

RECONNECTING PHILOSOPHY AND ECONOMICS

An Aristotelian Perspective on Funding
Health Care in The Netherlands



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Undemonstrated facts always form the first step or starting-point of a science; and these starting-points or principles are arrived at some in one way, some in another, some by induction, others by perception, others again by some kind of training. But in each case we must try to apprehend them in the proper way, and do our best to define them clearly; for they have great influence upon the subsequent course of an inquiry. A good start is more than half the race, I think, and our starting-point or principle, once found, clears up a number of our difficulties.

-Aristotle (*Nic. Eth.*, Peters1893: I. 7, 21:1098b-1098b8)

Reconnecting philosophy and economics:
An Aristotelian perspective on funding health care in
The Netherlands

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Acronyms

ACM	Consumer Markets Authority
NCE	Neo-classical economics
Zvw/ZVW	Health Insurance Act
HHI	Herfindahl-Hirschman Index
U.S.	United States
MOT	Management of Technology
SHI	Social Health Insurance
ADHD	Attention Deficit Disorder
HMO	Health Maintenance Organisation
PGP	Prepaid medical Group Practice
AMA	American Medical Association
CHI	Catastrophic Health Insurance
GDP/gdp	Gross Domestic Product
PPO	Preferred Provider Organisation
MCO	Managed Care organisations
NMG	Dutch medical society
KNMG	Royal Dutch Society for the Promotion of the Healing Arts
AWBZ	General Law Extraordinary Care Costs
WTZi	Care Institutions Admission Act
ICP	Institutional Cash Pool
MH	Mental Health
QALY	Quality Adjusted Life Year

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Executive Summary

The 2006 health care reforms in the Netherlands were aimed at improving the affordability, accessibility, and quality of health care, as well as freedom in health care. However, the reality is that since the reforms (which include the privatisation of health-care insurance), costs have further increased and accessibility has decreased while freedom of choice has declined. The reforms reduced freedom, while increasing costs and reducing accessibility. The aim of this thesis is to investigate whether these issues stem from a deeper (Utilitarian) philosophical foundation of how health care is currently funded and to propose a mode of funding founded on Aristotelian principles that would be in support of freedom without adversely affecting (or even improving) costs, accessibility and quality. The analysis of the system of Managed Care (in Chapter 2) and its implementation in The Netherlands (in Chapter 3) suggests that the rising costs of health care may be related at least in part to the utilitarian foundation of this system (with its utility-maximising consumer and its profit-maximising producer who, in an oligopoly like the health-care market, is able to generate super-normal profits), in part to the heavy administrative load associated with Managed Care, and in part due to contracting practices. All of which also restricts freedom of choice.

Aristotle's ethics, specifically his *Nicomachean Ethics*, underlines the importance of freedom (of deliberation) as the quintessential requirement for eudaimonia. If this were taken as the philosophical foundation for the health care system, then patients and health care providers would be able to make informed choices that align with their personal goals and values. This freedom of deliberation stands in stark contrast with protocolisation, standardisation and homogenisation that Managed Care brings. Such a system creates a 'monoculture' in which it is difficult to find discernible differences in price and quality, making it equally difficult to identify possible trade-offs between the two and implications of such trade-offs.

In Chapter 4 I propose a mode of funding Dutch health care that safeguards freedom of deliberation in health care that would be in line with the Dutch socio-economical environment and political system. The proposed Health Care system is a universal health care system with a single-payer that covers all health care expenses; where medical decision/treatments are made autonomously by client and practitioner without meddling/pressure/ruling by other parties who are not practising health care; where the funding of health care is a matter of transparent deliberation between all parties and a part of political discourse.

By prioritising freedom of deliberation, the proposed reforms address the limitations of Managed Care's utilitarian philosophy and offers a more human-centred approach to health care. A system that is based on Aristotelian philosophy creates an environment that encourages open and honest communication between all parties involved and is expected to improve all relevant aspects of the Dutch health

care system and health itself. The suggested reforms are far reaching and may seem unrealistic. Its proper functioning would indeed require substantial social reform in all spheres of social life (economic, legal-political, and cultural), though they remain entirely in-line with Dutch socio-econo-political reality.

