates and sets limits

Under the new healthcare system, the central government has a limited yet significant role. While it is careful not to intervene too much in healthcare-market outcomes, it is firm and unambiguous in allocating financial resources, establishing the benefit package and determining the level of solidarity. The government is responsible for providing a solid set of institutions and regulations. The Council proposes: simple funding, clear performance indicators, a sound safety net for when things go wrong, and incentives for competition. It is also the government's role to implement a number of preventive strategies that are medically proven to be particularly cost-effective and sometimes to impose excise duties on such goods as cigarettes in order to promote healthy lifestyles[3].

Prevent costs rather than shifting them

It is generally not desirable to shift the costs of an excessive increase in healthcare expenses to individuals and healthcare consumers, for example by cancelling reimbursement of certain treatments or by increasing out-of-pocket payments, as this does not resolve the cause of the problem but merely shifts its burden. Healthcare that is not cost-effective is an exception to this rule[4]. In long-term health care, where such standards are more difficult to implement, co-payments can play a significant role, for example accommodation costs in long-term care. Another example is certain mental health services, such as marriage and relationship counselling.

More balance between resposibilities, risks…

The ample opportunities available to healthcare providers and health insurance companies to transfer the financial impact of their actions to taxpayers and those paying insurance premiums must be contained. The best leverage point for this is the financial risk these parties bear, which currently is low compared with their responsibilities and power of decision. The greater the risk they run, the more efficient their actions will be – this has produced positive results in the Social Support Act, with prescription medication and among recipients of individual patient funding.

…and authorities

Responsibility and risk are two sides of the same coin: the various parties must, above all, bear responsibility for those risks under their control. The Council believes that this lack of

risk constitutes a significant portion of the estimated increase of the residual volume and, to a lesser extent, of the lagging productivity. For insurance companies, this means that they must run greater risk on the contracts they enter into. By contrast, the costs of risks over which the parties involved have little control must be spread widely across society..

What does the Council for Health and Health Care recommend?

Increased risk for insurers and providers

Eliminate ex-post equalisation

a. The risk to which health insurance companies and healthcare providers are exposed must increase, and this must be accomplished in the near future, particularly if the government intends to continue the policy of managed competition. Increasing insurer responsibility for controllable risk is the most effective way to keep expenses in check in a system of regulated competition. The ex-post risk equalisation for health insurance companies must therefore be eliminated as soon as possible and financial risk in long-term health care must be increased and new funding mechanisms developed within the regulated segment of health care. Patient rights are best served by pay-for- performance. The downside of such output funding is that rapid production growth will automatically lead to excessive compensation for fixed costs. The Council recommends that the Dutch Healthcare Authority (Nza) investigate if and how a system of ex-ante decreasing rates for those parts of healthcare that do not allow for competition might be implemented.

Give insurers more elbow room

b. Provide insurers with more opportunities to control their risks with respect to limited experience rating of premiums in group insurance. Insurers must also be given more freedom for selective purchasing, such as lump sum fees[5] for integrated care. This should also be a realistic option in hospital care. In addition, insurers must be given more opportunities to reward good quality and penalise poor quality.

… and more financial scope

c. Providers have managed to improve their financial position significantly over the past years, which was necessary in order to deal with the increasing risks with which they were confronted. However, not all insurance companies succeeded in doing so, and so it is essential

that they do so now, which may lead to temporarily higher premiums. One other alternative is private reinsurance, as it is in the public interest that well-managed smaller insurance companies maintain their right to exist.

Higher labour productivity

a. Labour productivity in the healthcare sector must increase: this is necessary in order to compensate for anticipated shortages in the labour market. As this shortage is one of the main causes of rising expenditures, particularly in the long term, it is important in the budget allocation process to take into account structural differences in the opportunities to improve productivity. Expenses for long-term care, where it is not possible to increase productivity to the same extent, will grow more rapidly than expenses for hospital care.

Promote labour productivity per segment

b. Reimbursement to medical professionals in the Netherlands is high compared to other countries, which results from a short supply over a long period of time. The Council believes this supply must be increased by expanding the number of training places. In addition, the medical hours in the Diagnosis Treatment Combinations (DTCs) must be adjusted annually to reflect productivity goals. In those areas where there is sufficient supply of physicians, it is possible to experiment with non-fixed hourly rates.

Train more professionals

Increased out-of-pocket payments

a. If policy remains the same, public expenses for geriatric care will increase substantially. The Council advocates a partial privatisation of long-term care, where only the expensive services, such as admission to nursing homes, is covered by compulsory insurance. Individuals will be free to choose better living arrangements and services, while the government would guarantee access to standard care at these facilities. The Council believes that a gradual transition is desirable. The Council supports the idea of long-term care being provided by risk-bearing health insurance companies, who receive a risk-adjusted payment for covered services. This will improve effectiveness, partly because the current separation between acute care and long-term care in insurance policies will be eliminated. Senior citizens

who are certified to have functional impairments based on a valid long-term care assessment will be granted a personal long term care budget which will give them more control over the health services they receive.

b. The rapid growth of 'minor' problems and problems that are difficult to verify in mental health care must be curtailed by increasing out-of-pocket payments, e.g. for relationship counselling. Currently, insurers are not at financial risk for this care, a situation that must change in the near future.

… and also for help with life issues

Budgetary politics

Expenditure growth must be more closely aligned with the political-administrative objectives of healthcare policy. Will political priority be given to more services or to new, expensive medication, to prevention or acute care, to care of the elderly and disabled or to hospital care? We need to specify the purpose for which volume is allocated, and what the objectives are for each sector. If possible, a reserve must be established for financial setbacks that occur during the term of the government agreement.

Determine the room for growth yourselves

Do not penalise increases in expenses that are not permitted under the budgetary framework through randomly imposed cuts, as these damage the government's credibility. As an alternative, more political control at the front end, i.e. when determining the global budget, would be desirable. One must prevent current undesirable budgetary trends from continuing automatically, which is to say that the quality of the estimates must improve and that a distinction must be made between inevitable expenses and growth that is subject to policy control.

Control at the front end rather than the back end

What will be the overall result of this recommendation?

The Council believes that efficiency in health care can be improved significantly. It's recommendations are in line with the current re-organisation of the healthcare system, and are based on shifting financial risk to the parties that can control the expenses. As a result, the industry will become more dynamic. There is a variety of channels that will help to improve efficiency: by working more productively , by purchasing more effectively, by shifting secondary-care responsibilities to primary care, through prevention (i.e. encouraging patients to take their medication in line with their doctor's recommendations and by preventing

More efficiency and dynamic in the healthcare sector

overweight), by prescribing medications more effectively, by preventing unnecessary healthcare consumption and by using IT resources more ingenuously – in addition to many other measures.

Increase efficiency by at least 0.5% per year

While it is difficult to predict what the financial benefits of these measures will be, it is realistic to assume that these measures will, over time, result in a substantial increase in productivity. This means that sluggish productivity growth will be improved, which is necessary in view of the shortage in the labour market. Experiences with the Social Support Act and pharmaceutical care support support the Council in this conviction. At the outset, the efficiency gains can be used to improve the financial position of the institutions, which is a necessary investment in the new healthcare system. It is also recommended that a portion of these efficiency gains be spent on innovation and modernisation. After several years, it should be possible to work ½ per cent more efficiently.

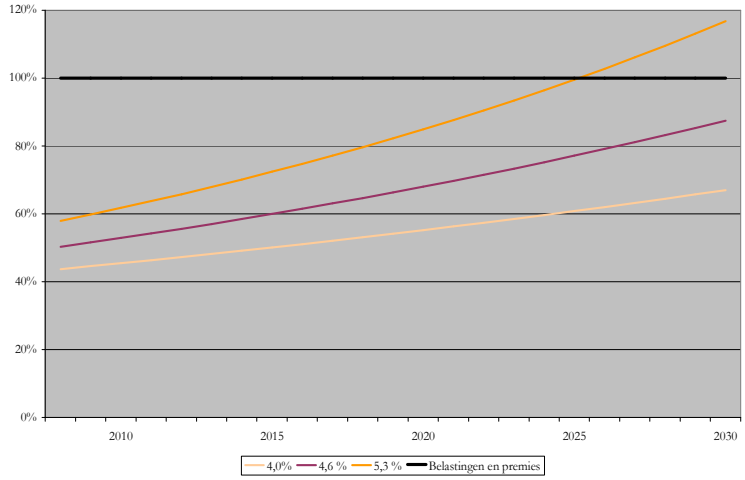
1 Introduction

1.1 Background

Healthcare expenses are increasing faster than wages

This recommendation relates to (public) expenditure for health care, i.e. the funds we as a society are required to pay and allocate for the care and cure of our fellow citizens. These expenses are high: depending on the description chosen, they comprise between 9.2 and 13.5 per cent of our GDP. However, these expenses are not only high, they are also increasing rapidly – significantly faster than both our own incomes and government revenues (see figure 1.1). The reasons for this are the ageing of the population, more generous need assessments, the manifestation of latent demand, expensive new technologies and medications, medicalisation of services, and relatively slow labour productivity growth.

Figure 1.1 What portion of the annual growth in collective revenues must be allocated for health care? (three estimates)



Source: Council for Public Health and Health Care

We pay too much for what we receive

Health care is not only becoming increasingly expensive for us as a society, we also benefit from this trend in that our health as a population is improving. The fact that our life expectancy is increasing and we are spending more of those years in good health can be partly – though certainly not entirely – attributed

to healthcare spending. And while these health improvements are substantial, they must still be assessed against the price we have to pay for them. We have a right to expect that the health care that we as a population pay for is efficient and effective. On top of that, we expect healthcare expenditure to be proportionate to other publicly funded resources.

1.2 Definition of the problem

New system: get rid of budgeting

The Minister of Health, Welfare and Sport has opted for managed competition as a regulatory model for health care, but what role does cost-containment play under this new system? The transition from the current global budget to this new model of managed competition has not proceeded without problems. There is uncertainty as to the financial impact of eliminating the global budget, and the interests of the government and the healthcare industry diverge.

Still, budgeting has its advantages as well…

The strength of budgeting is that it can have a strong preventive effect on financial overruns, which is a significant benefit for the government. However there are other benefits. For one, the uncertainty regarding the available funds is reduced among all parties involved, and secondly, as there is often little correlation between the budget available and performance, healthcare organisations are relatively free in how they choose to spend their funds. This has been the primary system since the early 1980s. As a result of the many efficiency cuts, the benefit for the healthcare organisations – i.e. the freedom to allocate funds – has increasingly eroded over the years. The system revealed its limitations during the late 1990s, when productivity dropped due to a lack of incentive for production and as a result of the Dutch government's policy of decreasing the number of medical professionals.

…and you're going to miss those advantages

However, the government is wary of eliminating the budgeting policy, as we saw at the beginning of this decade that with no budget, costs can increase substantially. It would appear that this strong growth was partly due to a change in the budgetary guidelines (i.e. the policy of paying only for actual services rendered), more generous assessments of patient need and latent demand. The industry believes that eliminating the budgeting system is necessary for increased competition and efficiency, stating that overruns must be offset by higher

patient contributions, a more limited package or higher premiums. There are three aspects that stand out:

1. These types of policy strategies have been discussed for many years, are implemented only occasionally and are not specifically intended for a system of managed competition.
2. These policy strategies focus on more contributions from patients and citizens, while the industry and medical professionals do not bear any of the burden.
3. Each one of these policy strategies is reactive and has only a limited preventive effect; those who generate the increases in expenses are not forced to change their behaviours.

What is going to replace it?

The Council believes that a sound strategy for cost-containment in a system of managed competition extends beyond entitlement reductions and an increase in patient contributions. The transition from a system steered by a global budget to a system of regulated competition will benefit from new mechanisms to prevent unnecessary expenditure. Specifically, this means that greater responsibility must go hand in hand with greater financial risk, since the current credit crunch has demonstrated what impact the opportunistic transfer of risk can have on the next link in the chain (see box 1.1).

Box 1.1 The credit crunch and the transfer of risk
The current credit crunch is a reason to revive the debate on the desirability of the free-market system in those sectors where public interests are clearly being undermined. Another issue is governance, particularly the incentive for aggressive, short-term profit maximisation. Both these issues also play a role in health care.
However, the underlying problem of the credit crunch is that risk has become too cheap, or, in other words: customers paid too little for credit and banks did not consider this a problem as they simply passed the risk on, selling it at a profit. On top of that, people expected the central banks to help out by lowering interest rates and providing cheap credit if needed. The upshot of all this is that taxpayers ultimately pay the price of the transfer of financial risk.
Expense management in the healthcare sector also means effective risk management: while individuals must be protected from uncontrollable risks, risk liability is also a condition for effectively dealing with risks that *are* controllable. Increased responsibility and increased risk liability are two sides of the same coin.

This recommendation represents an analysis of a strategy for cost-containment in a managed competition system. The Council offers the Minister an administrative and instrumental framework for expense management. The framework is intended primarily for the government. The action that must be taken in order to provide responsible and affordable care to patients and policyholders, both now and in the long term, depends on the answers to the following questions:

This recommendation provides an answer

1. How do we assess the increase in healthcare expenditure? What criteria do we use?
2. What are the reasons for the increase in healthcare expenditure? How do we assess this trend?
3. How do the administrative and instrumental mechanisms related to expense management operate? How do we resolve the main problems in this process?
4. How do we use managed competition to achieve moderate inflation of healthcare expenditures?

Cost containment is related to the view of how the healthcare system should be structured. As regards its vision of the healthcare system, the Council states that it is a proponent of comprehensive basic insurance coverage, implemented as much as possible in an environment of managed competition.

The control philosophy of the system serves as a guideline...

The Exceptional Medical Expenses Act (AWBZ) can largely be eliminated through re-allocation to the Health Insurance Act (nursing and supervision geared to care) and the Social Support Act (stay, transport, supervision and care geared to participation). Selective healthcare purchasing by insurers or municipalities is a key priority. This policy is based on providing financial incentives, transparency in quality, new entrants to the market and – this is of vital importance – ensuring that the funding system remains as simple as possible.

… for choosing the appropriate tools

There are three factors that are important to cost containment: 1.) endogenous incentives in the health care system; 2.) the role of patient contributions, and 3.) the benefit package. As the Council recently provided advice on this last factor, this problem will not be addressed separately in this recommendation.

1.3 Strategy and accountability

Expert committee

The Council has been grateful to draw on the knowledge of a substantive committee of experts from the worlds of policy and administration, healthcare and science, who commented on the draft text. This Committee met five times, while a technical committee gathered four times to discuss and assess the quantitative data used. [Consultancy firm] Berenschot subsequently incorporated the results into a report . The Council is responsible for the final result; individual committee members need not necessarily agree with all recommendations.

Notes

The secretariat provided separate notes containing an elaboration of expenditure in the pharmaceutical industry, among medical specialists and General Practitioners, in integrated primary health care, care of the disabled and mental health care. These notes have been included in a single Web publication, which can be downloaded from www.rvz.net. Finally, the secretariat has prepared a report on how hospitals are dealing with financial pressure. This report can also be downloaded from the Council's website.
Annex 4 contains an analysis of how the risk liability of health insurers can be increased. At the request of the Council, healthcare purchasing association Intrakoop calculated the potential cost savings of further professionalisation of the purchasing component (see annex 5). Both annexes are not translated, but can be downloaded in Dutch.

Background studies

The Council requested PricewaterhouseCoopers to assess the (financial) risks inherent in the healthcare sector and to evaluate the tools used in expense management. Marc Pomp will address the financial impact of partial privatisation on long-term care for the elderly, and the Council will publish both these studies in a separate volume that will be released at the same time as this recommendation (in Dutch).

Consultation

The Council commissioned the National Institute for Public Health and the Environment (RIVM) to explore what opportunities prevention and coordination provide for more efficiently handling the resources available. In a research paper, Nyfer analyses healthcare funding and the impact this has on expenditure. Both of these reports will be available as Web publications on www.rvz.net.

The Council has spoken with a large number of experts and stakeholders, either bilaterally or as part of a debate, and we have eagerly and gratefully used their comments. The names of these individuals are listed in annex 2.

1.4 About the recommendation

Chapter 2: Basic premises and criteria

This recommendation is structured as follows: the framework for assessing healthcare expenditure is included in Chapter 2. This chapter begins with the Council's views on the development of the healthcare system, after which we will discuss the conceptual framework related to healthcare expenditure. We will then present the criteria for assessing increases in expenses from an economic, political and professional perspective. This concludes with the Council's view of what exactly constitutes a sustainable level of expenses in our healthcare system.

Chapter 3: Assessing expense development

Chapter 3 contains a factual analysis of the main trends in healthcare expenditure. We will consider the areas in which the Dutch healthcare system performs well, but most of all we will look at the weaker areas and how we can work to improve them. We will be discussing the international position of the Netherlands, the expenditure of resources from a macro perspective, from an industry perspective, from the perspective of control based on the budgetary frameworks, from the perspective of solidarity shifts and from the position of both health professionals and informal carers.

Chapter 4: Assessing existing control mechanisms

Chapter 4 assesses the most important lessons learned from the operation of the current control mechanism: how do we prevent the rising expenses from being 'automatically' shifted to the public at large? The Council will flesh this out for curative and long-term care, and will illustrate the problems based on a number of sub-sectors.

Chapter 5: Developing a new alternative

Chapter 5 is a synthesis of the analyses from the previous chapters; the Council integrates them and justifies the choices it makes in this process. The main focus is on financial risk, increased labour productivity, better ex-ante allocation of resources through budgetary procedures, more private resources for long-term care as well as higher patient contributions for a segment of the mental health sector.

Chapter 6: The recommendation of the Council for Health and Health Care

In the final chapter, which contains the actual recommendation, the Council will provide an answer to the questions asked and propose a series of measures.

2 Assessment Framework

2.1 The term 'healthcare expenditure'

Definitions of healthcare expenditure

It is about the publicly funded portion of healthcare expenses …

This recommendation relates to those healthcare expenses of which the government helps ensure the affordability, availability and quality. This relates to the vast majority of healthcare expenses in the Netherlands, although the extent to which the government is involved can vary from sector to sector[6].

… based on various definitions

There is no uniform measurement for healthcare expenditure. Instead, there are four key operationalisations: that of Statistics Netherlands (CBS), the Netherlands Bureau for Economic Planning Analysis (CPB), the OECD, and that of the Dutch government (BKZ, i.e. the Budgetary Framework for Health Care). The Council is compelled to use all these various definitions. For example, the OECD definition is necessary to make an international comparison, the Statistics Netherlands definition is necessary to describe the costs of illnesses, the definition of the Netherlands Bureau for Economic Policy Analysis is necessary for the estimates and the size of the healthcare sector in the economy as a whole, while the Budgetary Framework for Health Care definition is essential for the size of the public healthcare expenditure and budgetary policy (see table 2.1).

Table 2.1 Definitions of healthcare expenses, 2007 (in billions of EUR)[7]

	CBS	CPB	Gross BKZ	Net BKZ	OECD
Nursing homes, care homes and home care	14.1	14.1	13.8	18.1	7.0
Care for the disabled	6.8	6.8	5.9		0.8
Hospitals and medical specialists	18.3	18.3	17.0	29.3	17.0
General Practitioners and dentists, paramedics, medications and medical aids, mental health care	19.3	19.3	14.3		18.2
Municipal health services, occupational health and safety services, children's day care	5.2				1.5
Policy, management	2.5	2.5	0.2	0.2	2.5
Other	7.9	4.9			3.3
Expenses for 2007	74.1	65.9	51.3	47.6	50.3

Source: Statistics Netherlands and the Ministry of Health, Welfare and Sport

Expenditure: price and volume

Table 2.2 shows the estimated increase in prices and volumes of the global budget during the current government term. First, the price portion: this includes general inflation (1) and – on top of that – a mark-up for healthcare-specific inflation (2). The amounts involved in this healthcare-specific inflation are substantial, and yet they are not really the subject of political debate. The legitimacy lies in the high labour intensity of providing health care and in the assumption that the increase in productivity as a result of new technologies and logistical optimisations will remain limited in size[8]. This is known as 'Baumol's disease' (see 2a in table 2.2)[9]. In addition, resources are required for other increases in real labour costs, such as periodic salary increases (2b).