In conclusion, this thesis argues that the Netherlands' health care reform should prioritise freedom of deliberation (the fundamental requirement for eudaimonia). As such individuals' well-being and values are prioritised, which is expected to have beneficial effects including reducing costs and improving the overall quality of care without diminishing access to it. Free deliberation and subsequent cooperation are thought to have more potential than competition.

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Introduction

2 The Netherlands is a wealthy country and prides itself for having a top notch
health care system. However, rising health care costs are threatening the accessi-
4 bility, quality and freedom of choice/deliberation in health care. Since 1941, Dutch
society has transitioned through various health care funding modalities with an
6 ever-increasing emphasis on cost reduction as the leading principle, but with little
success. What is has become quite clear now is that in The Netherlands health care
8 expenses could not be kept at a reasonable measure, people's freedom of choice have
been curtailed, accessibility has diminished and quality has remained a somewhat
10 nebulous concept.

The hypothesis underlying this thesis is that, these problems are associated with
12 the nature of the current health care system, the system of Managed Care (as will
be argued below). This system is a variant of the 'health care market' which is a
14 product of Neoclassical economic thinking. Managed Care, at its core, is funda-
mentally a utilitarian market model combined with strong direction by insurance
16 companies and to a lesser degree government. Health care providers, receivers and
insurers are expected as utilitarian agents to create an efficient health care market
18 (in relation to general goals set by regulations). When the system was introduced
(by politicians, healthcare economists and business people), it was promised that
20 it would reduce the costs of health care while expanding freedom of choice, whilst
maintaining accessibility and quality of health care. Whether the system would be
22 able to generate such positive effects could be doubted on theoretical grounds.

The pure Neoclassical 'healthcare market' consists only of care-providers ('produc-
24 ers') and patients ('consumers'). Given the high costs of health care, those seeking
it would not be able to afford health care in a pure healthcare market. Managed
26 Care remedies this problem by introducing a third party to the system, the private
(health care) insurer and relies on Neoclassical market theory of perfect competition
28 to result in the best outcome. Insurers would collect premiums on health care insur-
ance and provide financial coverage for health care provided by contracted health
30 care providers. In this system insurers compete with each other for insurees, whilst
health care providers would compete with each other for contracts with an insurer.
32 The market is then expected to find the lowest price for health care services through
this competitive mechanism.

34 However, one of the core assumptions underlying the perfectly competitive Neo-
classical market is *product homogeneity*. Competition (meaning price competition or
36 cost competition) is possible only when the product that is offered is homogeneous.
Meaning that characteristics of products, services and their delivery are assumed
38 to be identical, preventing a client to differentiate on terms other than cost. If
the product, service and/or delivery were differentiated, then health care providers

40 would have some discretion in setting their price. In that case, the model of per-
fect competition is not applicable. Unsurprisingly the Dutch health care system is
42 characterised by standardisation and protocolisation in an attempt to achieve this
homogenisation. Hence, when we consider the goal of *freedom* within the context
44 of the Managed Care market an incongruity already becomes visible. Homogenisa-
tion affords a kind of freedom best described by Henry Ford: "*any color so long as*
46 *it is black*". When it comes to quality, homogenisation/perfect-competition disre-
gards the kind of differentiation that is required to distinguish good from bad/lower
48 quality. As for costs, insurances should be seen as vehicles for spreading risks that
can not be carried out-of-pocket. As such, on the macro scale insurance compa-
50 nies could be seen as proxies for 'health care consumers'¹. Competition between
insurers and between health care providers is expected to reduce prices in health
52 care. However, this disregards the costs due to bureaucracy, systems of monitoring,
control schemes and so forth that are inherent in the system of contracting health
54 providers (by insurers). Regarding *accessibility*, many factors indirectly affect acces-
sibility. Lack of freedom and high costs can make health care less accessible than it
56 seems. In a perfect-competition the insurers all offer a homogeneous product they
have contracted and note that contracting is can be exclusionary, limiting access
58 to and volume of health care that can be offered. Whilst it seems that private
insurers make the market 'possible' their way of operating and operational costs
60 might negatively affect freedom, prices/costs, quality and accessibility. Note that
this is possible even when assuming no friction costs due to bureaucracy, systems of
62 monitoring, control schemes and so forth. The private insurer is but one element in
the entire Managed Care story. Another reason for doubting the beneficial effects
64 on costs/expenditure is that in the Neoclassical model, a human being is seen as a
consumer with unlimited wants, while the producer is expected to maximise profit.
66 As such the whole system is considered as aiming towards infinite growth (potential
and as objective). How can we expect a model that is geared towards unlimited
68 growth to reduce costs?