Additional price increase due to Baumol effect

Table 2.2 Estimated annual increase, 2008 – 2010: Budgetary Framework for Health Care – net[10]

				%	EUR million
Low-level policy portion	General inflation	GDP inflation	(1)	1.8	4,100
	Real price	Low labour productivity	(2a)	1.1	2,300
		Other real labour costs	(2b)	0.3	600
	Real volume	Population growth	(3a)	0.2	400
		Population composition	(3b)	0.7	1,400
		'Other' volume growth	(3c)	2.3	5,000
High-level policy portion		New policy from RA	(4a)	0.4	750
		Cutbacks from RA	(4b)	-0.8	-1,700
Total				6.0	12,850

Source: Netherlands Bureau for Economic Policy Analysis

Demographics have only a limited impact on volume

Volume growth is the expected increase in the healthcare services (3), which consists of the necessary growth resulting from demographic trends[11] and from other volume growth. Demographics relates to population growth (3a) and to changes in age structure (3b). This latter factor is not equal to the financial impact of the ageing of the population, which consists not so much of the larger number of seniors, but rather of their increasing need for health care. It is expected that the seniors of the future will require different and more expensive health care. The impact of 'other' volume (3c) is the main factor in this process. Other volume consists, for example, of the impact of increasing demands, technology, and because we would like to see the quality of housing facilities and services increase along with the general increase in wealth. 'Other' volume constitutes the main determinant for the positive income solidarity measured by economists: i.e. the phenomenon of healthcare expenses growing faster, at the aggregate level, than economic growth[12].

'Residual volume' is far more important

'Other' volume growth is an elusive residual category that essentially consists of the following elements:

1. A larger number of people receive care (aside from the growth that can be expected based on demographic trends); in such cases, there are epidemiological factors at play, better diagnostics, latent demand, more generous needs assessments or supply-induced demand.

2. Individuals receiving care will receive more care; as before, this may involve epidemiological factors, better diagnostics, latent demand, more generous need assessments or, as before, supply-induced care.
3. The health care provided is of better quality or more demand-driven (i.e. better forms of housing, improved technology, more and better qualified medical personnel).

It is this not-very-specific and hard-to-operationalise growth 'other' volume which, along with the limited growth in labour productivity, is responsible for nearly 90 per cent of the real increase in expenditure.

Better management of expenses for residual volume

Most of these expenditure are classified as 'low-level policy', defined as expenses that – whether justifiably or not – are perceived as autonomous and inevitable. The Dutch coalition parties almost always make additional agreements on new policy, i.e. the 'high-level policy' portion (4). The current agreements contain provisions for extending the benefit package[13] and for more funding for nursing homes. This is offset by a number of cost cuts. During the period of office, there is also the effect and acceptance of any windfalls and setbacks, and of other policy changes not anticipated at the beginning of the term..

Table 2.2 shows that the increase in 'high-level policy' expenses is relatively slight, and that the bulk of the increase in expenditure consists of 'low-level policy' deadweight-rate effects and an increase in 'other' volume – which is therefore what cost-containment strategies should focus on.

Technology in healthcare: a specific case

Technological innovations generate additional production

New technologies ordinarily lead to lower prices. Computers are increasingly advanced, yet they are becoming cheaper; the price of functional transactions is declining; the price of mobility is decreasing due to the use of technology, etc. However, this is not the case in the healthcare industry. Economists believe that the new technologies are an important reason for the increasing expenses[14]. New technologies ramp up production through more generous needs assessments. Both older and younger patients become eligible for treatment at an earlier stage[15]. Cutler states: 'Many medical innovations appear to reduce unit costs and increase total costs'[16].

On top of that, efficiency gains through technology can lead to a loss of revenue for certain healthcare providers, who make up the lost income through additional production. It is partly for this reason that there is only limited substitution between new and existing technologies[17]. This constitutes a problem, as research has shown that more extensive use of capital and purchased medical resources and pharmaceuticals are the main factors in long-term improvement of labour productivity[18].

…and higher expenses

Certain segments of the healthcare industry have been less affected by Baumol's disease than others, as there are substantial differences in the development of labour productivity – e.g. between hospitals and nursing homes. Healthcare institutions and medical professionals with an above-average increase in productivity see this reflected in additional room in the budget or in additional income (in the case of medical professionals) Conclusion: underlying differences in the Baumol effect lead to substantial differences in revenue and budget within one government term alone, particularly in those segments where the equalising effect of the Law of Large Numbers (LLN)does not function properly[19].

One consequence: less negative impact as a result of Baumol effect

In the Netherlands, medical specialisations sensitive to technology, such as medical microbiology and radiology, saw their revenues increase significantly faster in recent decades than non-invasive specialisations such as paediatrics and psychiatry. The income gaps among specialists have since been aligned by means of a standard rate for an hour of a specialist's time; however, if the underlying standard hours are not adjusted for differences in the development of productivity, the same trend is set to reoccur in the future. We are seeing a similar trend in the realignment of responsibilities, with nurse practitioners and physician assistants doing the work that doctors used to do. However, doctors remain accountable for all medical procedures and – more importantly – they send the invoice. Consequently, the productivity gained contributes primarily to higher doctors' incomes or to lower work pressure, rather than to lower healthcare expenditure.[20]

Another consequence: income gaps

2.2 Criteria to assess increasing healthcare expenditure

The Council assesses the increase in healthcare expenditure from three perspectives:

Three key perspectives

Economic criteria

Room for other types of expenditure

The economic perspective assesses the efficiency of healthcare expenditure in relation to other possible types of expenditure, such as education and private consumption. The increase in healthcare costs comes at the expense of these other types of expenditure. During the current government term, the increase in health expenditure accounts for nearly thirty-five per cent of the increase in revenues from taxes and premiums, not including any financial setbacks due to the credit crunch[21]. This rate is set to increase, if the current policy remains in place.

Economic growth

Fiscal policy for health care was long dominated by a macro-economic perspective and public-sector economics. The healthcare sector was a 'black box' for which little information was available. The emphasis was on those aspects for which information *was* available, i.e. increasing expenses and the impact this would have on purchasing power, company profits and the budget deficit. The revenues generated by health care – i.e. improved health and quality of life – were, for the most part, not factored in[22], and there was in fact little information available. Health care was assessed mainly based on the impact it had on economic growth. It was generally believed that increasing healthcare expenditure could affect the country's competitive position, as it pushed up wages and taxes[23]. Budgeting was used as a method to control these increasing healthcare expenses.

Public funds

The government is responsible for ensuring that public finance remains affordable and sustainable. Health care plays a key role in this process, and recent international comparative research shows that high government debt – an indicator that there is not much margin to further increase expenses – correlates with a lower increase in healthcare spending. In its study of the fiscal impact of the ageing of the population (2006), the Netherlands Bureau for Economic Policy Analysis indicated that a reduction in healthcare expenditure was likely to be most effective in resolving the 'sustainability' gap, the increasing gap between the additional expenses for the ageing of the population, and projected revenues[24]. This position was supported by leading health economist Victor Fuchs, who stated that: 'The principal challenge to achieving a sustainable long-run fiscal policy turns out to be reducing the rate of growth of health spending – all health spending, not just the federal or the state portion.'[25]

Market forces

The emergence of health economics marked a shift from the statements above and to the specific mechanics of supply and demand in healthcare markets. By analysing the mechanics of market imperfections and by developing tools to solve them, insight is created into the conditions under which providers in the market can themselves improve the effectiveness and efficiency of health care. Increasing health expenditure is relevant in this type of analysis, to the extent that they are an indication of market failure (e.g. supply-induced demand) and or government failure .

Solidarity

Political criteria

The largest portion of healthcare falls within the public domain. Healthcare expenditure has increased substantially over the past decades – both in the Netherlands and internationally.[26] This has significantly increased solidarity shifts. The Council argues that the presence of solidarity, while firmly rooted, is not an automatism that can be extended indefinitely[27]. On the one hand, solidarity is a normative basic principle; however, on the other hand it is also based on feelings of a common destiny and of intelligent self-interest. Views on solidarity can change over the course of time as a result of social trends and other developments, e.g. shifts in cost structure, new insights into the causes of diseases, new social and/or cultural trends, and certainly also because an increase in health expenditure endogenously drives up income transfers.

Controllability

Politics is also about achieving what is feasible. However, the healthcare industry is notorious for its resistance to policy, even when change is very clearly necessary. How can this be explained? The government's structural power position does not allow it to dictate policy unilaterally when it is faced with strong resistance from the profession or the industry. The basis of this 'power to protest', the necessary clinical autonomy, the private execution and the information asymmetry can also not be eliminated through laws and regulations. Both institutions and professionals have a major stake in increasing healthcare expenses.

Social and political significance

It must also be understood that the Netherlands has had a separate minister for health care only since 1994 – prior to that, there was only a state secretary in charge, which now seems inconceivable. This exemplifies the increased political significance of health care, which is related to the steadily increasing expenditure. A growing number of people are

confronted with the healthcare industry and depend on it in some way or other in their daily lives – as a patient or a client, as an employee in a healthcare institution, or through one of the numerous suppliers. There are millions of people involved altogether, who make up a significant portion of the electorate. An extra euro spent on health care means an extra euro for someone providing health care[28]. The emotional component is significant: it is about getting well or not getting well; being placed on a waiting list or not; privacy or no privacy in a vulnerable situation, and it is about the availability or lack of hospitals in the vicinity, which in many cases are the largest employer in their areas. The social significance of health care has increased significantly, which is the main reason for the large number of parliamentary questions that have been submitted related to this issue.

Social and professional criteria

Professionalisation

The history of health care in the Netherlands is also marked by increasing professionalisation and specialisation. Over the years, the healthcare sector has increasingly become the domain of professionals, referring not only to the physicians, but also to the large numbers of nurses and all types of therapists. The sector employs a large number of college and university graduates, and this professionalisation is indeed one of the determining factors behind the increase in healthcare expenditure[29]. This put the organisation of the professional structure on the agenda as well.

Care for each other

Nevertheless, the sector would encounter significant financial and operational problems if they were no longer able to rely on the substantial number of informal caregivers. This seems to be backed up by international comparative studies, which show a positive correlation between female labour force participation and the level of healthcare expenditure.[30] There is no government or social or private insurance that can altogether replace what individuals can do for one another on a voluntary and non-remunerated basis.

Medicalisation

In addition, healthcare expenditure is related to broader social and professional trends, and must be assessed in light of those trends. Medicalisation, for example, is a phenomenon that has an impact on expenses, – no matter how negative public response may initially be . Some examples of this are cosmetic surgery, sterilisation, 'new' diseases and a different view of 'suffering'. The demand for care can be rather subjective:

people are influenced by the social norms of their environment, and: 'All other things being equal, social norms dictate the frequency with which people consume healthcare products and services'.[31] Healthy – and, particularly, unhealthy – behaviours also fit into this category: research has shown that there is a strong positive correlation between sugar consumption and the increase in healthcare expenditure[32].

2.3 What is a sustainable level of healthcare expenditure?

A formal answer does not suffice

It is not easy to provide a simple or precise answer to that question. A formal answer would be: the sum of the different budgetary frameworks. However, this means equating responsible expense levels with political feasibility. The Council perceives this as artificial, as what is at issue is social, economic, and fiscal capacity in the short term – but especially in the long term – as well as the improved health that is ultimately achieved.

History, culture and the system are all determinants

On top of that, expense levels are embedded in an historical, cultural and institutional context – they cannot be determined on a theoretical basis alone. Different actors can make independent choices within certain limits – hence the frequent overruns of the global budget – thereby co-determining the outcome, both through their actual actions and through the model-based estimates of projected expenditure levels deduced from those actions.

… as are these criteria

The Council is no more able to answer the question of how much money we should spend on healthcare and when we should spend it than any other expert. However, it can provide an overall idea of the mechanisms involved in responsible expenditure levels:

1. We can assess expenditure levels in other countries; however, this means we must adjust for relevant determinants, such as the age structure of the population, epidemiological factors such as life expectancy at age 65, and the general wealth and price levels. 'Sustainable' expense levels are responsible if they do not diverge to any significant extent from those in other countries.
2. As soon as this gives rise to improved health higher expenditure levels are more responsible.

3. As the ratio between the number of people who participate in the labour force and those who do not deteriorates, the macroeconomic distortions of a given spending level are larger, and responsible spending levels are lower.
4. The greater the competition from other types of expenditure, the greater the pressure on expense levels in health care.
5. The greater the level of solidarity in a society, the higher the spending levels it is willing to accept.
6. The more health care and health are valued, the higher the levels of expenditure considered acceptable.
7. The smaller the amount of informal care available, the higher spending levels will be.

A number of the mechanisms outlined above are currently under pressure, for example the pressure on the number of people participating in the workforce, the number of informal caregivers, the competition from other types of expenditure, and the assumption that people will automatically accept the steadily increasing levels of risk solidarity. On the other hand, it is evident that the demand for care will continue to increase and that this will need to be funded in some way or other.

We believe the maximum permissable growth rate is double the economic growth

The Council considers the current medium-term estimate of the Netherlands Bureau for Economic Policy Analysis – i.e. 4.6 per cent real growth – to be the maximum rate the economy will be able to sustain over the long term. This would indicate, after all, that healthcare expenses would be increasing twice as fast as the economy as a whole – well above the historical trend. In the long term, a significantly higher growth rate will not approach sustainable expense levels (see box 2.1).

A higher growth rate would not be responsible

In addition, the demand on the solidarity of future generations is already
increasing substantially, as a result of which opportunities for other types of expenditure – including a real increase in purchasing power – are limited. An even higher growth rate is likely to lead to social conflicts. The option to shift these costs to individuals and healthcare consumers, e.g. through a cut in the entitlements and significantly higher patient contributions, is not advisable either, as it does not fundamentally resolve the problem described above.

Box 2.1 Substantially higher estimates than the Netherlands Bureau for Economic Policy Analysis – a viable alternative?

Prismant[33] anticipates that an additional volume growth of 0.7 per cent is necessary in nursing, institutional care and home care; for the care of the disabled, this represents an additional 1.6 per cent per year; and its estimate for hospitals is almost 1 per cent higher annually than that of the Netherlands Bureau for Economic Policy Analysis.

The Council believes that this estimate ignores the significant opportunities for improving efficiency within the model of managed competition. One of the reasons the new healthcare system was implemented was to capitalise on these opportunities.

Secondly, the political economy of healthcare expenditure should be taken into greater consideration. The Council believes that an excessive increase in expenses will lead to political intervention, e.g. limitation of claims and more stringent needs assessments, higher patient contributions and an accelerated increase in financial risk liability in the healthcare sector.

2.4 Conclusions

Adapt expense management to a regulated economy

Healthcare expenditure is not as easy to determine in a standardised manner as it first appears. There are four definitions, each of which is important to the analysis of the expenditure problem.

Monitor labour productivity and 'residual volume'

The increase in expenditure correlates strongly with the lower productivity and with the development of the less-than-specific category of the 'other' volume. Changes in policy, in the structure of the healthcare market, in the social and cultural context, in wealth and in technical developments are key determinants for the increase in healthcare expenses. The bulk of the increase in expenditure is perceived as being 'low on policy'.

Monitor efficiency, solidarity and informal care

How should we assess the increase in healthcare expenditure? 1.) They must be efficient, which is not self-evident; 2.) there must be public support for the income and risk solidarity, which is also not self-evident; 3.) informal care must remain widely available, which is not self-evident either.

The Council believes that healthcare expenditure should not be allowed to grow faster than the current rate (i.e. twice as fast as economic growth), in order to remain economically, politically and socially sustainable in the longer term.

Make sure that expenses don't increase further

3. Problem analysis

3.1 The Netherlands within the European perspective: in the middle

The expenses

Are we getting our money's worth for our healthcare expenditure? The answer to that question depends on the ratio between the expenses (input) and the results achieved: the higher the ratio between the results and the expenditure, the higher the level of efficiency.

Are we getting our money's worth?

We will first consider the position of the Netherlands within Western Europe. While there is no comprehensive picture of this position, statistical data and research have shown that:

Facts first

1. Dutch expenditure is currently around the average rate for the Euro Zone (see table 3.1);
2. The real increase in Dutch expenditure has been substantial over the past several years, particularly compared to Germany and Belgium (see table 3.1);
3. If we adjust for an increase in expenditure with approximately 0.6 per cent of GDP[34] for the still relatively young population, then the Netherlands is included among the group with the highest expenses in Europe[35];
4. If we consider the expenditure per capita and per consultation, the Netherlands is also included in the highest group within Europe. The High costs per physician consultation also may indicate a high price per unit-of-service (see table 3.1);
5. Expenses related to mental disorders are high, whereas expenses related to cardiovascular diseases, oncological neoplasm and the urogenital system are low [36];
6. The Netherlands spends a large amount of funds on institutional care (even if we adjust for the housing component) while it spends little on pharmaceuticals[37];
7. Expenses for the elderly are high, particularly for those over the age of 85[38].

Table 3.1 Healthcare expenditure within an international perspective[39]

	Annual real growth in % (2000-2006)	Expenses as a % of GDP	Acute care per capita PPP (in $)	Expenses (in $) PPP per physician-consultation
The Netherlands	4.2	9.3	1,887	394
Denmark	4.1	9.5	1,851	268
Austria	2.0	10.1	2,151	321
Belgium[40]	2.6	10.4	1,679	224
Germany	1.4	10.6	1,750	240
France	3.1	11.1	1,808	274
Italy	2.9	9.0	1,760[41]	251
Spain	4.1	8.4	1,361	175
UK	5.1	8.4	N/A	N/A
Average	3.4	9.6	1,781	268

No, we spend a lot …

These facts do not give reason for excessive complacency regarding any success in cost-containment. Adjusted for the young age structure of the population, healthcare expenditure in the Netherlands is rather high, particularly as a result of mental health and long-term care. However, this need not be a problem if these expenditures improve health significantly.

The results

… and we're right in the middle in terms of the benefits

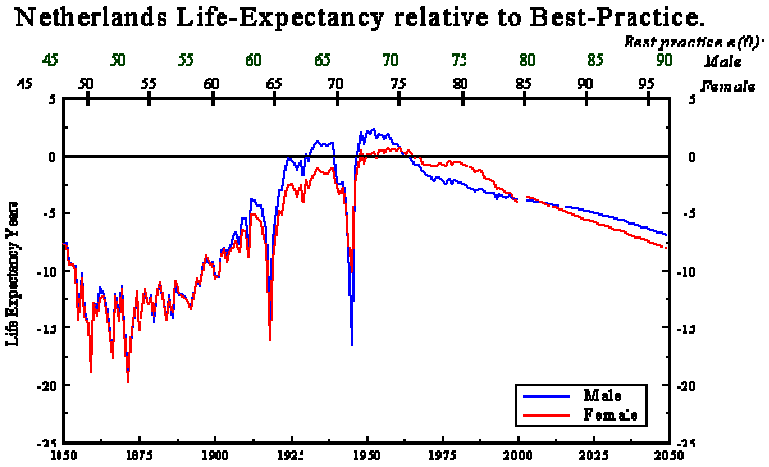
What do we receive in return for the healthcare expenses? To be able to answer that question, we must consider the yield. This consists of the services provided, i.e. the number of per-diem days, consultations and hospitalisations ; clinical effects such as the number of repeat occurrences, the five-year survival rate of cancer treatment and physical and psychological well-being , in addition to the contribution of health care to the increased life expectancy). How well does the Netherlands perform compared to other countries?

1. Life expectancy in the Netherlands is slightly lower than the average for the Euro Zone; however, life expectancy at age 65, in particular is low.[42]. Recent international research has shown that the size of this

group is the main determining factor for the higher healthcare expenses[43], which should drive down the Dutch healthcare expenses. However, when we look at the figures we see that the opposite is true.

2. The increase in life expectancy is lower than in other countries (see Figure 3.1)[44].
3. A large number of Dutch people, both male and female do reach the age of 65. This can be attributed to the fact that there are few fatal road accidents and that the prevalence of cardiovascular diseases is relatively low. [45]. While a large number of people live to age 65, they do not live as long past that age as people in other countries.
4. In the Netherlands, life expectancy is relatively evenly spread across the socio-economic groups[46], and the country's lead in this regard compared to other countries has increased since 1960.[47]. Differences between the health of people with a higher level of education and those with a lower level of education are small.
5. Although the clinical effectiveness of health care appears to be in order (the five-year survival rate among cancer patients is good, as is the treatment of depression and complications related to diabetes), the coordination of healthcare is relatively poor, especially when it comes to the use of pharmaceuticals and patient steering of the General Practitioner[48].

Figure 3.1 Life expectancy has increasingly lagged behind since the 1960s



Source: J. Oeppen, *Cross-country comparisons of life expectancy*

Expenses per unit-of-service

The price per product unit appears to be high

Finally, we will attempt to gain some insight into the size of the expenses per unit-of-service. Although a large amount of research still needs to be carried out[49], the following observations can be made:

1. Dutch people are averse to seek acute care treatments – particularly pharmaceuticals[50] and primary healthcare.[51] The number of doctor visits is approximately 25% lower than in other countries.[52] The limited number of doctor visits does not lead to reduced expenses. The total expenses per consultation are rather high (see table 3.1), which can be attributed in part to the relatively high fees[53], as well as to the long average-length-of-stay.[54]
2. Expenses for comparable procedures seem slightly higher than in other countries, while the variety between the costs in various institutions is exceptionally high.[55] Both these pieces of data would suggest that it is advisable to improve efficiency.
3. Expenses related to strokes are nearly EUR 2,000 higher per case in the Netherlands than in comparable countries. Strokes are one of the most expensive

medical conditions, and, as such, there is much to be gained in this area.

4. The consumption of both mental and long-term care and the expenses related to this care are high;[56] this correlates with the high rate of institutionalised care in these sectors. In the year 2000, there were significantly more people aged 75 and older in institutions in the Netherlands than in other European countries: 7 per cent of males and 15 per cent of females[57].

Our healthcare system is not very efficient

It would appear, therefore, that the efficiency of the Dutch healthcare system might be called into question. For example, there is not much evidence that Dutch citizens make much use of acute care[58] – on the contrary: the fact that Dutch people – compared to their counterparts in other European countries – visit the doctor infrequently initially has a decreasing effect on the costs of acute healthcare.

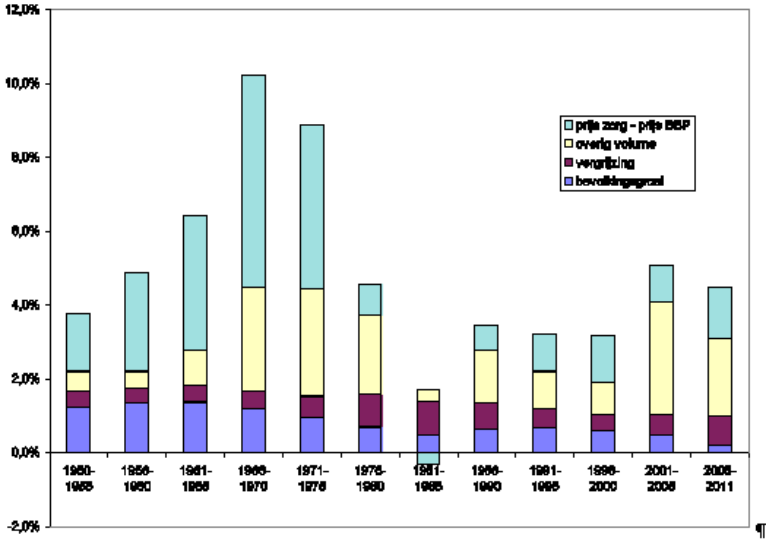
3.2 Health expenditure trends

Background

The problem lies in residual volume and labour productivity

The increase in healthcare expenditure is caused primarily by the increase in real prices and wages, by the slow growth in labour productivity and – particularly since 2001 – by the increase in the elusive 'other' volume (see figure 3.2)[59]. This paragraph will first address the residual volume and subsequently real price development. Note that breaking down expenses into a price component and a volume component is a complex process in the healthcare sector[60].

Figure 3.2 Average annual increase in real healthcare expenses



Source: Netherlands Bureau for Economic Policy Analysis

Residual or 'other' volume

'Residual volume' - what is that all about?

Both the Lower House and the Federation of Patient and Consumer Organisations in the Netherlands have conducted detailed investigations into the causes of the increasing healthcare expenses[61], one of which is 'residual' volume. The Council concludes that the nature of this 'residual' volume changes significantly over time and that this is related to the (budget) policy pursued[62]. In other words: the budgetary guidelines are relevant, and the 'residual' volume is significantly more subject to policy than current estimates would suggest.

Up to 2002: mainly all types of additional expenses

For example, approximately 50 per cent of the increase in residual volume between 1994 and 2002 was accounted for by all manner of additional expenses – not for additional healthcare services but for other matters, such as work pressure, labour market, healthcare reform, new treatments and quality programmes[63]. In addition, the budgetary guidelines – which are strongly focussed on input financing – make it possible to use the available room for growth for purposes other than additional services. Under the coalition governments of the social democrats, liberals and left-wing liberals in the 1990s, residual volume was comprised mainly of healthcare aspects that were difficult to identify in the data,

e.g. quality improvements and an increase in the number of medical personnel.

Residual volume is important in any sub-sector

In each sub-sector, 'residual' volume is a key cause of the increase in expenses. Table 3.2 shows the brief period between 2003 and 2005. Substantial growth is evident in all areas, with the exception of remaining acute care (i.e. entitlement reductions). The most rapid growth occurs in mental health care, care of the disabled and in hospital care provided to middle-aged patients. In addition, expenses for long-term care provided to those aged 85 and older are increasing rapidly – between 2002 and 2004, the increase was EUR 1,044 per person. This adds up, especially since the number of senior citizens will continue to increase rapidly over the next several years. As a result of social and cultural changes, the same applies to the demand for mental health care, while the life expectancy of people with disabilities is also increasing due to medical progress. As a result, expenses for these groups are growing exponentially.

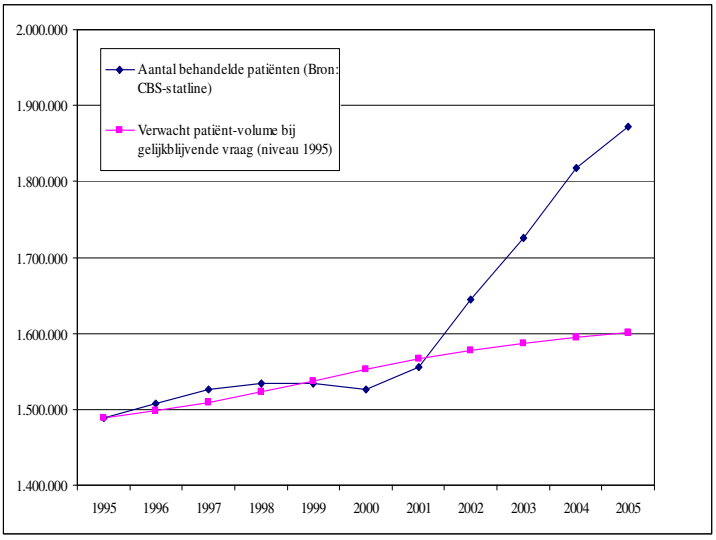
Table 3.2 Growth of 'residual' volume by sector and age, 2003 – 2005 (in millions of EUR)[64]

	0-19	20-44	45-64	65-84	85+	Total
Prevention	- 7	27	-13	-6	-1	0
Hospitals	84	201	277	95	-14	644
Other acute care	133	-355	-316	-164	-25	-726
Pharmaceuticals	24	32	53	77	18	204
Mental health care	63	252	126	15	5	461
Personal budgets Patient steered funding	97	134	108	-34	-26	278
People with disabilities	33	239	57	-1	1	329
Seniors	-6	-82	23	69	291	295
Management	-3	0	21	3	11	33
Total Budgetary Framework for Health Care (in millions of EUR)	418	447	338	55	261	1,517
Per capita (in EUR)	105	76	82	28	1,044	93
Per capita hospitals (in EUR)	21	34	68	48	-56	40

From 2002 onward: mainly from additional production

Since 2001, residual volume has consisted increasingly of additional services. The number of hospital treatments remained roughly the same between 1995 and 2000, after which it increased rapidly – much more rapidly than might be expected based on a demand that remains level. Besides, much more additional care was provided than might be expected based on the waiting lists (see figure 3.3). There is another factor at play: since the number of treatments per patient (and the related costs) is increasing, healthcare is becoming more intensive, partly due to the additional costs of new, expensive pharmaceuticals.[65]

Figure 3.3 The number of hospital patients who received treatment versus projected demand (1995 – 2005)[66]



This is the result of the budgeting policy

Why is the number of patients in hospitals increasing so rapidly? One of the reasons is that the waiting lists are being reduced, while another reason is that the budgetary policy is in the process of changing. In 2001, a policy was introduced, whereby the hospitals and institutions under the Exceptional Medical Expenses Act receive compensation for the actual number of services provided, subject to the approval of the insurers. This has greatly increased incentive to deliver additional services.

Presumably, demand also generates additional supply

However, where do all these extra patients originate from? Could it be delayed and latent demand, an increase in the number of people with multiple diseases (i.e. multimorbidity), or perhaps an increased number of referrals from primary care providers or supply-induced demand? This is an ongoing debate among health economists[67]. What is striking at any rate is that the hospitals – bucking the trend of the past several decades – have, in a short period of time, begun treating fewer seniors and a larger number of members of the workforce. The Council recommends that this be thoroughly investigated and incorporated into the volume study currently being conducted on the initiative of the Minister[68]. This is essential, as it is important that 'counter forces' are mobilised when incentives to produce become so strong that supply ends up creating its own demand.[69]

Not only in the hospitals

What is the situation like in other segments? Research by the Lower House indicates that the production increase in long-term care for the elderly between 1994 and 2002 was higher than that in the acute segment.[70] It is also striking that the increase in expenses for mental health care and care of the disabled was more than one per cent higher between 1994 and 2005 than the increase in expenses for long-term care for the elderly. Another report points out the rapid growth in the demand for outpatient psychiatric help, with the number of clients increasing by no less than 41 per cent between 2001 and 2005[71]. A final fact worth noting is the rapid increase in expenditure for medical aids, in particular optical aids[72]. Benefits under the municipal provisions for the disabled dropped by 10 per cent per year between 2003 and 2005[73].

Healthcare institutions have propped up their reserves

In those cases where fixed costs are high, the laws of business dictate that rapid production growth will usually lead to a decrease in the cost price per product unit. The increase in reserves that many providers have realised in recent years should therefore partly be considered in this light. Average solvability of the institutions affiliated with the Guarantee Fund (*Waarborgfonds*) increased from 8.5 per cent of turnover to 12.6 per cent of turnover between 2002 and 2006.[74] In the hospitals – the largest segment – solvency increased from 8.2 per cent in 2002 to 9.6 per cent in 2006 and 11.1 per cent in 2007[75]. While this ensures an improved basis for bearing more financial risk, many providers will require several years before they will achieve the standard set by the Guarantee Fund, i.e. a resistance of 15 per cent.

With approximately EUR 4 million combined

Major healthcare providers and, in particular, specialised clinics, typically have lower resistance than smaller institutions, mental healthcare providers and disability care. Between 2002 and 2006, all institutions together were able to increase their capital by roughly four billion euros, while in 2006 and 2007 the average financial positions of the healthcare insurance companies was double the level of the statutory requirements. This is equivalent to a resistance of approximately 16 per cent, i.e. an amount of six billion euros[76].

The increase in real price

Baumol effect: 1.1% per year

Average productivity growth in the healthcare industry has trailed behind productivity growth in the corporate sector. The rapidly increasing wages result in a budget deficit equal to the sluggish productivity development. This phenomenon is referred to as 'Baumol's Law'. The Netherlands Bureau for

Economic Policy Analysis estimates this deficit at 1.1 per cent per year for the coming period. Figure 3.2 shows that throughout the years, this effect has been a key factor in the increase in healthcare expenses, and, by extension, is of vital significance to cost-containment.

Considered a given – but wrongly so

In the Dutch healthcare system, this significantly lower increase in labour productivity is (inaccurately) accepted as a given, and providers receive remuneration for this – or at least their compensation for labour conditions is not reduced.

See differences per sector and per region

How is labour productivity developing in the healthcare industry compared to a number of other public segments? The Netherlands Institute for Social Research/SCP calculated the increase in real labour costs in heath care, education and security between 1995 and 2004; these data indicate that real labour costs in the healthcare sector are increasing at a more rapid rate than in law enforcement or education[77]. Note that the development of labour productivity in hospitals runs a pace with the economy as a whole until the mid-1990s, which was when the system of specialist budgeting was introduced. It later experienced a sharp fall, only to recover after the introduction of the system of paying for actual work performed and the introduction of increased competition[78]. In other words: more competition and budgetary guidelines geared specifically towards services increase labour productivity.

3.3 Expenditure trends per sector

Background

Expenses increase by 6 to 8% annually

Table 3.3 shows how expenses in the main segments of the healthcare sector have increased over the past several years. Increase across the board is high, ranging from an average of more than 6 per cent per year to more than 8 per cent per year. At an annual growth rate of 7 per cent, healthcare expenses will double every ten years.

'Residual volume' accounts for 2 to 4%

The overall price increase did not exceed 2 per cent per year during this period, while the lower labour productivity caused by the Baumol effect cannot account for more than roughly one per cent per year. Demographic effects account for significantly less than one per cent, while there are roughly four explanations for the remaining portion of the increase in expenses: additional volume increase, quality improvements, lower efficiency and investments that have not yet started to

pay off. This latter category also includes all manner of adjustments that are essential in creating an environment with managed competition, including an increase in solvency.

Table 3.3 Expenditure per segment (in billions of EUR)[79]

	1998	2000	2004	2005	2006	Average growth (%)
Hospitals	10.1	11.3	16.3	17.6	19	8.2
Mental health care	2.3	2.6	3.7	4	4.2	7.8
Care of the disabled	3.5	4	6.1	6.1	6.6	8.3
Nursing homes	3	3.3	4.7	4.9		6.3
Care homes/facilities	2.6	2.9	4.2	4.3		6.5
Home care	2	2.4	3.6	3.7		8.0

Source: Statistics Netherlands, *Gezondheid en zorg in cijfers 2007* ('Health and Health Care in Numbers, 2007')

Labour productivity increases unevenly

The increase in labour productivity is not the same across the board; in home care, in hospital care and in mental health care, it is stronger than in care for the disabled and in the nursing homes[80]. However, the Ministry of Health, Welfare and Sport and the Health Authority treat all segments equally with respect to the specific compensation for labour productivity[81]. Segments with a consistently below-average productivity development are therefore required to surrender funds in favour of the other segments.

…as previous research has shown

As noted above, the development of labour productivity is difficult to measure[82]. Based on earlier data provided by Statistics Netherlands, labour productivity in health care (measured in terms of added value divided by the number of hours worked) declined by an average of 0.6% between 1995 and 2006. This fact led to surprise, and it is true that these data are debatable. Statistics Netherlands has developed new methods to improve the division of value development into 'price' and 'volume' in the largest segments (i.e. hospitals, nursing and care, care of the disabled and mental health care)[83]. For this period, implementation of these new methods does not result in a drop in labour productivity but in a small increase – an average of 0.2 per cent per year[84]. As these types of positive adjustments also occur in the international research

available,[85] conclusions regarding the development of labour productivity must be made with some caution. However, there is sufficient theoretical and empirical substantiation for the following three hypotheses:

1. Labour productivity in the healthcare sector is slower than that in the rest of the economy.
2. The possibilities for increasing labour productivity vary significantly for each sector.
3. The budgetary guidelines and financing methods affect labour productivity.

Long-term care for the elderly

Geriatric care is a major budget item

Expenses for geriatric care financed with public funds total nearly EUR 13 billion per year, the equivalent of almost EUR 800 per capita. During the years for which data are available (2000-2005), out-of-pocket payments increased slightly more than three per cent per year. This increase is consistently lower than the increase in gross expenses, which can be considered remarkable.

Table 3.4 Expenses for long-term care for the elderly (EUR billion)[86]

	1998	2000	2002	2004	2006	2007
Nursing homes and care homes (gross)	7.6	8.7	11.2	12.3	13.4	14.1
Patient contributions		1.2	1.3	1.4	1.4	1.4
Long-term care (net)		7.5	9.9	10.9	12.0	12.7

Source: Statistics Netherlands and the Health Care Insurance Board/CVZ (patient contributions)

Expenses will increase significantly due to the ageing of the population

Care for the elderly is a budget item that is set to increase significantly in the future due to the ageing of the population. The background study related to this subject addresses scenarios in which these expenses will account for at least 3.4 per cent of GDP in 2030; however, a more likely scenario is one based on 4.1 per cent of GDP. The same background study shows that the Netherlands also scores high on an international level (see table 3.5).

Table 3.5 Average long-term care costs and patient contribution per inhabitant per year

	NL	Germany	Belgium	UK	US
Percentage of individuals receiving intramural care (both public and private)	7.1	4.1	8	4.2	3.6
Costs per inhabitant per year (* EUR 1,000)	41 – 76	28 - 37	36.5	30 - 51	49 - 56
Average patient contribution (* EUR 1,000)	7.5	11 - 15	14.6		
Patient contribution dependent on choice of provider?	No	Yes	Yes	No	Yes

Extensive use of intramural care

The first thing that stands out is that in proportion to the population as a whole, a large number of senior citizens make use of intramural care. How can this be explained? Possible reasons are the stringent assessments of personal finances in

Great Britain and the United States, or the strong incentive in Germany to opt for home care. In addition, annual expenses per individual resident of a nursing home – i.e. the price per product unit – are significantly higher in the Netherlands than in other countries. This obviously requires more detailed analysis, for instance to examine whether care in the countries listed is much less generous or actually much more efficient than in the Netherlands.

Low patient contributions

Something else that stands out is that patient contributions in the Netherlands are low, with contributions in Germany and Belgium being nearly double as high, on average, while Great Britain and the United States use stringent assessments of patients' personal finances. Another striking difference is that both in the Netherlands and in Great Britain, patient contribution do not depend on the choice of healthcare provider, whereas in the other countries it does. More expensive and more luxury housing requires consumers to pay higher contributions.

Acute mental health care

Expenses have increased substantially

The cost of mental health care has increased rapidly over the past several years,[87] with the number of clients increasing by no less than 41 per cent between 2001 and 2005[88]. The exact causes of this increase are difficult to trace, however demographics only account for a small part of the reasons. Experts sometimes cite our increasingly complex society as a reason that the demand for help is rising, though it is also true that much of the latent demand is manifesting itself due to the fact that there is no longer a stigma to seek out mental help.

…particularly for minor mental-health problems

It is currently not possible to say whether this additional demand for care will increase or decline the average seriousness of such conditions. The latter may be more likely, for the following three reasons: 1) Clients with more serious problems 'automatically' come in contact with mental healthcare providers, e.g. through interventions, and there is only limited growth in this category. 2) Research shows that the demand for help is particularly high among people who have been through a divorce[89], and it is likely that the majority of these problems are of a less serious nature. 3) Social norms and broader cultural trends contribute significantly to the ultimate demand for health care – particularly if this is more difficult to verify [90] – which may give rise to an increased demand for simple help.

Health insurers bear no risk

On 1 January 2008, acute health care accounted for approximately 75 per cent of the global budget for mental health, transferred from the Exceptional Medical Expenses Act (AWBZ) to the Health Insurance Act (ZVW). Although the purpose of this effort is to encourage more competition, this is currently far from the case. Health insurance companies are subjected to detailed costing for mental health care and, as such, do not carry risk. In addition, patient risk has also been reduced due to the cancellation of patient contributions for psychotherapy, a generally relatively affluent category of patients.

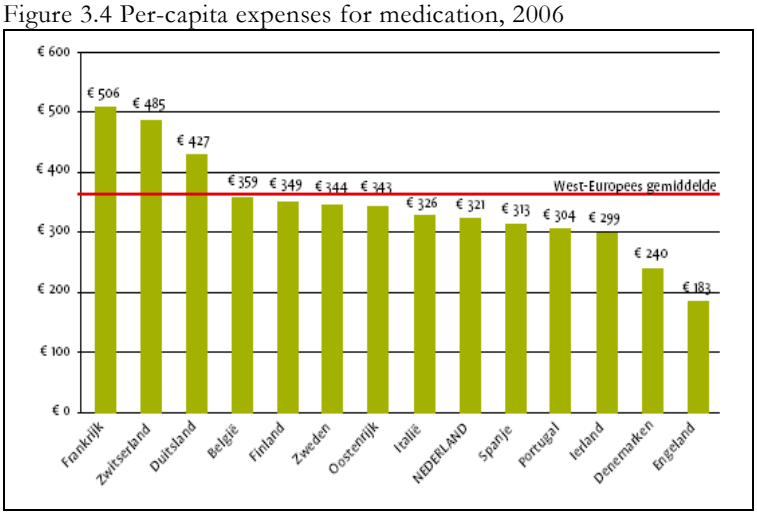
Pharmaceutics

Low per-capita expenses

Expenses for extramural medications distributed by public pharmacies totalled EUR 4.7 billion in 2007[91]. Per-capita expenses for medication in the Netherlands are relatively low (see figure 3.4), which is most likely attributable to a reluctance on the part of Dutch physicians to prescribe medication. Pharmacies play a role as well, particularly in promoting substitution by generic pharmaceuticals. In so doing, they also greatly benefit financially, as 'purchasing benefits' paid to pharmacies for prescribing generic medications totalled EUR 400,000 in 2007, amounting to EUR 780 million per pharmacy. The government, although at one time responsible for these 'purchasing discounts', has been attempting to change this situation for years, with mixed success.

Pharamacies: many puchasing benefits

Figure 3.4 Per-capita expenses for medication, 2006



Source: Foundation for Pharmaceutical Statistics (SFK) (2008)

Social Support Act

Municipal authorities bear the full risk

The introduction of the Social Support Act (Wmo) in 2007 resulted in the transfer from household care services from the Exceptional Medical Expenses Act to the municipal authorities, along with the corresponding resources. While this measure was initially based on the historical distribution of costs, the budget for the Social Support Act is now fully distributed on the basis of a risk-adjustment scheme, with municipal authorities bearing the full risk.