A main problem involved in applying the Neoclassical economic model to health
70 care seems to be that utility from health care decisions is not like the utility from
consuming apples or oranges. The problem in health care is not to maximise con-
72 sumption but to give and receive the right care at the right moment in the right
measure. When it is left to governments or insurance companies (rather than doc-
74 tors and patients) to determine what the right care is, it is then tempting to let a
(scientific) authority statistically research, determine and ultimately promote policy
76 in favour of treatments with the most cost-effective utility. Steering legislation in
such a manner, while ignoring the unique needs of individuals, effectively dimin-
78 ishes options to choose from, disregarding appropriateness. This illustrates how the
application of the Utilitarian² principles of Neoclassical economics to health care

¹If risks can not be carried out-of-pocket by most consumers, then a market servicing those risks will only be accessible to a select few that have the means to carry it if there is no way to spread the risk like insurers do.

²Note that Utilitarianism in this thesis refers to Bentham's Utilitarianism. Aside from Benthamian Utilitarianism there are two main further developments, namely 'Rule' and 'Act' Utilitarian ethics. These are in my perspective attempts of applying concepts foreign and incompatible with base Utilitarianism. For example, 'Rule' Utilitarianism implicitly introduces the concept of justice (or at least as a a consequences) through rules and with that creates a paradox between

80 could potentially lead to legislation and interference with the practice of health care
that might eventually lead to less than desirable outcomes regarding freedom and
82 ultimately the costs, quality and accessibility of health care.

In short, there are theoretical reasons to think that the problems associated
84 with Managed Care may be inherent to the system, and especially to its utilitarian-
economic foundations. They seem to be inherent in the model on which the current
86 health care system is based, which in turn can be traced back to the utilitarian
perspective on man. The abstraction of rational man only busy with maximising
88 their utility robs man of their agency, no matter sophistication such as 'revealed
preference satisfaction'. This is the hypothesis on which this thesis is based. If it
90 is true, then the problems associated with the current system are unlikely to be
solved through political measures or other adaptations of the system. Answers are
92 unlikely to be found unless we reconsider the utilitarian-philosophical foundation
on which this system is ultimately based. Without a departure from the utilitarian
94 perspective there is no hope and man is doomed to slavishly follow a predetermined
path set out by felicific calculus. What this all boils down to is that there are
96 reasons to question the utilitarian-philosophical principles on which Managed Care
is based. The purpose of this thesis, then, is not to conclusively prove its main
98 working-hypothesis. Rather, the aim is to explore and propose a possible alternative
to the current system that is based on an Aristotelian (rather than a utilitarian)
100 foundation. Why Aristotle?

An intuition or central idea that is guiding this thesis is that the key to answers
102 to the current problems lies in freedom, and in how it is understood. In Neoclassical
economic theory as well as the system of Managed Care, freedom refers to the
104 freedom of the so-called 'free market' in which man maximises their utility. On the
other hand, in day-to-day language freedom refers to liberty from bondage, slavery,
106 interference by the state etc., and being free means enjoying civil liberties such as
freedom of thought and expression, freedom of the press, freedom of public and
108 private deliberation, academic freedom and so on. If this kind of freedom prevailed
in health care, arguably there would be more diversity in health care, and therefore
110 more opportunities to compare different treatments proposed by different schools
of medicine, different organisational approaches etc. in terms of their impact on
112 the cost, the quality and the accessibility of health care. The crux of the idea is
that freedom of deliberation and choice creates the opportunity for both health care
114 practitioners as well as clients to choose what is right for their particular case, with
possible beneficial effects on the costs, quality and accessibility of health care. Truly
116 free spirits would quite likely apply their mind to all problems that may come up
in health care, and when this happens, chances are high that new ideas will then
118 also come up to reduce costs and improve the accessibility and quality of health
care. However, *this* concept of freedom receives little attention in Managed Care or
120 indeed in Neoclassical economics, and it is this freedom that has suffered from the
introduction of Managed Care. The purpose of this thesis is to design a mode of
122 funding that would safeguard this freedom.