This results in significant cost savings

Almost EUR 1.3 million was transferred to the municipalities in 2006[92]. The Netherlands Institute for Social Research estimates that municipal authorities saved EUR 169 million during the first year, a cut of nearly 14 per cent, which represents a major departure from past trends (see table 3.6). The municipal authorities monitored costs very closely, since they carried the full risk. This resulted in some competitively priced contracts – in some cases too competitively priced. Home-care organisations have significantly reduced their rates, which was possible by making greater use of inexpensive (i.e. unskilled) household workers and by drawing on financial reserves. The Netherlands Institute for Social Research is responsible for the annual indexation of the Social Support Act budget. The Institute's method is based on multiplying the actual result by a price and a volume factor. This insures that cost cuts are deducted automatically, while municipal authorities still have the incentive to reduce costs[93].

Table 3.6 Social Support Act Budget and realisation

	2005	2006	2007	2008
Budget allocated	1,123	1,165	1,218	1,265
Realised	1,186	1,201	1,049	N/A
Surplus	-63	-36	169	N/A

Source: Netherlands Institute for Social Research (SPB), 2008.

Individual patient funding

Individual patient funding for facilities was introduced in 1994

In 1994, the government introduced funding for individual patients[94] (*persoonsgebonden budget*) for specific types of care provided under the Exceptional Medical Expenses Act. Under this system, clients, rather than the healthcare administration office, purchase their own care services. Patient organisations welcomed the system of individual funding as the best example of patient empowerment in practice. The government

underlined that the individual budget would make healthcare more efficient due to the elimination of overhead costs and the challenging of new providers in the market.

From 2003 onward: individual patient funding for functions

In April 2003, an updated version of the individual funding scheme was implemented. One new feature was that the budget would henceforth be determined based on a *functional* assessment of an individual's need for care. This transition has increased the range of healthcare services that those eligible for the scheme can purchase.

Number of beneficiaries is increasing significantly

Table 3.6 shows that the number of patient fund holders is increasing substantially. The data for 2007 are distorted by the introduction of the Social Support Act (WMO). Expenses will increase to over EUR 1.4 billion in 2007, and are expected to continue to rise.

Table 3.7 Individual patient funding: budget holders and expenses[95]

	Number of budget holders	Rate of increase	Expenses (in millions of EUR)
2003	62,500	25%	635
2004	69,500	11.20%	764
2005	80,500	15.80%	922
2006	95,000	18.10%	1,136
2007	89,771	42%	1,455 (estimate)

3.4 Control of healthcare expenses: the Budgetary Framework for Healthcare, 1995 - 2007

Consistent overruns of Budgetary Framework for Healthcare

A new government began its term with a multi-year global budget for healthcare, the Budgetary Framework for Healthcare (BKZ). Table 3.8 shows the overruns that have since occurred in relation to the expenses specified in the Government Agreement. It emerges that actual expenditure is consistently higher than was agreed under the Government Agreement, and this gap increased as the government term progressed. The fact that successive governments have allocated increasingly more funds towards healthcare has not affected this process in any significant way. In fact, the contrary is true: the overruns only appear to have grown. At

the same time, the size of the public health expenditures as a percentage of GDP remains remarkable stable, hovering just above nine per cent.

Table 3.8 Global budget and overruns (in billions of EUR)[96]

	Public expenditures	Budgetary Framework for Healthcare	Overrun	Year of global budget set	Volume in global budget	Price increases in global budget
1995	24.2	23.8	0.4	1994	1.3%	1.2%
1996	24.8	24.7	0.1	1994	1.3%	2.0%
1997	25.7	25.4	0.4	1994	1.3%	2.1%
1998	27.3	26.1	1.2	1994	1.3%	3.1%
1999	29.1	29.4	-0.3	1998	2.3%	3.6%
2000	31.3	31.1	0.2	1998	2.3%	2.9%
2001	35.1	33.3	1.8	1998	2.3%	1.8%
2002	38.3	34.2	4.1	1998	2.3%	2.1%
2003	41.9	38.9	2.3	2002	2.5%	3.7%
2004	42.8	41.1	1.7	2003	2.5%	1.6%
2005	42.8	41.7	1.1	2003	2.5%	1.8%
2006	44.8	43.5	1.3	2003	2.5%	1.9%
2007	47.6	45.7	1.9	2003	2.5%	2.4%

Standard response: increase cost savings or increase Budgetary Framework for Healthcare

What measures has the government implemented to reduce these consistent and ever-increasing overruns? Effectively, they have implemented two different measures:

1. Implementation (either compulsory or through agreements) of general efficiency deductions through sharp cuts
2. – more importantly – approving the 'inevitable' overruns by raising the budget.

Sometimes an overrun is a conscious decision

Obviously, in some cases the budget is exceeded deliberately in order to facilitate new policy, as a portion of the overruns are the result of policies implemented during a particular government term. However, many overruns are caused by the fact that providers and medical professionals delivered more

than was agreed. It is often not possible to redress for these overruns, as they often manifest themselves too late, as a result of which it is not always possible to take measures at short notice.

The Budgetary Framework for Healthcare is continuously updated

Why is it that even though overruns seem to be the rule rather than exception, expenses as a percentage of GDP are barely increasing? This is partly due to the rapid economic growth , however the most significant factors are the transfer of benefits from the basic packages to the additional insurance (e.g. physiotherapy and dental care) and certain 'technical' changes and window dressing that have an optimally diminishing effect[97] (mainly shifts to the governmental budget): including funds for university clinics, public health). The Temporary Research Committee of the Lower House states that the Budgetary Framework for Healthcare is a calculation unit that seems strongly subject to downward definition change[98].

3.5 Solidarity shifts

What are the factors influencing solidarity?

Solidarity is decided at the political level

The bulk of healthcare expenditure are funded by public means, and compulsory community-rated and income-related schemes play a key role in healthcare funding. The degree of risk solidarity in the Netherlands is high, with younger people paying for a growing group of older people and healthy people paying for a growing group of healthcare consumers. The question as to how much solidarity is desirable is first and foremost political. Consequently, the exact type and size of the solidarity-based funding are by no means self-evident.

… and based on public support

Why do societies show varying degrees of solidarity? With respect to solidarity as a social phenomenon[99], important factors include sympathy for another person's fate and ideas such as reciprocity and inherent self-interest. The embedding of these principles in religious orientations in which solidarity is a central tenet – such as brotherly love in Christianity and concern for our fellow human beings – is an added factor. As an increasing amount of research has shown, solidarity is fostered by the existence of a homogenous society in which there are no major social and cultural differences[100]. Another shared notion behind an increase in solidarity is that people are confronted with significant blows in life that are difficult to control. This is often coupled with the idea that anyone can

be affected by such misfortune (randomized chances). Yet there are other factors, too: Efficiency trade-offs must be limited; that is to say, the administrative costs to organize solidarity must remain in check[101]. Another key basis for solidarity is that there should not be too much competition from other types of expenditure and interests. This is easier to facilitate during times of strong economic growth, when there are a large amount of funds to be allocated. Finally, solidarity is also encouraged when stakeholders and interest groups are able to influence the related decision-making process, either by exercising their right to vote, or through representative participation in all types of entities.

What is the size of the solidarity shifts?

10% of the population consumers 70% of curative care

The financial transfers in the healthcare sector are substantial, as expenses are distributed very unevenly. For example, annual hospital costs are incurred almost entirely by roughly tern per cent of the population. When we consider a longer period of time, say ten years, this same group is still responsible for approximately seventy per cent of these costs[102]. Concentration of healthcare expenditure among the top ten percent consumers has intensified over the past decades: they incur now roughly seventy per cent of all acute care costs, versus forty per cent in the 1950s[103].

This ratio is even more skewed in long-term care

Concentration of expenses for long-term care is even more dramatic: this relates to the limited number of congenital defects (i.e. care for the disabled) and serious psychiatric disorders. Risk solidarity is less pronounced in care for the elderly, as the majority of people – fortunately – live to a relatively old age: 15 per cent of those aged 80 and older live in a senior facility and an even larger percentage receive home care. This ensures that while the solidarity shifts among older people are limited, those between the generations are substantial. As healthcare is funded on a pay-as-you-go basis, an increasingly smaller workforce must pay for a growing group of senior citizens. The ratio between those aged 65 and older and those under the age of 65, is deteriorating, thereby causing solidarity transfers to increase significantly. The paradox is that the impact of this demographic shock is strengthened by the fact that as a society we are becoming increasingly wealthy. This increased prosperity leads to greater demand for premium facilities in long-term care by a new class of prosperous elderly.

An increasing amount of solidarity is needed

The implication is that more and more solidarity transfers will be required to continue to fund the healthcare system in the current manner. Several years ago, the Ministry of Health, Welfare and Sport calculated that in twenty years' time, an average net payer will pay approximately 3,600 real euros more for a net receiver than is currently the case. This represents an increase of more than 100 per cent[104]. In other words: the 'average Joe' will need to pay approximately 15 per cent of his salary (EUR 29,500 in 2006) to healthcare consumers, compared to 10 per cent now. This exemplifies a number of typical characteristics of the Dutch healthcare system. Income solidarity is 'limited' due to low thresholds, risk solidarity is at a maximum level.

The elderly, women and divorced people receive

Who receives and who pays for the solidarity transfers?
Who are the main beneficiaries of this considerable financial solidarity? Recent research has shown the following:[105]

1. Women, especially due to their greater life expectancies. However, this is offset by the fact that the majority of people providing 'free' informal care is are female.
2. Senior citizens and healthcare consumers with multiple disorders. [106]
3. People with lower levels of education and from non-Western backgrounds consume approximately 10 per cent more healthcare. Nutritional diseases such as obesity play a significant role in this additional consumption.
4. Healthcare costs of divorced people are almost 50 per cent higher than average; this relates in particular to significantly higher expenses for mental health care, social work and family care.

…while employers, young people and families pay

As a result, solidarity shifts are steadily increasing due to a combination of demographic (i.e. the ageing of the population) and social/cultural trends (i.e. the divorce rate, migration, unhealthy lifestyles, growing technological possibilities and a demand for 'prosperity-proof' facilities, particularly under the Exceptional Medical Expenses Act (AWBZ). This leads to problems when net payers, such as employers, young people and traditional nuclear families are no longer willing to contribute to the same extent. Employers have already stated they have a problem with automatic contributions, as this undermines their competitive position. The Council believes that this proposition and any potential solutions merit a detailed investigation.

3.6 Professional care and informal care

Professional care

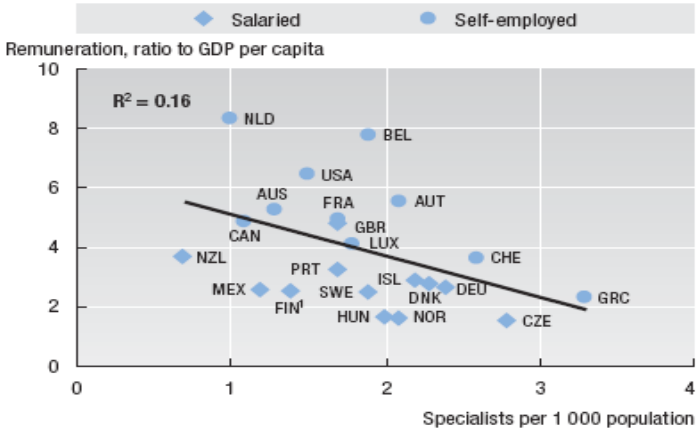
Few doctors, who earn a lot of money

The health sector employs more than one million people – many of whom work part-time – who together account for 1.2 billion contract hours[107]. Figure 3.5 shows that the Netherlands has only a small number of medical specialists compared to other countries. In addition, specialists in some fields (such as child psychiatry) have a difficult time finding well-qualified professionals. The total number of doctors appears to be low, and is not in line with other countries. This has a distorting effect on the market, leads to higher pay and increases the number of waiting lists.

Many nurses, who earn a decent salary

Yet while the Netherlands has only a limited number of doctors, it does have a significant number of nurses. The country has roughly the highest number of nurses per 1,000 inhabitants of the entire OECD (14.2), which is nearly double the average (8.2)[108]. Nevertheless, there are local shortages within the densely populated Randstad conurbation[109]. The question is what implications this should have for employment conditions, particularly those of hospital staff. In a recent study, British health economist Carol Popper showed that significantly more patients die from heart attacks in areas with a strong labour market and therefore greater dependence on temporary staff. [110] This prompted her to raise the question of whether there should not be more regional differences in the employment conditions of hospital staff.

Figure 3.5 Relative remuneration of specialists versus number per 1,000 inhabitants



Efficiency gains benefit doctors

Both per bed and per discharged patient, a larger number of nurses are deployed in Dutch hospitals than in hospitals in other European counties[111]. There is clearly an ample supply, and as such there are no indications that Dutch nurses earn more money than their counterparts in other Western countries. However, doctors do, and the result is that there are significant differences in income in the Netherlands between doctors and nurses – at least more so than in other countries. Reallocation of responsibilities can help make this situation more manageable. The increased efficiency gained as a result of such a reallocation must benefit the premium payers and the nurses, rather than benefiting the doctors, such as in the current situation.

Volunteers and informal care

Just as much informal as formal care

The amount of informal (i.e. voluntary and unremunerated) care provided in the Netherlands is almost as large as the amount of care provided by paid professionals. Between 1993 and 2004, the number of volunteers involved in nursing and other care providers increased from 5 per cent to 8 per cent of the population. This contrasts favourably with other types of volunteer work[112], but the question is whether this growth can be sustained if workforce participation must increase at the same time.

Greater workforce participation has not yet affected informal care

This question also applies to the availability of informal care[113], since the percentage of people working full-time while also providing informal care has dropped in the past decade. In

addition, informal carers with jobs each week provide an average of ten hours less care than those without jobs [114]. There are currently 3.7 million informal carers in the Netherlands; however, if we only consider informal care that is a substitute for professional care, the number if approximately 1.1 million[115]. The majority of these workers are females over the age of 45 who either do not have jobs or work part-time. Professional care would come under considerable pressure without this additional help, and recent international research shows that increased female workforce participation indeed results in higher healthcare expenses[116].

The government supports informal care…

It is not surprising, therefore, that the Dutch government is committed in its policies to ensuring that volunteer care and informal care remain attractive options. They do this by implementing support measures, such as bonuses for volunteers, tax incentives, and increased opportunities for leave to care for a relative and long-term leave. A decidedly more radical option is remuneration for informal care. Strictly speaking, such care would then no longer qualify as informal care. The incentives of financial remuneration seem substantial, particularly if a decent hourly wage is provided. On the other hand, it is unaffordable, unless a large portion of such remuneration were to be earned back due to lower expenditure for professional help.

…but the costs of such care are high

What is the financial impact of remuneration for informal care in the healthcare sector? Those eligible for individual patient funding may choose to hire family members or friends/acquaintances, which a large number of them do[117]. These people typically earn less than professional workers; however, as there are such a large number of them, we estimate that the total burden on the individual patient funding scheme is approximately 500 million euros. An increasing number of people are claiming funds under this scheme, and the State Secretary of Health, Welfare and Sport recently responded by introducing stricter criteria for assessing those needs.

3.7 Conclusions

This chapter discussed current trends in healthcare expenses and their causes. The Council has reached several conclusions in response to these trends.

Health care is too expensive

Healthcare expenditure in the Netherlands is among the highest in Europe, if we take into account the country's age structure (i.e. a relatively young population) and the low number of doctor's visits. The Netherlands does not serve as an example when it comes to healthcare expenditure, the results we obtain with these funds. The overall impression of Dutch citizens regarding such aspects is positive: they consume only a limited amount of healthcare and keep the number of doctor's visits to a minimum. Another positive aspect is that health improvement is virtually the same across the board and that socio-economic differences do not significantly affect health-care consumption levels.

...and the expenses are increasing too rapidly

The increase in healthcare expenses is primarily due to an increase in 'residual' volume and a real increase in wages. Both of these increases can be steered through policy, however the budgetary regulations related to the Budgetary Framework for Healthcare do not appear to provide for this. In its current form, the global budget is not able to control expenses as it merely has a signalling function. Without additional measures, therefore, the provisions of the global budget are continuously exceeded (see paragraph 5.3).

Budget policies are significant, and it is possible to control allocation and efficiency on the basis of such guidelines. For example, the system of paying only for actual work performed has prompted providers to convert their 'residual' volume into additional services. Other opportunities following the success of the Social Support Act seem offered by the increase in financial risk and a more effective incentive structure for recording gains in labour productivity.

Labour productivity must go up …

This productivity can also be boosted by changing the costing system. In addition purchasing policies are a potential productivity driver in the healthcare sector.

… and the price per product unit must go down

The price per unit-of-service, which is relatively high in the Netherlands, is slowly falling considering the rapid growth in production. Expenses for elderly care and psychiatric help are among the highest in Europe, which is due in part to the high percentage of institutional care.

The system 'maximises' the level of risk solidarity; if this policy does not change, solidarity transfers will increase significantly as a result of the ageing of the population and a number of social/cultural trends. It is not likely that these trends will be

accommodated into the current funding without any discussion.

4 Healthcare expenditure: the perspective of risk management

4.1 Shifting costs

Employers and individuals foot the bill … while others incur the costs

The bill for increasing healthcare expenditure is paid by premium payers (i.e. employers and individuals) and taxpayers (government contributions). This is effectively where the financial risk is concentrated. Footing these bills, however, is not the same as being able to control the expenses. Nevertheless, the government can provide users and institutions with incentives to operate efficiently. This helps prevent that all expenditure is simply transferred to taxpayers. These incentives are provided by shifting the financial risk (or a portion of that risk) to the other parties, or to share it with the other parties. These parties are insurance companies, providers and users. However, professionals, patients, clients, care providers, health insurance companies, assessment bodies and healthcare administration offices all barely carry the financial risk of their actions. This is all the more problematic, as these parties do not have a natural interest in controlling expenditure but rather in an *increase* in expenses. For providers, this means higher remuneration, higher salaries and better fringe benefits, more career opportunities, more research opportunities, more social influence and reduced work pressure. The providers are often supported by patients and clients, who believe that higher expenses guarantee better health.
Since patients themselves also not do not bear any financial risk – with the exception of small out-of-pocket payments – they will be pleased to accept additional treatments, as long as they benefit from it in some way.

This means the costs are shifted

Together, these groups often have the opportunity to shift the increases in expenses to all taxpayers. The reasons for this are:

1. There are currently few formal incentives related to cost-containment.
2. Over the years, the parties involved have 'learned' that any financial responsibilities are often not maintained; cost-containment is often less dramatic than they appear.

This is how it's done

How does this process work in practice? The individual goes to the doctor or to an assessment agency; He/she is not limited by personal contributions or other restrictions: out-of-pocket payments are significantly lower than in other countries, and our package is an open, comprehensive system. Both the Exceptional Medical Expenses Act and the Healthcare Insurance Act deliberately provide more options for customised healthcare. These options have increased demand, particularly for healthcare that is difficult to 'verify'.

The risks are limited…

While individuals can be added to a waiting list, the number of these lists has been strongly reduced since the introduction of the fee-for-service policies. After all, since then no production also means no money. Providers expense the bill to the insurance company or health administration office, which pays more or less 'automatically', in line with the current rate. Financial risks are limited (segments of acute care) or zero (long-term care and mental health care).

…and the government has a hard time saying 'no'

Generally, a budget problem arises during the year: (1) the number of treatments increases faster than expected or (2) there is a need for new or higher rates due to new developments or changes in the treatment process. The government attempts to reduce this effect by imposing generic discounts, increasing patient contributions or trimming down the package. However, as this has met with considerable resistance, there is significant pressure to increase the budget, i.e. to accept the overruns. The parties involved take full advantage of the media, which are increasingly focusing on healthcare and health-related issues. In this 'mediacracy', more money represents better care. Many politicians share the concern the public has raised over this issue. These MPs feel compelled to provide additional funds, and the global budget is further exceeded.

Risk management: from global budgets to managed competition

It is hard to prevent shifting risk

The process of shifting financial risk to third parties is known in the literature as 'cost-shifting hydraulic' and comes in many varieties[118]. The phenomenon is very hard to control, the reasons for which are:

1. Income and risk solidarity are necessary[119] in order to ensure access for large groups of people; this reduced risk for patients and consumers.

2. The healthcare market has specific characteristics: a) the client is not able to accurately assess the price-quality ratio, b) demand is often irregular and strongly heterogeneous in nature, c) clients are not really sensitive to price, d) providers have great control over the demand for care (supply-induced demand) and – finally – the shortage of professionals; all these factors increase options for shifting costs.
3. There are tens of thousands of treatments, and the rate at which these treatments change – sometimes helping to reduce expenses, but more often increasing them – is high. It is particularly difficult to monitor whether the regulated rates are in line with the costs, thereby making cross subsidy inevitable.

This requires a third party

As a result of these characteristics, a third-party is usually required to reduce financial risk: the insurance company. However, insurance companies incur a strong incentive to not accept high-risk clients, or to accept them at much higher rates.

The government acted in that capacity …

For decades, the government assumed an increasingly large share of these risks, i.e. the state assuming greater control over the major organisations and institutions that make up public life. This resulted in upward pressure on healthcare expenditure, which was partially related to the decreasing financial risks in these organisations and institutions. In the early 1980s, the same government was compelled to revert the effects of this process by means of a stricter budget policy. Providers now ran the risk that the costs of the care they needed to provide would exceed the budget; health funds and healthcare administration offices served mainly as administrative entities and ran virtually no risk at all.

… but the budget ran out

However, the rate with which these budgets increased kept more and more behind the actual cost development and growth of services. Eventually, the budget model created significant problems due to the increasing lack of cost compliance and due to the fact that nearly any production incentives were rendered subservient to the need for cost control. Any budgetary problems were routinely resolved at the decentralised level by means of 'grey' agreements: insurers accepted that production commitments were not being met so that other 'priorities' could be funded instead. Volume risks were effectively shifted to the patients – in a rapid increase in

the number of waiting lists and an increase in the price-per-unit of service.
Intensification was no longer effective. The increase of the number of global budgets had reached a deadlock; something had to change.

Now it is the insurer's turn …

The government now has opted for managed competition, and a large number of laws and structures have since been adapted to such a system. How should the distribution of risk in a system of managed competition be organised? On the one hand, the government will play a less prominent role. However this requires a moderate development shift to the decentralised parties. The most extreme outcome of this policy is the risk of provider liquidation. If this is the result of ineffective management, this option is even desirable.

… but it must be willing to take a risk

The core of the policy is that the risk for health insurance companies and healthcare administration offices must be increased significantly, preferably as soon as possible. This is the only way to ensure that preventing inefficient behaviour will come naturally to them. Currently, they are still mainly involved in distributing funds, for which they are accountable to a limited degree. As a result of the ex-post equalisation, it is mainly the competitors who are accountable. The process of increasing risk for the insurance companies is slow – too slow. For example, the introduction of the basic insurance packaged also resulted in a substantial risk reduction, and the time has come to reverse this situation. That is the main conclusion the Council relates to a study of risk management in healthcare conducted by PricewaterhouseCoopers (PwC).

4.2 Risk management in acute healthcare[120]

Health insurance companies

Ex-post risk equalisation reduces risk

PwC believes that as a result of inadequate selective healthcare purchasing on the part of the health insurance companies, the best opportunities to achieve a lower level of expenditure are lost, and estimates total losses to be at least one billion euros[121]. Insurers are currently focusing primarily on mergers and on competitive premium setting, although it should be noted that opportunities for the latter are limited. The ex-post equalisation (a public reinsurance) effectively ensures a reduction in bandwidth for the highest and the lowest premiums. Box 4.1 shows the mechanics of risk equalisation.

Box 4.1 Risk equalisation and risk adjustment[122]

The risk borne by health insurance companies depends on risk equalisation. If the risk equalisation system is designed in such a way that insurers receive only a standard risk-adjusted amount for each policyholder based on aspects they cannot control, the insurance company bears full risk. This is referred to as 'ex-ante equalisation' (a generous kind of public reinsurance). However, as this risk-adjustment scheme does not (yet) adjust for all predictable losses. Thus, the model also includes a wide range of compensations for budget results achieved – the ex-post equalisation. In stark contrast to the ex-ante equalisation, this reduces health insurers' risk liability, and is some cases it is eliminated altogether. An insurance company that reduces its claim levels by implementing an effective purchasing strategy, e.g. managed care would then not see this reflected in its operating profit at all.

For policyholders with extremely high costs, only 10 per cent of the costs exceeds a limit of approximately EUR 20,000 is for the expense of the insurer. The remainder is pooled. This relates approximately 8 per cent of all hospital costs, and is known as 'high-cost compensation'.

Besides, for policyholders with lower medical expenses, the ex-post equalisation and the level to which health insurance companies bear risk, is different depending on the types of healthcare/medical expenses. Risk liability is completely absent in mental healthcare and for the fixed hospital costs; is considerable for the flexible costs of the hospitals (50 per cent costing), and is full for other services, e.g. primary healthcare and pharmaceuticals (0 per cent costing). In addition, a 'bandwidth' regulation is in place that significantly reduces risk liability: an insurance company that, after the high-cost compensation and the 50 per cent costing, deviates more than EUR 22.50 per policyholder from the total average healthcare costs, will 90 per cent receive reimbursement from the general cash reserves. It is likely that a significant number of insurers make use of this regulation, although no public data are available.

Which is why there is still too little selective health purchasing

Insurance companies are focusing primarily on attracting new customers and on downsizing their administrative costs. Selective healthcare purchasing (managed care) and differentiation in the insurance packages are slowly getting off the ground. In 2007, the Council advised the government on how to stimulate this process. The main reasons for limited managed care strategies are as follows:

1. It takes a considerable amount of time to gain knowledge and develop negotiation skills; insurers must 'grow into' their roles as directors.
2. The ex-post equalisation contains little incentive for selective purchasing: potential savings on premiums are limited and in some cases purchasing efforts can benefit competitors.[123].
3. Due to the public costing for the actual volume increase, insurers effectively run low risk on volume, and it is not interesting enough to opt for capitation payment structure, which is the main alternative the market offers to control costs[124].
4. Unlike privately insured individuals under the old insurance system, few current Dutch policyholders opt for a voluntary deductible, leading to the conclusion that the reduced premiums apparently do not offset the additional risk[125].

Eliminate ex-post equalisation sooner…

It is essential that the ex-post equalisation be eliminated as soon as possible, in all aspects of care including mental health care. The Council feels this safety-net is being phased-out too slowly, because:

1. Without this elimination, competition and substitution by alternative forms of healthcare will not get off the ground.
2. Health insurers can also control fixed hospital costs, for example by making commitments on reducing the number of beds.
3. In mental health care, insurers can control costs by contracting for less volume; however, there is no incentive for them to do so as long as they receive their full costs in this segment.
4. Smaller health insurance companies can reinsure risk on the private market (box 4.2); if necessary, the government can create a special provision for this purpose.
5. While the current solvency requirements are being met, increased risk does mean that the reserves must increase accordingly[126], as a result of which premiums must (temporarily) be increased or the insurer must reinsure this risk.
6. Generally, ex-post costing pushes the cost of the risk to an 'artificially' low level, which encourages opportunistic behaviour (e.g., short term profit seeking).
7. The impact of the new Diagnostic Treatment Combination (e.g. the new Dutch system of broadly

bundled treatment packages) funding can be simulated based on product details of the past several years; it is not necessary to wait for years for 'experimental data'.

Box 4.2 Private reinsurance
The protection against major claims offered by high-cost compensation can also be ensured through reinsurance. The reinsurance market provides coverage (known as 'excess' or 'loss coverage) that work similarly to high-cost compensation. If the annual healthcare costs of an individual policyholder exceed a maximum limit (i.e. the priority), say, EUR 100,000, the reinsurer bears the bulk of the costs that exceed the priority. The reinsurer's liability is usually limited to a specific maximum per policyholder, e.g. EUR 500,000. The premium for such coverage is expressed as a percentage of the gross premium or as a fixed amount per policyholder.

… because the pros outweigh the cons

The above does not mean that the subject matter is not complex, that the information provision is in order or that some of the objections heard are not justified. However, the Council believes that without eliminating the ex-post risk equalisation managed competition will fail to contain costs. In addition, caution with respect to the phasing out of the ex-post equalisation is not proportionate to the dynamism with which prices in the hospital market have been liberalised in recent years, all the more because the problems related to information provision and such are also prevalent in that segment.

The Council does not believe that phasing the ex-post costing out at an accelerated rate will cause the smaller health insurance companies to disappear, as they often have a strong regional position and score highly on customer satisfaction. However, regulators should examine this in greater detail, as a cartel of a small number of major insurance companies is not in the public interest.

Pharmaceuticals

The benefits of risk are evident in the pharmaceutical industry

Increased risk liability does appear to have a positive impact on the development of expenditure in pharmaceuticals. Several health insurance companies are actively focusing on absorbing 'purchasing benefits' by pursuing a preferential policy. They compensate the pharmacy only for the cheapest version of a particular generic medication. The preferential policy has in the short term already resulted in a reduction in expenses of nearly EUR 400 million[127]. In addition, there are no indications

of a negative impact on quality. The fact that health insurance companies are now pursuing a preferential policy can partly be attributed to the incentive offered by the risk equalisation: there is no ex-post safety net, which means insurers bear the full risk for the costs of medications provided.

Mental health care

No risk, no lower volume

In acute mental health care, the main cause of the expenditure problem is the rapid increase in volume. Since insurance companies and clients currently do not bear risk in any way, there is no natural incentive to stop this development. In addition, there is a significant latent demand for this type of care.

More risk for insurers and clients

There is an urgent demand for risk liability for insurers, but another issue that needs to be addressed is the substantial latent demand. The Council recommends that clients with a simple, short-term health demand of a less serious nature be asked to pay a contribution. This group is difficult to define due to the heterogeneity, instability and ambiguous boundary problems common to many psychological ailments[128]. However, it is not impossible to define this market: some examples are marriage and relationship counselling and help with existential questions. Since the indirect cost of there disorders (e.g. absenteeism and low work morale) are high,[129] we might expect that employers will help to cover mental health benefits in special group plans.

4.3 Risk-management in long-term care[130]

Funding

Healthcare administration offices bear no risk

There is a great deal of ambiguity and uncertainty regarding the role of the healthcare administration offices that execute long-term care benefits. The problems experienced by the health insurance companies, e.g. the lack of incentive, risks, knowledge and experience are characteristic of this segment. The transfer of household care from the healthcare administration offices to the municipal authorities – who are exposed to risk through the fact that the municipal fund is fixed – proves that increasing financial risk can have a significant impact on expenditure.[131] In municipal purchasing, as with the purchase by recipients of individual personal patient budgets, the prices per product unit are lower, and the budgets allocated are under-utilised. The healthcare administration offices, on the other hand, have no inherent

incentive to control costs, and it is even debatable whether they any have formal/legal options to prevent overruns. [132]

Without risk, volume growth cannot be kept in check.

Volume risk plays a significant role in long-term care in 2007: 830,955 positive assessments were made under the Exceptional Medical Expenses Act (AWBZ), including assessments under the Social Support Act (Wmo). What else can we anticipate?

1. Due to the ageing of the population, the number of people suffering from dementia – one of the most expensive diseases – is increasing rapidly. [133]
2. As many people find it difficult to deal with an increasingly complex world (e.g. the disabled and the mentally ill), the demand for care among these groups is increasing as well.
3. Since long-term care is increasingly more responsive to demand, this creates a further increase in demand.
4. As potential clients are becoming more aware of the options available, still more demand is activated.
5. Long-term care is sometimes difficult to separate from private services, e.g. how do you separate public household help from privately funded household help purchased for reasons of comfort and reduced mobility[134]?

Still too much expensive institutional care

Long-term care in the Netherlands is highly institutionalised. A PriceWaterhouseCoopers (PWC) study conducted in 2003 showed that on balance, intramural care for the elderly cost society more than extramural care; the financial difference, is approximately six to a maximum of thirty euros per client per day – the equivalent of roughly 500 million euros per year[135] . This raises questions regarding the strongly institutionalised nature of long-term care in the Netherlands.

The government must take contious action

Pressure on budgets is so high that the government is almost continuously forced to intervene, with measures ranging from budget limits and rate cuts to more stringent assessments, invitations to tender (Social Support Act), cutting individual patient funding, etc. The lack of financial risk encourages administrative chaos and unrest, as the sector is continuously faced with change[136].

Long-term care for the elderly

No incentives for efficiënt use

The chances of an elderly person using care financed with public funds increases after they have reached the age of

eighty. The majority of this care represents home care; the claim is lower for intramural care. With the exception of the out-of-pocket payments, which are lower compared to other countries, the Exceptional Medical Expenses Act currently does not provide any incentive to use resources efficiently; the amount of risk run by the parties involved is too low.

Risk must increase for insurers and users alike

A logical option is therefore more risk-bearing in elderly care, for example through transfer to the Health Insurance Act and the Social Support Act. This will have a downward effect on the increase in expenses. Besides such a strategy, the background study shows that also greater out-of-pocket payments for consumers has very substantial financial effects. For example, gradual privatisation of home care will cause public expenses to decline in 2030 by approximately 0.7 per cent of GDP and higher income-dependent patient contributions can cause public expenses to drop by approximately 1.2 per cent of GDP by 2030.

Social Support Act

The Social Support Act leads the way

Depending on the limited experiences so far, the introduction of the Social Support Act has been successful from the perspective of cost-containment. Municipal authorities responded strongly to their new risk liability, which resulted in significant cost savings that can be used for other local purposes. Nevertheless, it was decided to limit municipal autonomy regarding tendering home-care. Municipal authorities are required to ensure that new lower-cost providers with whom they contract consult with providers losing contracts on the possibility of hiring displaced personnel.

Individual patient funding through personal budgets

Individual patient funding is growing rapidly…

In addition to the popularity of this type of funding among healthcare consumers, several factors played a role in the excessive growth in this area in recent years: the increase of the accountability-free amount to EUR 2,500 per year in 2007; the increase in the number of children diagnosed with Autism Spectrum Disorders (ASD) or for whom no other adequate care is available; and possibilities to remunerate existing informal care (i.e. provided by neighbours, friends/acquaintances or family members).

… also to pay informal carers

The Dutch government has announced that the accountability-free amount will be reduced to 1.5 per cent of the budget. In addition entitlement to care under the Exceptional Medical

Expenses Act will be limited to healthcare consumers with milder disabilities. However, the final cause of the increase in expenditure – i.e. remuneration for informal care, which is defined as care that has been assessed and purchased from an informal caregivers – will not be eliminated. As a result, free informal care is replaced by paid care, a development some people in the Netherlands warned about five years ago.[137]

In order to stop this trend, expenditure could be reduced by linking the right to receive such funds to services provided by a professional care provider.

This must be halted

4.4 Conclusions:

A strategy based on controlled expenditure trends within a system of managed competition means transferring the financial risk from the central level to the decentralised level, particularly health care insurers. Note that this is nothing new in and of itself; in many aspects, it is standard policy of the Ministry of Health, Welfare and Sport. However, the Council does note that there are apparently formidable counter forces that prevent these principles from being applied in the short term.

More risk for insurance companies

While the Council understands the objections made by the sector, it believes that the interest of a moderate development of expenditure is more important, particularly in respect to finalisation of the system reform. The financial risk must increase substantially. Market reforms are based on decentralisation of 'benefits' and 'costs', and if the various parties do not run any actual financial risk on their activities, expenditure will continue to increase and there will be no other option than to implement major cost cuts each time. In such case, the shadow system of global budgets cannot be dismantled much further, thereby creating an unwanted chasm between policy theory and policy practice.

The pros outweigh the cons

The ex-post equalisation (public reinsurance) must be phased out in the short term, and risk must increase in both long-term care and mental health care. The complexity and size of the system of Diagnostic Treatment Combinations must be radically reformed in the near future. In this process, the government must take the initiative as the final 'problem owner', given the considerable interests of the parties involved.

It is essential that ex-post equalisation is phased out soon

Patients and clients must be spared in this process as much as possible. An exception is long-term care, where volume developments among care for the elderly and growth in outpatient mental health need to result into more personal financial responsibility in the foreseeable future.

More excess in geriatric care and milder forms of mental health care

5 Cost-containment through managed competition

5.1 Financial risk

Controlling expenses means increasing risks

There is political and administrative support for managed competition, particularly in acute care , which is unique from an international perspective. However, the shift to more decentralised responsibilities is currently occurring at a faster rate than the increase in financial risk, which means more rights without the concomitant obligations. From the perspective of cost-containment, this is not desirable.

Undesirable: more rights, without the obligations

Patients, insurers, healthcare providers and workers: none of these categories currently stands to benefit from a more moderate development of expenditure. They are not, or only to a very limited degree, confronted with the cost of the increasing expenses, as this is shifted to those who pay the premiums. Cost-containment is the responsibility of the government, but it is not always equipped to deal with all the various countervailing powers. Additionally, the existing tool, i.e. the global budget, is under pressure as it is not really in line with the system of deregulated competition.

Those who incur the costs shift them to those who pay the premiums

If you ensure that they run greater risk, the various parties will manage expenses more naturally. Health insurance companies, providers, medical professionals and (for certain payments) patients must therefore bear more risk. The remainder of this paragraph will discuss what measures the government must take in order to achieve this.

Desirable: run financial risk yourselves

Health insurance companies and healthcare administration offices

Health insurance companies and healthcare administration offices are natural allies in the battle against out-of-control health spending. However, the risk they run is limited, which constitutes a significant problem, as there is insufficient incentive to use resources sparely.

Selective healthcare purchasing does not pay off enough…

The Dutch Healthcare Authority (NZa) recently noted that 'There is the impression that incentives for healthcare purchasers to buy at compete prices have not increased in relation to 2007'[138]. The Council regards this development as undesirable and therefore advocates that the ex-post

…which is why an accelerated phasing-out of ex-post equalisation is essential

equalisation be phased out at an accelerated rate. The reason for this is that this public reinsurance scheme covers the sector against any additional expenses arising from further liberalisation of the prices and volumes.

Share volume risk with institutions

Health insurance companies must be given more opportunities to share volume risk with the institutions (i.e. capitation fees). In its background study related to this recommendation, PwC states that capitation fees will likely be the most important mechanism in achieving more effective control of expenses. Such additional measures ensure that the possibility of further deregulation of pricing will be retained.

Increased solvency for health insurer

Any increase of risk must naturally be in line with the decentralised opportunities for controlling that risk, which also means that effective tools must be developed for this purpose. More risk also means more financial resistance. This also comes with the current implementation of prospective capital remuneration. Statutory solvency norms may have to be increased.

Strong collectivities

An often-heard objection is that the risk-adjustment scheme may not entirely eliminate the incentive towards risk selection and that ex-post equalisation remains necessary. However, the Council disagrees with this. There is an open enrolment, the risk of reputation damage is considerable, and there are options to improve risk-adjustment the following year prospectively. Open group plans furthermore ensure that both high and low risks are pooled. As such, it is desirable to further strengthen their position.

Major expenditure problem for Exceptional Medical Expenses Act

As to the issue of long-term care, the problem with expenditure is substantial, which is not surprising, as healthcare administration offices and assessment bodies do not run any risk on the expenditure. The result is a continuous flow of processed needs assessments with significant regional variety. From an international perspective, Dutch costs for long-term care are high. In addition, the government finds itself in a bind each time: although a budgeting system is in place, the rapid growth in demand means it is forced time and again to accept overruns or to intervene in the payment structure.

Social Support Act shows it can be done differently

The transfer of household care to the Social Support Act has demonstrated that an alternative may be possible. Municipal authorities ran considerable financial risk from the outset,

causing expenses to decrease by no less than 15 per cent. Note that municipal authorities had additional incentives to cut costs as they had alternative needs which could be met if they reduced home health spending. Occasional exceptions notwithstanding, the spending cuts do not appear to have created major healthcare-related problems anywhere although many providers lost money on their activities under the Social Support Act[139]. Surprisingly, there is also underutilisation in the individual patient funding scheme, at least when we look at the individual level. Beneficiaries underutilise their budget by approximately 10 per cent – a performance that healthcare administrative offices have yet to repeat.

Partial privatisation of geriatric care

The Council advocates a partial de-collectivisation of care for the elderly, where only the expensive care components, such as admission to nursing homes, should ultimately be paid from compulsory insurance. The Council advocates a gradual transition. The current standards for housing and services will continue to be guaranteed. The future demand for better facilities and services will be financed by the parties themselves; this makes it possible to use a portion of senior citizens' future income growth to finance their demand for care, as well as for more luxurious housing facilities.

Have Exceptional Healthcare Expenses Act implemented by risk-bearing insurers

Despite the relatively high expenses, there are currently many questions with regard to long-term care quality. Nobody is truly satisfied, yet the funds involved are substantial. The Council advocates activation of compulsory long-term insurance by risk-bearing health insurance companies as part of the current acute care health insurance scheme, which receive standard risk-adjusted payments. Such a model promotes efficiency, partly by removing the financial division between acute and long-term care. Seniors with a valid needs assessment will always be given a legal right to receive individual patient funding, which makes it possible to maximize patient empowerment.

Call for tenders and standard payment: greater risk for healthcare provider

Bureau Cebeon has investigated differences in the use of care within the nursing home and care sectors, and has found that there exists considerable regional variety[140]. Cebeon cites as a reason the current practice within the Exceptional Medical Expenses Act : 'in correlation, regional offices/bureaus arrested needs of care in such a manner that there are clear regional differences in terms of the number of individuals receiving care, the average size of the care consumed, and the average price of the services delivered[141]. The Council concludes that the expenditure are higher than necessary, as

those responsible for implementation do not run any financial risk.