Before such a mode can be designed what is required first and foremost is a
124 detailed understanding of this particular concept of freedom which the utilitarian
perspective does not recognise. The human being underlying utilitarian-Neoclassical

the individual and society when considering utilitarian core principles.

126 theory is an animalistic creature driven to satisfy their wants, and devoid of a higher,
127 spiritual nature. Therefore, I go back to a great philosopher who had a higher regard
128 of the human being, who took this kind of freedom seriously and who explained why
129 it is essential to the human being in all his endeavours, including health care, a
130 philosopher who is also known for his economic writings and has been called 'the
131 first economist', namely Aristotle. Because nowadays the utilitarian perspective is
132 orthodoxy, the Aristotelian understanding of freedom is often ill applied today and
133 consequently ill understood as well, therefore the Aristotelian concept of freedom
134 requires detailed explanation.

135 It is certainly justified to ask why I chose Aristotle (rather than, for example,
136 a modern Aristotelian philosopher or a different philosophy). The initial impulse
137 was because of my prior knowledge on some of Aristotle's work and was impressed
138 by it (unlike many other philosophies). A key reason why Aristotle's *Nicomachean*
139 *Ethics* is chosen as the foundation for this thesis is its compatibility with my own
140 perspective on man, which is spiritual rather than animalistic. Even though mod-
141 ern Aristotelian philosophers can be found who claim that they share Aristotle's
142 perspective on man and freedom, I would like to know for myself what 'the master
143 himself' said. There are several reasons for this. First of all there are a myriad of
144 thinkers who are inspired by Aristotle or claim to be Aristotelian. Choosing any of
145 them still requires a solid understanding of Aristotle's ethical philosophy first. To
146 have a firm grasp of possible deviation between them and Aristotle and amongst each
147 other. Furthermore I would be able to check to what extent modern philosophers
148 who claim to be inspired by Aristotle could actually be called Aristotelian. To my
149 surprise I have yet to find a contemporary Aristotelian who has applied significant
150 adaptations, omissions or fundamental criticism without becoming inconsistent in
151 their own reasoning. For example, Aristotle argues that the ultimate end to strive
152 for is *eudaimonia* (happiness/flourishing), which flows from virtuous activity. Mac-
153 Intyre treats human 'dignity' as an additional ultimate end, creating possibility for
154 competition between *eudaimonia* and dignity (MacIntyre et al., 2021).³

155 In my reading of *Nicomachean Ethics* dignity can be seen as included in *eu-*
156 *daimonia*, as a virtue or a product of virtuous actions (aimed at *eudaimonia*) or a
157 quality of *eudaimonia*. To present it as essentially an additional ultimate end is a
158 wholly unnecessary and erroneous complication. Setting *eudaimonia* and dignity at
159 equal footing is like serving two masters. This is but one example, but it illustrates
160 how modern scholars adapt Aristotle's work to the point of becoming internally in-
161 consistent. One more reason going for Aristotle is that culture in The Netherlands
162 is to an extent (historically) influenced by / a product of Christian values and is
163 host to a multitude of cultures, worldviews, religions and so forth. This should be
164 taken into account when a proposal for a different mode of funding is created. Aris-
165 totle's work has historically garnered much interest and support from a wide range
166 of scholars (Abrahamic scholars such as ibn-Rushd, ibn-Sina, Maimonides, to Chris-
167 tian scholars such as Thomas Aquinas and many more). A better understanding
168 of Aristotle's work may provides a foundation for deliberation and understanding
169 amongst different groups. Contemporary philosophers have not had such ubiquitous
170 interest and focusing on one of them would probably be less compatible with the
171 multi-cultural Dutch society. Considering the many thinkers of the past and current
172 with their variety in world views found something in the foundation of Aristotle's

³MacIntyre doesn't explicitly make this point, rather it is a logical conclusion.