It is possible to let significant parts of the Exceptional Medical Expenses Act function on a risk-bearing basis: in a public environment by tendering priority healthcare packages, and in a private environment by working on the basis of standard risk-adjusted payments. It should be possible to begin experimenting during the current government term.

Provide insurers with more control tools

Greater risk increases insurers' willingness to invest in healthcare purchasing, provided that insurers have more options to actually be able to turn that willingness into action. The following measures might therefore be considered:

- Transparency of quality. As long as no information is available regarding the price/quality ratio in specific healthcare institutions, insurers will not be able to explain to their policyholders why one provider has and another provider has not been given 'preferred provider' status[142].
- Health insurers and hospitals can opt for contracts that are not expressed in Diagnosis Treatment Combinations, but rather relate to capitation fees on a different aggregation level (i.e. maternity care, eye care and emergency care). A portion of the (volume) risk is then transferred to the hospital, which is then induced to make efficient choices.
- Health insurers and General Practitioners are entitled to make commitments on remuneration. For instance, the capitation fee could be increased while the fee-for service rate was reduced; this could be complemented by specific incentives related to prescription and referral behaviour.
- Follow through on the development of medical guidelines that are partly based on criteria for cost-effectiveness. Health insurers can use such guidelines as a basis for their purchasing policies and specify that they only reimburse costs in accordance with the guidelines, unless medical reasons necessitate an exception.[143]

Providers

Providers currently dominate the healthcare market

Healthcare providers run a limited risk. The continuity of business operations is rarely if ever the subject of debate, due

to a shortage of medical professionals, high entrance barriers to the market, monopoly positions and easy access to 'political protection' in the event of expenditure problems. Providers have significantly more knowledge at their disposal than do the healthcare purchasers furthermore, they constitute the trust of their patients and clients.

Providers dominate the market, which implies that the quality of the current management is vitally important to actual efficiency levels. A U.K. study of financial problems in the National Health Service (NHS) shows that the expenditure problems are strongly related to failing management and failing regulators,[144] which means it is important to closely monitor management.

High margins as a result of additional production

Healthcare providers can generate additional revenue relatively easily by providing additional services at full-cost remuneration. Many healthcare institutions have low marginal costs, causing the cost price per unit to drop and the margin to increase. This margin may be used in various ways:

1. Lower prices. There is some evidence of this in the hospital sector ('B' segment where prices are negotiated between insurers and hospitals) and particularly under the Social Support Act.
2. Increase in financial reserves.
3. Cross-subsidy of care for which no funding is available.
4. A less efficient process (slack).

Insurers must absorb high margins

The HEALTH BASKET[145] study shows that current margins on a number of services are high, particularly for appendectomies and cataracts (see table 5.1). This would indicate that hospitals are still in the 'comfort zone'. Healthcare regulators are responsible for assessing to what extent such high margins – caused by provision of excess volume – allow sufficient replacement of capital by health purchasers with lower health insurance premiums or who provide better-quality care.

Table 5.1 Costs, compensation and operational margin

	Costs (in EUR)	Compensation (in EUR)	Margin (%)
Myocardinal infarction	5,599	8,722	56
Hospital delivery	761	711	- 7
Hip surgery	5,605	6,842	22
Stroke	6,533	6,873	5
Appendix	1,898	4,285	126
Cataract	500	1,041	108

It helps to use quality parameters…

Another way to improve efficiency is to use more quality parameters in the costing process (pay-for-performance). This must be given a high priority, as good quality indicators that are also clear to the patient activate the flywheel effect and therefore constitute important leverage for controlled expense development. This is the next step after the implementation of the current DTC costing, and is important because quality and efficiency often go hand-in-hand. In addition, it is evident that improving quality will lead to improved health. We acknowledge that quality often comes at a price, which is evident in the purchase of expensive pharmaceuticals and implants, expensive medical aids, expensive IT systems and expensive equipment. However, quality also leads to cost savings: there are fewer medical complications, fewer expensive repeat treatments, and average-length-of-stay is shorter. Additionally, institutions have the opportunity to invest in quality. Simply by purchasing essential materials collectively, they will be able to save several hundred million euros in the short term, and possibly even more than one billion euros. (see box 5.1)

… as well as better purchasing

Box 5.1: Purchasing partnerships in healthcare
The Council commissioned Intrakoop – a cooperative purchasing association operating in the healthcare industry – to estimate the profits that can be achieved in this area (see Annex 5). The association has good insight into a large number of sub-markets, and can draw on their own data. These data show that for food, energy and medical wholesale, savings of approximately 10 per cent are realistic. In addition, indirect savings are realised due to fewer invoices and lower overhead costs for institutions. The Council estimates that on a macro level, this equates to an amount in excess of one billion euros.
This means that providers must make purchasing a central focus also. The management needs to professionalise the purchasing process; purchasing must become a strategic issue on the agenda of the Board of Directors of the healthcare institution. At present, this is not yet the case.

The government is responsible for establishing parameters

The Council believes that the government is responsible for establishing the quality parameters to be used by the parties involved (i.e. a uniform/standardised language).

Patient contributions

Little reason for additional excess

Patients and clients may consume healthcare unnecessarily. It appears, however, that Dutch people do not visit the doctor frequently and do not use many medications. As such, there are few reasons to substantially increase out-of-pocket payments in acute care or start a compulsory deductible for General Practitioners.

...except in milder forms of mental health care, where patient contribution is needed

The situation in the mental health care sector is different altogether. Here there is a great deal of latent demand, one of the reasons for which is that there is no longer a stigma on seeking mental help. It is therefore not advisable to cancel the patient contribution for psychotherapy, as the government now proposes. The expenditure problem in mental health is caused by the rapid increase in volume. As insurers and clients do not bear any financial risk, there is no deterrent.
The Council recommends that clients with a simple, short-term need for help pay a substantial out-of-pocket contribution. Examples are marriage and relationship counselling.

Set quality requirements for healthcare through individual patient funding

Expenses for individual patient expenses are increasing rapidly, and the opportunity to pay people in the patient's own network using public funds has a utilization effect Since the

personal budget is 30 per cent lower than, public payments to institutional providers, many regular institutions are unable to attract patients on personal budgets, thereby prompting patients to look for alternatives in their own environments. This expenditure problem is reduced if care under the individual patient funding scheme has to comply with quality requirements. The system of individual patient funding – which has been immensely valuable to patient emancipation – would then be able to remain intact. Other benefits would also be maintained, such as lower transaction costs and consistent underutilization of individual budgets through prudent purchasing by the budget holders.

5.2 Productivity

Labour productivity

Set quality requirements in the various sectors in order to increase labour productivity

Labour productivity in the healthcare sector generally increases more slowly than in the economy as a whole, since healthcare – and specifically long-term care – is a labour-intensive sector. However, this does not explain why, during the 1990s, many healthcare segments came to a complete standstill or even experienced lower labour productivity. With the current trend of payment for actual services, this trend has returned. From 2001 onward, labour productivity started to increase again, particularly in acute care. The Council believes that healthcare providers can be expected to improve their productivity each year, as is common in the rest of the economy. Technologic and logistic innovations shifting work to lower paid Nurse Practitioners and Physician Assistant, and better incentive structures also provide opportunities for productivity. Nevertheless, productivity gains are difficult to implement, due in part to a lack of competition, incentives and risk. It should be noted, however, that gains from labour productivity are higher in the technology-sensitive hospital sector than in residential facilities. The current generous financial compensation for the sluggish labour productivity growth appears to be rather high for hospitals, also in view of the expected future shortages in the labour market. What needs to be changed?

1. In analyzing budgetary growth, the Ministry of Health, Welfare and Sport must take into account differences in

the development of productivity among health care sectors.

2. The hospital sector will be in charge of the task of increasing labour productivity. The incentive to the hospital is a specific reduction in cost growth.
3. In return, the acute care sector is exempted from any additional efficiency deductions, to prevent them from being docked twice.
4. The productivity gains generated through the reallocation of responsibilities from medical practitioners towards the physician assistants and nurse practitioners must be used for the benefit of the people paying the premiums rather than on improving the employment conditions of medical professionals.
5. An active labour-market policy is essential: The number of places in medical and social programmes in higher education, as well as in nursing programmes, must increase by, for example, five per cent each year. This can be funded from the revenue generated by additional productivity increases.

Productivity and changes in the structure of the system

Productivity can be increased by making improvements to how the care process is organised.

Prevention, quality inducement and disease management do not automatically result in improvement of care, though there certainly are opportunities, as demonstrated by the National Institute for Health and the Environment (RIVM). However, these types of opportunities are currently blocked due to the presence of all sorts of administrative red tape. Even when there are opportunities for cost savings, they are almost never used for the benefit of the public or people paying premiums, but rather remain 'suspended' in the system. The reason: financial benefits and expenditure often end up in different places. The winners are unwilling to adequately compensate the losers, thereby causing many efficient innovations to fail before they even get a chance.

Costing should facilitate this.

However, preventive care, quality inducement and disease management are essential to improving efficiency; they are key indicators for well-run organisations and processes. Although academic evidence is still far from complete, a focused strategy of preventive care, quality inducement and disease management may well result in cost savings for specific clinical pictures. The most promising are the opportunities for co-morbidity (i.e. the simultaneous presence of several diseases in a single patient), which is a group for which expenses are extremely high.

But how do we capitalise on these opportunities? Insurers often have insufficient financial interest in these types of innovations. The ex-post equalisation contains incorrect substitution incentives, since health insurers run more risk in primary healthcare than in secondary healthcare. On top of that, the more expensive the health care, the larger the amount of funds from the ex-post equalisation scheme. Performance-related funding that transcends all divisions (pay-for-performance) might be an option.

… performance-based costing

5.3 Budgetary guidelines

Does the Global budget constitute a problem?

The sector regards the Budgetary Framework for Healthcare as the symbol of the failed system of government intervention. During the period 1994 – 2007, the global budget was virtually always overrun, yet few people will argue that expenses will increase if the framework is cancelled. Nevertheless, pressure on this instrument is increasing, not least by the introduction of managed competition. How should we therefore position the current budgetary (statutory) guidelines?

Budgetary Framework for Healthcare still remains necessary

In this analysis, it is important to distinguish between the various uses of the Budgetary Framework for Healthcare, which are as follows:

- The estimates on which the global budget is based;
- Determining the exact budgets;
- Monitoring the expenditures;
- The tools the government can use to redress overrun;

The Budgetary Framework for Healthcare has various functions

Estimates

The Council believes the level of the increase in health expenditure estimated by the Netherlands Bureau for Economic Policy Analysis is adequate, i.e. sufficient to prohibit underfunding of the healthcare sector. The sector would then be permitted to increase by 4.6 per year (real growth; see table 4.6) In a previous study, the Dutch National Institute for Health and the Environment calculated a growth that was 0.2 per cent lower[146]. Prismant, a consulting firm, arrived at a result approximately one per cent higher than that of the Netherlands Bureau for Economic Policy Analysis. The Council believes that an increase double the growth rate of the economy as a whole already places an increasing

Various estimates
Should not grow faster than double the economic growth rate

demand on individuals' solidarity and economic capacity. That rate is approximately 4 per cent per year. Figure 1 shows that within ten to fifteen years, the largest portion of the additional public funds available will need to be allocated towards healthcare; a higher rate would be irresponsible. If the right incentives are provided, autonomous overruns are not necessary, which means that this estimate may not be exceeded.

Specifically allocate residual volume and labour productivity

However, the Council does question the current 'low-policy' nature of the estimate by the Netherlands Bureau for Economic Policy Analysis and the way in which this is subsequently 'automatically' incorporated into the institutional budgets. The Council believes that the 'residual' volume and the additional compensation for the lagging labour productivity-the two largest components- *are* susceptible to policymaking. A more specific allocation of these resources can prevent problems during the course of the process. However, policymakers currently lack accurate estimates at the sector level. What is needed is a specific set of estimates that provide insight into the necessity of 'residual' volume and real prices, in addition to the necessary demographic impact. It will then be possible to set more accurate and effective political priorities.

Based on more accurate sector estimates

Determining the Budgetary Framework

Healthcare is part of the Budgetary Framework

It is both good and inevitable that healthcare is included in the budgetary guidelines set out in the Government Agreement by the coalition parties. Healthcare is included under public expenses due to community-rated premiums and the EMU norm also provides few alternatives in this area.

The Budgetary Framework is necessary as a yardstick

The global budget is the yardstick used by the Dutch government in forming an opinion on health spending; it is vital for the political-administrative allocation of public funds. It plays a role both in the division between public and private expenses and in the allocation of public funds towards either healthcare or competing public sectors, i.e. the various components of the government budget (such as education, safety, transport and social security). At the beginning of a government term, the government usually operates on the basis of the existing system before implementing a number of additional measures (both increases and reductions in expenses).

The Council is in favour of a more integrated budgetary assessment – i.e. zero-based budgeting – when determining the budgetary frameworks for the different sub-levels. 'Automatic' growth may only consist of changes in the composition of the population and inevitable real price increases. The 'residual' volume, i.e. the policy-sensitive development of labour productivity and any additional intensifications or responsibilities constitute the 'high-level policy' component. Political parties discuss the overall allocation of these funds, initially when determining the global budget in the Government Agreement. Thus, the framework serves to fill the room in the budget based on preferences related to the care provided, specific nodes, technological developments, quality-of-care, disease management and the labour market.

Process only demographics and price increases directly

What is important is a system that encourages a more political distribution of resources within the healthcare system: should more public funds be allocated for care for the elderly, or should it be allocated towards hospitals? The allocation function is currently not emphasized enough. Since the budgetary framework was first introduced, in 1995, it has been customary to allocate volume growth on an equal basis to the various healthcare segments.

Divide rest of room for growth through policy

Therefore: control from the front

Monitoring the Budgetary Framework

During the year, the global budget functions as a system of which people are certain that it will strike alarm – since all financial problems are transferred to the surface – thereby causing overruns. The model lacks the automatic stabiliser of significant risk for insurers, providers and patients. The many permanent overruns place a continuous pressure on budgetary flexibility, which creates political imbalance, particularly when there are few options to compensate for those overruns.

The Budgetary Framework for Healthcare lacks an automatic stabiliser

The monitoring function struggles with major deficiencies in the availability of information. It takes a long time before reliable data are available on the size of the budget overrun, which constitutes a problem not only for the government when implementing corrective measures, but also for the insurers, who are obstructed in the process of setting their premium rates. The Council assumes greater risk accountability will also have a positive effect on accurate and efficient information exchange, as this will now be in the interest of the various parties.

… and information often arrives late

Tools for adjustment

There is a limited degree of control, and a great deal of uncertainty and confusion regarding the exact function of budgetary adjustment at the back end. This reveals the imbalance between managed competition and a central budgeting mechanism that stays intact to a large extent. This imbalance can be rendered manageable by increasing risk for insurers, healthcare administration offices, providers, and in some cases patients and clients. There are so many opportunities to improve efficiency in the healthcare sector that higher financial risk has a restrictive effect on finances.

Therefore: greater risk for the various stakeholders…

The Dutch Healthcare Authority 'translates' the budgetary decision-making process to the market, making use as much as possible of specific incentives that promote efficiency. Insurers and providers obviously determine themselves how they plan to execute the contracts agreed upon and the commitments made therein. The Council proposes to investigate whether degressive rate-setting[147] is a viable alternative to the current generic reductions to market prices which central rule setting produces.

Degressive rates instead of uniform deductions

In addition, there is a segment of free price-setting. Regulators intervene only in the event of disproportionate market power, e.g. when clear advantages of scale do not translate into lower prices, or when prices are excessive. The healthcare authority makes this information available to all parties in the healthcare industry.

… and the market must function well

How to deal with overruns

The Council believes that all clients and patients always remain entitled to care. The incentive for insurers to closely monitor costs increases as a result of the higher risk liability. In addition, the Council believes the government can impose differentiated productivity targets on the sector. The Council has learned from hospital administrators that they prefer prior certainty regarding deductions and budget cuts to the current practice of reductions during the process[148]. As a result of the proposed degressive rates, an additional volume increase does not lead to a proportionate overrun.

The right to healthcare comes first

What happens when global budgets are exceeded regardless? The Council is in favour of finding a solution at the system level to the extent possible, e.g. by further increasing the financial risk of the various parties. Generic reductions and budget cuts must be avoided, particularly when they are

Instruments: risk, package and patient contributions

retroactive. If it is not possible to resolve the problem that way, a reduction of the compulsory entitlement and higher patient contributions are possible alternatives.

5.4 Conclusions

This chapter discusses how the main budgetary problems might be addressed, i.e. what are the anchor points cost-containment through managed competition?

Under managed competition, expenditure must be controlled by increasing the financial risk of insurers and healthcare providers. In the acute sector, the current ex-post risk equalisation is the main impediment to achieving this, as it blocks many positive effects of managed competition, i.e. selective purchasing, more focus on quality of care and a of lower price per unit-of-service. In those segments of where prices remain subject to rules, a costing system must be established that does not limit the 'right to treatment' to any great extent, for example through an input budget. One possibility would be to use a system of degressive rates. Patients already contribute to a controlled development of expenditure by not visiting the doctor frequently. However, in elderly care and in less serious forms of mental health care, patients and clients must fund more treatments with their own resources. This ensures that care for the elderly will remain affordable in the long run, as well as limiting the substantial latent demand for short-term psychological help for marriage counselling.

Personal responsibility of patients

Labour productivity must increase, and the government must allocate responsibilities for this for each segment. It is also important that the government pursue a more aggressive policy in order to capitalise on increased labour productivity by using it to reallocate responsibilities. Increasing competition is obviously a key overall incentive for increased labour productivity.

Labour productivity

This approach also allows for an alternative use of the budgetary guidelines which must serve as a more explicit political-administrative allocation mechanism. This means estimates must become more accurate on a level segment. Overruns are to be prevented as much as possible; if this proves impossible, risk must be increased further, or

Budgetary guidelines

entitlement and patient contributions become necessary.
Budget cuts during the process are to be avoided.

6 Final answers

6.1 Answers

Question 1: How do we assess the increase in healthcare expenditure? What criteria do we use?

Healthcare expenditure too high due to inefficiency

Healthcare expenditure can often be put to better use. Expenditure must demonstrably improve health or the quality of life, preferably at the lowest possible cost. This means that the price per unit-of-service is low, and treatments and nursing contribute to making people better and improving public health. We have gained the impression that major improvements are at hand in Dutch healthcare. Although there is a fair amount of information available to underscore such claims, it is worth investing in research that provides greater insight into the processes at the sector and micro levels.

Other spending is jeopardised

The increase in healthcare expenses limits expenditure for other purposes, such as education as well as a real increase of purchasing power. Another factor is that government funds are reaching their limit, and it is in the interest of us all that this be prevented.

Increasing solidarity is expected of taxpayers...

There must be public support for income solidarity and risk solidarity, which currently still the case. However, the solidarity transfers are set to increase further over the next few decades: as a result of the ageing of the population and a number of social/cultural trends. Controlled development of healthcare expenditure prevents that the solidarity required exceeds the financial capacity of the population.

... as well as of informal carers

Informal care by friends and family members is extremely valuable. Informal care can also contribute to affordability, i.e. when it is a substitute for professional care. In the long term, informal care will come under pressure, a problem that cannot be solved through explicit remuneration. It is too expensive to implement across the board, and the additional expenditure are not earned back through the reduced use of professionals.

Question 2: What are the reasons for the increase in healthcare expenditure, and how do we assess this increase?

Labour productivity increases too slowly, whereas residual volume increases too fast

The main causes for the increase in healthcare expenses are not related to demographics, but rather to the development of labour productivity, which is too low, and the rapid increase of the remaining volume growth (i.e. technology, quality perceptions and a shifting demand). As time goes by, the possibilities offered by new technologies increase while we also have different (i.e. higher) expectations of the level of facilities and the services. This latter expectation can be also regarded as ensuring that the service level of healthcare is in line with the level of wealth in a society (i.e. more single rooms, etc.)

Limit residual volume…

The increase in labour productivity and 'remaining' volume are policy-sensitive – much more so than demographic factors. It is possible in this process to make decisions regarding the nature of the care and the budget. Policy is of particular significance with regard to labour productivity and 'residual' volume. These expenses and the purposes for which they are intended can be controlled both directly and indirectly.

…and promote labour productivity

It is possible – and, in view of the anticipated labour shortage – desirable to increase labour productivity. The government is advised to set ex-ante requirements for labour productivity rather than opting for efficiency deductions during the process. These responsibilities vary for each sector, as this will be more complicated to implement in, say, the nursing sector than in radiology. Revenues from increased labour productivity achieved are currently disproportionately awarded to doctors, in the form of lower work pressure or as additional compensation.

Question 3: How do the institutional mechanisms related to cost-containment operate? How do we resolve the main problems in this process?

Additional expenses are transferred to premium payers

Cost-shifting in all around which forces the government time and again to choose between two evils: either a substantial overall efficiency deduction for the sector or a reduction of the entitlements to individuals. Both options tend to meet with heavy resistance, which often leads to the decision to legitimise the overrun. Over the past several years, the global budget has indeed been overrun virtually every year. Paradoxically, this situation does not change as the amount of available resources increases. This indicates problems related to institutions and incentives.

It is therefore important to prevent the shifting of expenditure as much as possible. Two measures must be implemented to accomplish this: (1) Better political-administrative steering of 'residual' volume and of the projected labour productivity; this is encouraged if the government stops implementing the method of efficiency deduction when faced with impending overruns; and (2) Higher financial risk for those operating in the healthcare sector, particularly health insurers.

The government must allocate based on 'high-level' policy

Question 4: How do we combine managed competition with moderate increases in expenditure?

The most important recipe is more financial risk. This is sure to meet with a fair amount of resistance, because even though the sector is in favour of deregulation, people quickly reconsider when they learn about the high risk involved. In other words, they want to enjoy the benefit of liberalisation without bearing the financial responsibility. This is a situation to be avoided, as in such a scenario further deregulation involves a considerable risk with regard to expenses. The key to acute care is to abolish the ex-post risk equalisation; the long-term care sector must also experiment with risk liability. This is essential in order to ensure that the system works the way it was intended to — after all, we can only do things right once.

Balance between responsibility and risk

Furthermore, in long-term care, a larger portion of the expenditure must be covered by patients themselves, notably in care and nursing and mental health care and especially for higher income groups. This ensures that the increasingly high demands imposed on housing and services remain affordable in the long term. Choices must be made for specific forms of mental health care. Who is to pay for the significant latent demand, particularly for care related to 'ordinary' problems people experience in life?

People pay for their own luxury, services and medicalised care

6.2 Recommendation

Increased risk for insurers and providers

a. The risk to which health insurance companies and healthcare providers are exposed must increase, and this must be accomplished in the near future, particularly if the government intends to continue the policy of managed competition. Increasing risk and improving risk-adjustment are the most effective ways

Eliminate ex-post equalisation

to keep expenses in check in a system of managed competition. The ex-post risk equalisation for health insurance companies must therefore be eliminated as soon as possible and financial risk in long-term health care must be increased. Develop a new costing system within the segment of health care that stays regulated. The right to care is best served by pay-for-performance. The downside of compensation per performance is that rapid production growth will automatically lead to excessive compensation for fixed costs. The Council recommends that the Dutch Healthcare Authority (NZa) investigate if and how a system of ex-ante degressive rates for regulated segments might be implemented.

b. Provide insurers with more opportunities to control their risks, e.g. greater opportunities with respect to individuals covered by group insurance schemes. Insurers must be given more freedom for selective healthcare purchasing, such as capitation fees[149] for primary care and managed care strategies. However, this should also be a realistic option in inpatient care. In addition, insurers must be given more opportunities to reward good quality and penalise poor quality.

Give insurers more elbow room

c. Providers have managed to improve their financial position significantly over the past several years, which was necessary in order to deal with the increasing risks with which they were confronted. However, not all insurance companies succeeded in doing so, and so it is essential that they take action now, which may indeed lead to temporarily higher premiums. One interesting alternative is reinsurance, especially for smaller insurance companies .

… and more financial scope

Higher labour productivity

a. Labour productivity must increase: this is necessary in order to compensate for the anticipated shortage in the labour market. As this shortage is one of the main causes of rising expenditure, particularly in the long term, it is important to take into account structural differences in the opportunities to improve productivity. Expenses for nursing care, where it is not possible to increase productivity to the same extent,

Promote labour productivity per segment

might grow more rapidly than can expenses for acute care.

b. Remuneration paid to medical professionals in the Netherlands is high compared to other countries, which is the result of a short supply over a long period of time. The Council believes this supply must be increased by expanding the number of training places, which can be funded by absorbing the increased productivity resulting from the targets of labour productivity. Funding systems must be adjusted annually to productivity development. In those areas where there is sufficient (long-term) supply, it is possible to experiment with free rates for medical specialists.

Train more professionals

Increased out-of-pocket payments

a. Public expenses for elderly care will increase substantially. The Council advocates a partial deprivatisation; where only the expensive components, such as admission to nursing homes, is ultimately paid from the compulsory insurance. Individuals will be free to decide on their own accommodation and services, while the government ensures general access to the current standards of these facilities. The Council believes that a gradual transition is desirable, targeted to reallocate a portion of senior future income growth to finance their own need for care.The Council supports the idea of elderly care being provided by risk-bearing health insurance companies, who receive risk-adjusted benefits for this purpose. This will improve effectiveness, partly because as the current "Berlin-walls" between acute care and care for the elderly will be eliminated. Senior citizens who have received a valid assessment will be granted a legal right to patient funding for long-term care services, which will give them more control over the health services they receive.

Let people pay for their own services and luxury

b. The rapid growth of 'minor' problems and problems that are difficult to verify in mental health care must be curtailed by increasing the number of patient contributions, e.g. for relationship counselling. Currently, insurers do not run any financial risk on this type of care, a situation that must change in the near future.

...as well as for help with life issues

Other budgetary guidelines

Determine the room for growth yourselves

The room for growth for which little or no discretionary policies are in place – i.e. the largest portion of the increase in healthcare expenditure – must be more closely aligned with the political-administrative objectives. Will priority be given to more services or to new, expensive medication, to preventive or acute care, to care of the disabled or to hospital care? Specify the purpose for which the 'residual' volume is allocated, and what the objectives are for each sector. If possible, a reserve must be established for financial setbacks that occur during the term of the government agreement.

Control from the front, not the back

Do not penalise increases in expenditure that are not permitted under the budgetary framework through randomly imposed reductions or cost cuts, as these damage the government's credibility more than anything. As an alternative, more control at the front end, i.e. when determining the global budget, would be desirable. The political parties must prevent current undesirable trends from continuing automatically, which is to say that the quality of the current industry estimates must improve significantly and that a distinction must be made between inevitable expenditure and growth that is subject to complex policy guidelines.

What will be the overall result of this recommendation?

More efficiency and dynamics in the healthcare sector

The Council believes that efficiency in healthcare can be improved significantly. The recommendations are in line with the current reform of the healthcare system, and are based on shifting financial risk increasingly to the parties that can control the expenses. As a result, the industry will become more dynamic. There is a variety of channels that will help to further improve efficiency: by working more efficiently within institutional frameworks, by purchasing more effectively, by shifting inpatient care to primary care, through prevention (i.e. encouraging patients to take their medication in line with their doctor's recommendations and by preventing obesity), by prescribing medications more effectively, by preventing 'unnecessary' consumption and by using IT resources more ingenuously – in addition to many other measures.

Increase efficiency by at least 0.5% per year

While it is difficult to predict what the financial benefits of these measures will be, it is realistic to assume that these measures will, over time, result in a substantial increase in productivity. This means that the sluggish productivity growth will also be improved to some extent, which is necessary in

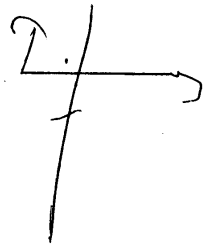
view of the shortage in the labour market. Experiences with the Social Support Act and pharmaceutical care (support the Council in this conviction. At the outset, the efficiency gains can be used to improve the financial position of the institutions, which is a necessary investment in the new healthcare system. It is also recommended that a portion of these efficiency gains be spent on innovation and modernisation. After several years, it must certainly be possible to increase efficiency by 0.5 percent on a yearly basis and capitalizing on these gains for the public good.

Council for Health and Health Care

Chairman

Rien Meijerink

General Secretary



Pieter Vos

Notes

1 Council for Public Health and Health Care, Tenable Solidarity in healthcare, Zoetermeer, the Netherlands, 2005 and 2006.
2 The study conducted by the National Institute for Health and the Environment (RIVM) assesses the impact of disease management and prevention on healthcare expenditure (www.rvz.net).
3 This study is available from the website of the National Institute for Health and the Environment, www.rvz.net.
4 Council for Public Health and Health Care, Zinnige en duurzame Zorg, Zoetermeer, the Netherlands, 2006; Rechtvaardige en duurzame zorg, The Hague, the Netherlands, 2007.
5 Capitation fees where the volume risk is partly transferred to the provider.
6 For example, the government's involvement in budget policies in hospitals is much stronger than in dentistry.
7 The difference between the gross and net Budgetary Framework can be accounted for by patient contributions; the OECD definition only includes expenditure for medical and nursing services, while housing costs are excluded, and as a result, expenses under the Exceptional Medical Expenses Act are significantly lower; the definition of the Netherlands Bureau for Economic Policy Analysis is more comprehensive than that of the Budgetary Framework, as this includes the portion funded from the general budget (e.g. training and education, etc.) and supplementary insurance ; the definition of Dutch Statistics (CBS) is even wider and includes Municipal Health Services, Occupational Health and Safety Services, welfare facilities and child care.
8 We note that there has been an ongoing debate over the past several years about the impact of IT and the development of productivity in labour-intensive sectors. This is believed to result in a lower Baumol effect. See, for example J.E. Triplett and B.P. Bosworth, Baumol's disease has been cured: IT and multifactor productivity in US services industries. Jansen (ed.), The new economy and beyond, past, present and future, 2003.
9 J. Hartwig, Can Baumol's model of unbalanced growth contribute to explaining the secular rise in health care expenditure?, KOF working papers, no. 178, 2007.
10 Our thanks go out to M.P.D. Ligthart for providing these data.

[11] The variation between the various sectors is between zero per cent for maternity and nearly two per cent for elderly care.

[12] The higher the aggregation level, the higher the income elasticity (F. Pammolli, M. Riccaboni, L. Magazinni, The sustainability of European health care systems: beyond income and aging, Working Paper 52, University of Verona, 2008). At the level of individual citizens, income-elasticity is lower, for example because richer people are in good health. This phenomenon is related to the uneven cost distribution of the healthcare expenses.

[13] These package measures are effectively a relief of the premium burden for people with supplementary insurance (95%).

[14] M.A. Morrisey and J. Cawley, Health economists' view of health policy, The Journal of Health Policy, Politics and Law, Vol. 33, no. 4., 2008, pp. 707-725.

[15] Due to more effective technologies, 'the elderly' are more likely to be eligible for heavier operations such as transplants and open-heart surgery. However, this also applies to 'young people', e.g. cytostatics, reconstructive surgery and implants that are inserted at an earlier age due to the longer period during which they are used (e.g. knees, hips).

[16] Cutler D.M and R.S Huckman, Technological development and medical productivity: the diffusion of angioplasty in New York State, Journal of Health Economics 22(2): p. 187.

[17] Th. Bodenheimer, High and rising health care costs. Part 2: technologic innovation, in Annals of Internal Medicine, 2005, no. 142, pp. 932-933.

[18] Triplett J.E. and B.P. Bosworth, Productivity measurement – issues in services industries: Baumol's disease has been cured, FRBNY Economic Policy Review 9(3):23-35, 2003.

[19] Table: Fictitious compensation: Baumol effect versus real development of labour productivity (in %).

	Baumol compensation	Δ Baumol (real)	Δ real budget	Δ 4 years
Specialisation A (capital-intensive)	0.2	0	0	0
Specialisation B (capital-extensive)	0.2	2	1.8	7.4
Hospital (average)	0.2	0.5	0.3	1.2
General Practitioner (significant reallocation of responsibilities)	0.2	1.5	1.3	5.3
Nursing home (residents that require more care)	0.2	-1.0	-0.8	-3.2
Home care	0.2	0	0	0
Social Support Act (call for tenders)	- 19.0	9.5	- 9.5	PM

[20] Nevertheless, the government has provided additional funds for the reallocation of responsibilities, e.g. for nurse-practitioners.

[21] Internal memo from the Netherlands Bureau for Economic Policy Analysis to the technical supervisory committee for this recommendation.

[22] See Heller and Hsaio, What should macroeconomists know about health care policy?, IMF, 2007.

[23] See also L. Koopmans, Gezondheidszorg en economische wetenschap, Inaugural Address at Utrecht University, 1993.

[24] Van Ewijk, Draper, ter Rele and Westerhout, Aging and the Sustainability of Dutch Public Finances, CPB, 2006, p. 18.

[25] V. Fuchs, Three inconvenient truths about health care, in New England Journal of Medicine, October 23rd, p. 1749, 2008.

[26] F. Bos, De Nederlandse collectieve uitgaven in historisch perspectief, Netherlands Institute of Economic Policy Analysis, document No. 109. 2006.

[27] Council for Public Health and Health Care, Houdbare solidariteit in de zorg, Zoetermeer, the Netherlands, 2005.

[28] V. Fuchs, Three inconvenient truths about health care, in New England Journal of Medicine, October 23rd, p. 1750, 2008.

[29] Starr P., The social transformation of American medicine: the rise of a sovereign profession and the making of a vast industry, Basic Books, 1982.

[30] For public expenses, this correlation is even the second highest, right behind life expectancy at age 65. F. Pammolli, M. Riccaboni, L. Magazinni, The sustainability of European health care systems: beyond income and aging, Working Paper 52, pp. 17-18, University of Verona, 2008.

[31] J.P. Drouin, V. Hediger, and N. Henke, Health care costs: a market-based view, in The McKinseyQuarterly, September 2008, p. 2.

[32] High government debt pushes down public expenses, whereas additional sugar consumption has an increasing effect on expenses (i.e. 0.4). F. Pammolli, M. Riccaboni, L. Magazinni, The sustainability of European health care systems: beyond income and aging, Working Paper 52, p. 18, University of Verona, 2008.

[33] Lommers M., VanderMeulen L., Winkel E., estimate on expenses for hospital care, 2008-2011, Prismant, Utrecht, the Netherlands, 2007; Lommers M., Winkel E., Analyse CPB/SCP estimate of volume development of VV&T and GHZ, 2008-2011, Prismant, Utrecht, the Netherlands, 2008.

[34] A virtual comparison based on age structure generates a 6.4% increase in costs (Heijink R., M.A. Koopmanschap and J.J. Polder, International Comparison of Cost of Illness, National Institute for Health and the Environment (RIVM), Bilthoven, the Netherlands, 2006, p. 77).
Dementia is a good example. Due to its young population, the Netherlands currently still has the second-lowest number of dementia patients, i.e. 1.13 per cent (source: European Commission, Directorate of Public Health and Consumers, Major and chronic diseases, report 2007, Luxembourg, 2008, p. 93). This is an extremely expensive disease, and catching up would lead to significantly higher expenses. In addition, as a result of increased wealth, the demand for better facilities and quality is also increasing rapidly.

[35] All the countries with approximately the same level of expenditure as the Netherlands have a significantly larger number of people aged 65 and older; the only exceptions are France (with 2.5% more people aged 65+) and Germany (with 3.2% more people aged 65+). While both countries have more people in this demographic, they also have higher expenses. See also: TK 2003 – 2004, Government Budget for 2004, Chapter XVI: Ministry of Health, Welfare and Sport, p. 298.

[36] Table: The cost of illnesses in an international perspective

	Acute care (%)		Long-term care (%)	
	Netherlands	Fra. Ger.	The Netherlands	Fra Ger.
Psychological disorders	13.1	9.7	51.7	24.1
Illnesses with an inadequate description	13.5	7.9	N/A	N/A
Cardiovascular diseases	12.2	14.0	15.6	21.8
Neoplasm	6.0	6.7	1.6	6.0
Uro-genital	4.0	5.2	0.5	4.3

Source: Heijink R., M.A. Koopmanschap and J.J. Polder, International Comparison of Cost of Illness, National Institute for Health and the Environment (RIVM), Bilthoven, the Netherlands, 2006, pp. 12 - 13.

[37] Medications in the Netherlands cost $ 268 (PPP) per capita; in France and Germany, the average cost is $ 353.50. Expenditure for nursing homes and residential facilities in the Netherlands is $ 356 (PPP), while in France and Germany the average cost is $ 140.5. See: Heijink R., M.A. Koopmanschap and J.J. Polder, International Comparison of Cost of Illness, National Institute for Public Health and the Environment, Bilthoven, the Netherlands, 2006, p. 65 – 66.

[38] Relative per-capita expenses by age group ($ PPP)

	- 15	15 - 45	45 – 65	65 - 85	85+
Australia	100	100	100	100	100
Germany	91	111	137	110	94
Netherlands	93	132	130	124	134

See: Heijink R., M.A. Koopmanschap and J.J. Polder, International Comparison of Cost of Illness, National Institute for Health and the Environment (RIVM), Bilthoven, the Netherlands, 2006, p. 79.

[39] OECD Health Data, 2008.

[40] The year 2002-2003 has not been included for Germany and France due to changing trends.

[41] Estimated for basic data for 2003 ($ 1,660).

[42] Table: Life expectancy in an international perspective

	Life expectancy (2005)		Life expectancy at age 65	
	Males	Females	Males	Females
Netherlands	77.2	81.6	16.4	20.0
Denmark	76.0	80.5	16.1	19.1
Austria	76.7	82.2	17.0	20.3
Belgium	76.2	81.9	16.6	20.2
Germany	76.7	82.0	16.9	20.1
France	76.7	83.7	17.7	22.0
Italy			17.7	21.7
Spain	77.0	83.7	17.3	21.3
Sweden	78.4	82.8	17.4	20.6
UK	77.1	81.1	17.0	19.5

Source: OECD Health Data

[43] F. Pammolli, M. Riccaboni, L. Magazinni, The sustainability of European health care systems: beyond income and aging, Working Paper 52, pp. 17-18, University of Verona, 2008.

[44] Average life expectancy in the Netherlands has increased by 5.2 per cent since 1960: 1.3 per cent less than in Scandinavia and even 2.7 per cent less than in the surrounding countries. This difference is largely accounted for by the increase in life expectancy at age 65, which is significantly lower than in other countries (see table).

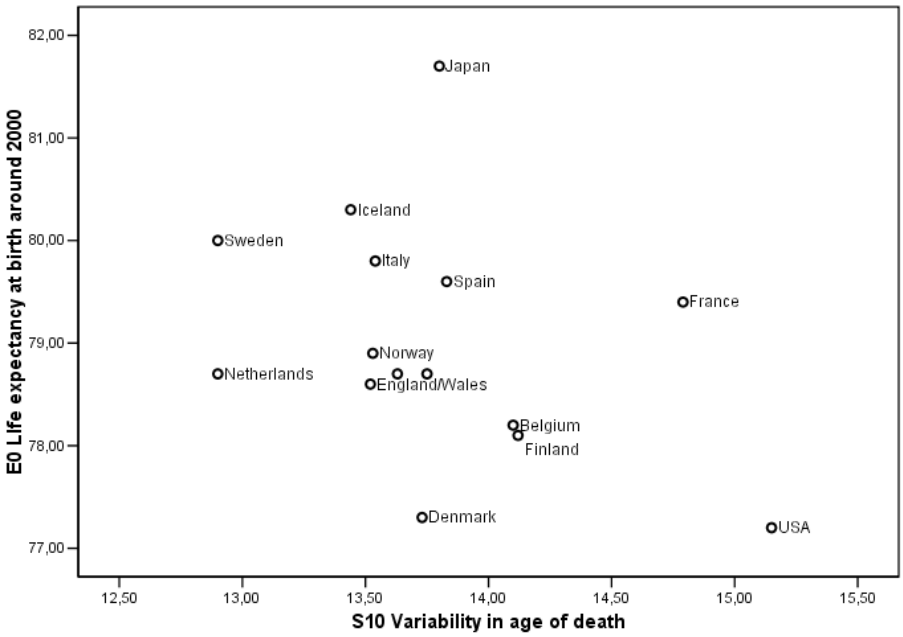
Table: Increase in life expectancy at age 65 since 1960

	Netherlands	Scandinavia	Western Europe	Southern Europe	UK and US
Males	1.7	2.8	3.5	3.7	3.8
Females	3.2	4.0	4.6	5.1	3.3

Source: Lundberg O., M. Yngwe, M.K. Stjärne, L. Björk and J. Fritzell, The Nordic experience. Welfare states and public health, Health Equity Studies No. 12, August 2008, www.chess.su.se, p. 44 – 48.

[45] The low prevalence of cardiovascular diseases also has another side: it indicates that the Netherlands is benefiting relatively little from the rapid developments in this field, which affects the increase in life expectancy compared to the surrounding countries.

46 Figure: Distribution of life expectancy (approx. 2000)



Source: Lundberg O., M. Yngwe, M.K. Stjärne, L. Björk and J. Fritzell, The nordic experience. Welfare states and public health, Health Equity Studies No. 12, August 2008, www.chess.su.se, p. 53.

47 The distribution of life expectancy (over the age of 10) decreased by 6 per cent in the Netherlands, compared to 3 per cent (Scandinavia); 2 per cent (Western Europe); 4 per cent (Southern Europe); and 2 per cent (UK and US). Lundberg O. M. Yngwe, M.K. Stjärne, L. Björk en J. Fritzell, The Nordic experience. Welfare states and public health, Health Equity Studies No. 12, August 2008, www.chess.su.se, p. 52.

48 Westert GP, Berg MJ van den, Koolman X., and H. Verkleij (ed.), Zorgbalans 2008, de prestaties van de Nederlandse gezondheidszorg, National Institute for Health and the Environment (RIVM), Bilthoven, the Netherlands, 2008.

49 For an overview: Busse R., J. Schreyögg and P.C. Smith, Variability in healthcare treatment costs amongst nine EU countries – results from the Health Basket project, Health economics 17:(1), 2008, p. 1 – 7.

[50] Table: Pharmaceutical sales, 2006 ($ PPP)

	NL	Belgium	Germany	Denmark	Spain	France	UK	Sweden
Per capital (in $)	321	525	326	375	332	429	316	372

Source: OECD Health Data, 2008.

[51] Bolin K.A. Lindgren, B. Lindgren and P. Lundborg, Utilisation of physician services in the 50+ population. The relative importance of individual versus institutional factors in 10 European countries, NBER working paper 14096, June 2008.
Table: Average number of doctor's visits per person aged 50+ (SHARE 2004 database)

	Netherlands	Austria	Germany	Denmark	Spain	France	Italy	Sweden
No. of doctor's visits	4.56	6.51	7.70	4.34	9.63	7.36	8.78	3.00
No. of GPs (a)	2.73	4.81	4.97	3.28	7.48	5.49	6.85	1.80
No. of specialists (b)	1.83	1.70	2.73	1.06	2.14	1.87	1.93	1.20
b / a (%)	67%	35%	55%	32%	29%	34%	28%	67%

p. 31, own editing

[52] Source: OECD, Health Data, 2008.

[53] See the vignettes about specialists and GPs www.ruz.net.

[54] Westert GP, Berg MJ van den, Koolman X., and H. Verkleij (ed.), Zorgbalans 2008, de prestaties van de Nederlandse gezondheidszorg, National Institute for Health and the Environment (RIVM), Bilthoven, the Netherlands, 2008. 182 – 183.

[55]Table: Expenses per comparable service in seven countries

	CVA	AMI	Cataract	Hip	Appendix
Netherlands	6,533	5,328	500	5,328	1.804
Germany	3,283		623		
France		5,508	909	5,680	
Italy	4,465	7,251			1,588
England				5,273	1,887

The practice of these services varies significantly between the countries, which is primarily due to technology and, to a lesser extent, the duration of stay/hospitalisation. For example, the

type of hip used in hip replacement surgery is less advanced in the Netherlands, the average-length-of-stay for CVA patients is long; thrombolytic drugs are administered more frequently; those suffering from AMI are more often given a coronary artery stent; appendices are usually not removed laparascopically. A soft lens is often used for cataracts. The table only contains countries that are similar in terms of the techniques used.
The distribution of expenses is substantial in the Netherlands: for a hip replacement (EUR 8,750 - € 4,100), stroke (EUR 14,000 - EUR 3,500) even the highest in all the countries surveyed; distribution is also substantial in PTCA (EUR 7,600 - EUR 3,700) and appendectomies (EUR 2,159 - EUR 1,550). See, Busse R. J. Schreyögg and P.C. Smith (eds.), Variability in healthcare treatment costs amongst nine EU countries – results from the Health Basket project, Health economics 17:(1), 2008, p. 1 – 103.

56 Heijink R., M.A. Koopmanschap and J.J. Polder, International Comparison of Cost of Illness, National Institute for Health and the Environment (RIVM), Bilthoven, the Netherlands, 2006.

57 Delbes, Ch, J. Gaymu en S. Springer, Les femmes vieillissent seules, les hommes vieillissent a deux. Un bilan européen, in Population & Sociétés, No. 419, 2006. We must bear in mind, however, that this includes nursing homes. If we consider nursing homes only, the score for the Netherlands is slightly less extreme (see table).
Table: Per-capita cost of nursing-home care ($ PPP) and as a % of GDP

	NL	Austria	Germany	Denmark	Spain	France	Sweden
Per capita (in $)	452	447	406	725	199	342	241
% GDP	1.2	1.3	1.3	2.1	0.7	1.1	0.7

58 See also: Council for Public Health and Healthcare, Gepaste Zorg, Zoetermeer, 2004.

59 Kommer GJ, Slobbe LCJ en Polder JJ, Trends en verkenningen van kosten van ziekten. Zorg voor euro's – 2, National Institute for Health and the Environment (RIVM), Bilthoven, 2007, p. 11.

[60] This relates to problems concerning the measurement of production and quality improvements. Quality improvements, such as increased chances of survival or better quality of life, are often measured as a price increase rather than as an increase in volume.

[61] TK 2003 – 2004, no. 28852, Onderzoek naar de Zorguitgaven; ECORYS, Kostenontwikkeling ziekenhuiszorg. Implicaties vanuit consumentenperspectief, Rotterdam, 2007.

[62] Kommer GJ, Slobbe LCJ and Polder JJ, Trends en verkenningen van kosten van ziekten. Zorg voor euro's – 2, National Institute for Health and the Environment (RIVM), Bilthoven, 2007, p. 11.

[63] TK 2003 – 2004, no. 28852, Onderzoek naar de Zorguitgaven, p. 21.

[64] We are indebted to the National Institute for Health and the Environment (*ir.* L. Slobbe) for the data provided; the per-capita statistics were calculated by the secretariat.

[65] Turnover increased from EUR 130 million (2004) to EUR 186 million (2005) to EUR 266 million (2006). The fastest growers were: Remicade® (used for the treatment of rheumatic arthritis) Herceptin® (breast cancer) and Mabthera® (rheumatic arthritis and non-Hodgkin Lymphoma).

[66] We are indebted to the National Institute for Health and the Environment (*ir.* L. Slobbe) for the data provided.

[67] Peacock S.J., Richardson J.R., Supplier-induced demand: re-examining identification and misspecification in cross-sectional analysis, European Journal of Health Economics vol. 8 no. 3, 2007; see also P.J. Ginsburg, High and rising health costs: demystifying U.S. health care spending, Robert Wood Johnson Foundation, Research synthesis report no. 16, October 2008.

[68] Parliamentary Paper 2008, CZ/FBI-2882008, Procedurele voortgang bodemprocedure NVZ-Staat der Nederlanden.

[69] E.S. Mot, Paying the medical specialist: the eternal puzzle. Experiments in the Netherlands, Amsterdam, 2002, p. 255.

[70] TK 2003 – 2004, no. 28852, Onderzoek naar de Zorguitgaven, p. 18 – 21.

[71] GGZ-Nederland, Toenemende zorg, industry report on the Municipal Healthcare Services, 2003-2005, Amersfoort, the Netherlands, 2006.

[72] p.36: see 74.

[73] Above, p. 24 and Poos MJJC, Smit JM, Groen J, Kommer GJ, Slobbe LCJ, Kosten van Ziekten in Nederland 2005, Zorg voor euro's – 8, National Institute for Health and the

Environment (RIVM), Bilthoven, the Netherlands, 2008, p. 41.

74 See various annual reports on www.wfz.nl.

75 Source: NVZ Dutch Hospitals Association

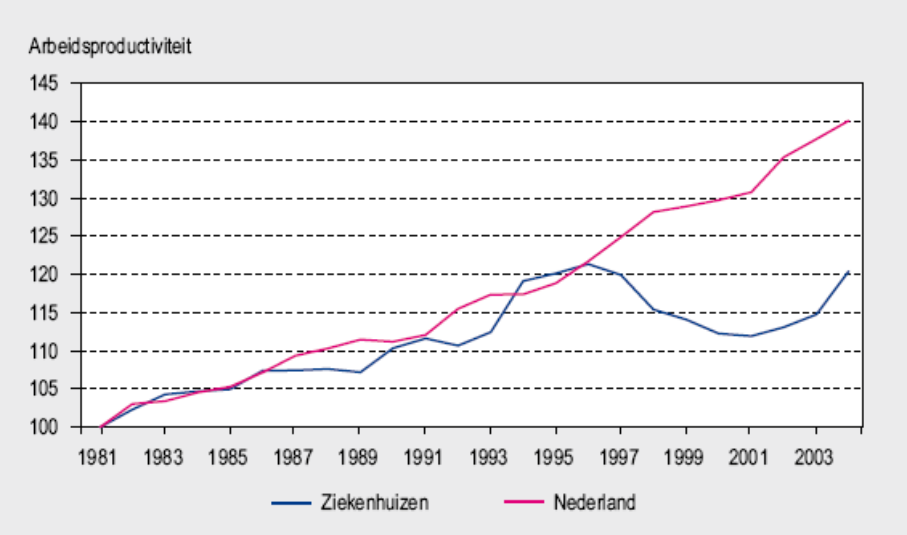
76 Westert GP, Berg MJ van den, Koolman X., and H. Verkleij (ed.), Zorgbalans 2008, de prestaties van de Nederlandse gezondheidszorg, National Institute for Health and the Environment (RIVM), Bilthoven, the Netherlands, 2008, p. 150.

77 Table: Real development of labour costs, 1995 – 2004; annual increase in percentage)

	Healthcare	Safety and security	Education
share of labour costs (%)	60	69	75
Real wages agreed by contract	0.7	0.5	0.2
Occasionally above development of wages agreed by contract	1.6	1.3	1.3
Share of labour productivity	0.4	-1.2	0.9
Total	2.7	0.6	2.4

Increase in labour productivity halts the increase in labour costs, which means that a positive number in table 3.2 refers to a decline in labour productivity (i.e. healthcare, education), thereby causing an increase in real labour costs. Source: Netherlands Institute for Social Policy Research (SCP). Publieke prestaties in perspectief, memorandum quartaire sector 2006 – 2011, The Hague, January, 2007, p. 34.

78 Figure: Development of labour productivity in hospital care, 1981 – 2004 (screened for case mix).



Source: Westert G.P., Verkleij H. (eds.), Zorgbalans. de prestaties van de Nederlandse gezondheidszorg in 2004, Council for Public Health and Health Care, Bilthoven, the Netherlands, 2006, p. 151.

79 In 2005, Dutch Statistics ceased to publish a breakdown of elderly care into nursing homes, residential care homes and home care.

80 Table: Increase (decrease) in percentages of labour productivity based on production volume in the various sectors (1994 – 2003)[79]

	Prismant	Netherlands Institute for Social Research
Hospitals	+ 0.0	- 0.6
Municipal healthcare	+ 0.5	+ 0.9
Care for the disabled	- 0.2	- 1.2
Nursing homes	- 1.1	- 1.1
Residential care homes	- 1.3	- 2.0
Home care	+ 0.5	+ 1.6

81 This does not mean that this is the same for all other discounts and intensifications;

82 it is rather due to the fact that productivity is ideally expressed through the improved health that has been achieved, which is difficult to measure. Instead, other volume indicators are used,

such as the number of hospitalisation days, patients and operations.

83 The new methods are based on measuring volumes directly based on output indicators, and can be used directly to calculate labour productivity. Of this method, only the method for hospital care has already been incorporated into the figures that form the basis of the Growth Accounts. However, in an Annex to the Growth Accounts, Dutch Statistics has assessed the impact on labour productivity of transfer to the new methods under the Exceptional Medical Expenses Act.

84 Dutch Statistic (CBS), De Nederlandse groeirekeningen 2007, Voorburg, the Netherlands, 2008.

85 For a recent discussion: J. Hartwig, Can Baumol's model of unbalanced growth contribute to explaining the secular rise in health care expenditure, KOF working papers, no. 178, November 2007.

86 There are currently no figures available for the total patient contributions in 2006 and 2007, which is the result of the implementation of the Social Support Act. This table assumes that total patient contributions (i.e. including those for home care) have not changed in the past two years.
Expenditure for geriatric care relates to: nursing homes, residential care homes and home-care institutions.

87 See the vignette on mental health care published along with this recommendation (www.rvz.net) or the Sector Report (*Sectorrapport*) for extensive qualitative data.

88 Vignette on mental health care, www.rvz.net, p. 12, 2008.

89 Kunst A.E., Meerding W.J., Varenik N., Polder J.J., and J.P. Mackenbach, Sociale verschillen in zorggebruik en zorgkosten in Nederland 2003. Zorg voor euro's – 5, Dutch National Institute for Public Health and the Environment (RIVM), Bilthoven, the Netherlands, 2007.

90 See J.P. Frouin, V. Hediger, and N. Henke, Health care costs: a market-based view, in The McKinsey Quarterly, September 2008.

91 See the vignette on Pharmaceuticals (Council on Health and Health Care) published along with this recommendation for an extensive analysis of the expense development in the pharmaceutical industry.

92 The Social Support Act includes not only home care but also facilities for the disabled (ex. Act concerning the provision of amenities for the handicapped (formerly TheWelfare Act). The funds for these facilities are already included in the municipal fund.

[93] This is a form of yardstick competition, as individual municipalities control over macro-realisation.

[94] This paragraph is largely based on P.P.T. Jeurissen, W.G.M. van der Kraan en P. Vos, Het persoonsgebonden budget, Chapter 11, in F. De Kam en A. Ros (ed.), Jaarboek Overheidsfinanciën 2008, SDU, The Hague, the Netherlands.

[95] Letter from State Secretary Bussemaker of Public Health, Welfare and the Environment, 11 March 2008; 2007 figures do not include Social Support Act; increase in percentage for 2007 is in relation to the figures screened before this transfer.

[96] Source: VWS – FEZ.

[97] Between 1995 and 2006, expenses under the global budget were reduced by EUR 6.89 billion as a result of administrative changes .

[98] TK 2003 – 2004, no. 28852, Onderzoek naar de Zorguitgaven, p. 16.

[99] Jeurissen P.P.T. and F.B.M Sanders, Zorg om Solidariteit, in S.G. van der Lecq and O.W. Steenbeek (red.), Kosten en Baten van Collectieve Pensiensystemen, Kluwer, 2006, pp. 47 – 65.

[100] A major study of community involvement conducted by Harvard political scientist Robert Putnam reveals that: '*the greater the diversity in a community, the fewer people vote and the less they volunteer, the less they give to charity and work on community projects'.* Glaeser and Alesina found that: '*roughly half the difference in social spending between the US and Europe – Europe spends far more – can be attributed to the greater ethnic diversity of the US population'.* The downside of diversity*,* in International Herald Tribune, August 5, 2007.

[101] For a detailed theoretical discussion of these problems, see: B. Jacobs, De prijs van gelijkheid, Bert Bakker, Amsterdam, 2008.

[102] Wong A., GJ. Kommer and JJ. Polder, Zorg voor overlijden. Solidariteit en de kosten van vergrijzing, National Institute for Health and the Environment (RIVM), Bilthoven, 2008, p. 19.

[103] Council for Public Health and Health Care (RVZ), Houdbare solidariteit in de gezondheidszorg, Zoetermeer, 2005, p. 22.

[104] Table: Increase in the real solidarity transfers of net payers (for 2006) in EUR

	2006	2026
Basic insurance	1,670	3,780
Exceptional Medical Expenses Act	1,380	2,870
Total	3,050	6,650

Ministry of Public Health, Welfare and Sport, Niet van Later Zorg, The Hague, the Netherlands, 2006.

[105] Kunst A.E., Meerding W.J., Varenik N., Polder J.J., and J.P. Mackenbach, Sociale verschillen in zorggebruik en zorgkosten in Nederland 2003. Zorg voor euro's – 5, Dutch National Institute for Public Health and the Environment (RIVM), Bilthoven, the Netherlands, 2007.

[106] Wong A., G.J. Kommer and J.J. Polder, Zorg voor overlijden. Solidariteit en de kosten van vergrijzing, National Institute for Health and the Environment (RIVM), Bilthoven, 2008, p. 49.

[107] Council for Public Health and Health Care, Arbeidsmarkt en Zorgvraag, Den Haag, 2006, p. 58.

[108] OECD, Regions at a glance 2007, p. 178: density of practicing nurses.

[109] OECD, Regions at a glance 2007, p. 180: density of nurses: Europe.

[110] When wages in the regional labour market are 10 per cent higher, death rates of AMI (Acute Myocardinal Infarction) patients increase by 4 to 8 per cent. E. Hall, C. Propper and J. Van Reenen, Cab pay regulation Kill? Panel data evidence on the effect of labor markets on hospital performance, CEP Discussion Paper, no. 843, January, 2008.

[111] Table: Number of discharged patients per FTE (2002) and number of beds per FTE (2005).

	Netherlands	Austria	Germany	Beglium	Denmark	France
No. of patients per FTE	7.4	19.2	17.8	13.2	12.1	
Number of FTEs per bed	0.29	0.45	0.49	0.48		0.58

Source: National Institute for Health and the Environment (RIVM), 2006, p. 152; OECD Health Data 2008.

[112] E. van de Berg and J. de Hart, Maatschappelijke organisaties in beeld. Grote ledenorganisaties over actuele ontwikkelingen

op het maatschappelijk middenveld, Netherlands Institute for Social Research (SCP), The Hague, 2008, p. 23.

113 Council for Public Health and Health Care (RVZ), Mantelzorg, arbeidsmarkt en zorgvraag (background study), The Hague, 2006.

114 Struijs A.J., Mantelzorg, arbeidsmarkt en zorgvraag, in Council for Public Health and Health Care (RVZ), Arbeidsmarkt en zorgvraag, achtergrondstudies, The Hague, 2006, pp. 227 – 274.

115 This relates to informal carers who provide assistance to the chronically ill and the dying; who provide personal assistance or household help, and who provide this aid more than eight hours a week and/or more than three months at a time. See, A.H. de Boer, R. Schellingerhout and J.M. Timmermans, Mantelzorg in getallen, SCP, The Hague, the Netherlands, 2003, p. 11.

116 F. Pammolli, M. Riccaboni, L. Magazinni, The sustainability of European health care systems: beyond income and aging, Working Paper 52, p. 17-18, University of Verona, 2008.

117 C. Ramakers, R. Schellingerhout, M. Wijngaart, and F. Miedema, Persoonsgebondenbudget nieuwe stijl 2007, ITS, Nijmegen, 2008.

118 For instance, in the U.S. there are major public programmes which pay compensation that does not cover the costs, therefore compelling the hospitals to charge additional amounts to people with private health insurance. See: J.A. Meyer and W.R. Johnson, Cost shifting in health care: an economic analysis in Health Affairs, vol. 3(1): pp. 21 -34, 1984.

119 On top of the actuarial risk.

120 This paragraph is largely based on PricewaterhouseCoopers' study Risico's voor het uitgavenniveau in de zorg, Council for Public Health and Health Care, the Hague, 2008.

121 See PWC, 2008, p. 88.

122 See Annex 4 for a detailed description of the mechanics of this model.

123 For instance, some insurers pointed out that the competition is benefiting from the fact that they stuck their necks out by introducing preferential policy in the pharmaceutical industry.

124 See PwC, 2008, p. 26.

125 As before, this is stimulated by the (ex-post) risk equalisation, which reduces the 'price' of the actuarial risk – insurers save less money of they shift risk to the patient – while the potential deductions are lower as well.

126 J. Eggelte and P. Schilp, Risico en rendement op de zorgverzekeringsmarkt, ESB 93 (no. 4544), pp. 589-590.
127 Dutch Healthcare Authority (NZa), Consultatiedocumenten, Advies langetermijnvisie geneesmiddelenbeleid (2008).
128 H.H. König and S. Friemel, Gesundheitsökonomie psychischer Krankheiten, Bundesgesundheitsblatt-Gesundheitsforschung-Gesundheitsschutz, 2006 no. 1, p. 53.
129 J.M. Donahue and H.A. Pincus, Reducing the societal burden of depression. A review of economic costs, quality of care and effects of treatment, Pharmacoeconomics 2007, 25(1): 7-24.
130 This paragraph is largely based on PricewaterhouseCoopers' study Risico's voor het uitgavenniveau in de zorg, Council for Public Health and Health Care, the Hague, 2008.
131 See PwC, 2008, p. 23.
132 See PwC, 2008, p. 64.
133 The National Institute for Social Research is expecting an increase in the number of dementia patients between 2005 and 2015: 71 per cent for men and 31 per cent for women. In 2025. 280,000 individuals will have to rely on other on account of their dementia. Within this group, the number of single people is increasing at an above-average rate. Due to the lack of informal care, this group consumes more care than other groups (PwC, 2008, p. 61).
134 See PwC, 2008, p. 56.
135 See PwC, 2008, p. 67.
136 See PwC, 2008, p. 54.
137 Berg, B. van den, F.T. Schut, 2003, Het einde van gratis mantelzorg?, Economisch Statistische Berichten 88 (4413), pp. 464-467.
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139 According to a recent estimate by PwC, this will be 8.4 per cent in 2008; 2007, 6.7 per cent.
140 Cebeon, Verklaring van regionale verschillen in zorggebruik AWBZ, juni 2007; Toepasbaarheid verklaringsmodellen zorggebruik AWBZ, July 2008.
141 Cebeon, 2008, p. 5.
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