ethics. Whilst they may deviate from Aristotle in their own way, all those different
174 views at a certain level have a common interest in Aristotle's perspective. It is this
that makes going back to the ultimate source to make much more sense. This might
176 be an avenue where there probably will be common understanding or at the least a
common language for deliberation. However, my agreement with Aristotle's philos-
178 ophy including his 'first principles' should not be seen as the 'be all, end all' option,
for the choice remains bounded by personal factors. Meaning that a similar thesis
180 could be written using any of the myriad of moral philosophies as a foundation.⁴

Having said all of this, I will now introduce the chapters that are ahead and give an
182 explanation on how this thesis is structured. The thesis starts with an investigation
of Aristotle's *Nicomachean Ethics* and especially his view on the human being and
184 freedom. This is Chapter 1 and it is the first chapter because, as mentioned above,
freedom is a concept that is little understood; therefore, a thesis that proposes
186 an alternative to the current health care system based on freedom will first have to
explain what freedom is, and how it differs from the concept of freedom on which the
188 Neoclassical 'healthcare market' and the system of Managed Care are based. This
also why the chapter starts at the very first principles and is very methodical in its
190 explanation. Aristotle's *Nicomachean Ethics* gives an entirely different perspective
of man and freedom. Man, in his perspective, is not a (complex) maximising agent,
192 slave to their senses for pleasure and pain. In Aristotle's perspective, man holds those
aspects in common with animals, but they are a part of man. According to Aristotle,
194 man's discerning quality is having the capability for reasoning in accordance with
reason. With that man has the ability to choose what they consider to be right
196 and they will find *eudaimonia* when they are given the freedom to deliberate and to
choose between right and wrong. In terms of Aristotle that is to choose the mean
198 between deficiency and excess, that which is appropriate given context. Man is thus
more than what the philosophy behind Managed Care holds for humanity.

200 The next two chapters describe the intellectual history of the system of Managed
Care and the history of Managed Care in The Netherlands, with a focus on how
202 this system is (currently) funded and managed. The chapters are mainly descriptive
and empirical with the aim to review effects of Managed Care on the costs and
204 accessibility of health care and on freedom of choice in health care. As mentioned
above, the aim is not to conclusively prove that the problems the system is confronted
206 with are or are not due to the nature of the system itself. A conclusive empirical
analysis would involve much broader and deeper statistical analysis, this is not
208 the aim of this thesis. However, the results still do show that empirically, costs
have not decreased, and accessibility and freedom of choice have decreased since the
210 introduction of the system. Analysis on how these outcomes have come to be suggest
that the root cause can be led back to principles of Managed Care, the utilitarian
212 perspective of man, and a lack of freedom of deliberation.

Since the introduction of the 'health care market' it has rapidly turned oligopolis-
214 tic (especially the health insurance market). In such a market profit-maximisation

⁴Anyone wishing to do such research is wholeheartedly encouraged to do so and I would consider their efforts as equally valuable.

is likely to lead to super-normal profits and actors will attempt to increase market
216 share. In such an environment rather than declining, costs will be increasing and
this is indeed what has been happening. What has followed are attempts to cur-
218 tail 'consumption by the utility-maximising consumer' with their infinite wants, and
further measures by both governments and insurance companies to suppress health
220 care expenditure/cost. These measures take on the form of dis-incentives, protocol-
isation, standardisation and imposing budget ceilings for health care practitioners.
222 All are features of Managed Care that are meant to dampen a person's so called
utility curve for health care (through dis-incentives of various kinds, including in-
224 creasing expenses), create barriers to freely practice health care (by applying proto-
cols), homogenise health care so it becomes commensurate (through standardisation)
226 and therefore manageable, surveil health care providers to minimise deviation, cap
expenditure through administrative means and increasingly centralise health care.
228 However, these measures are reducing the accessibility of health care and freedom
of choice therein.

230 Critics of the system argue that the problems are associated with the system itself.
On the other hand, proponents of the system may say that they are due to the fact
232 that the system has not been implemented according to how it was originally meant.
Whatever the truth may be, it seems safe to conclude that the empirical results do
234 not falsify the *theoretical* hypothesis mentioned at the start of this introduction,
namely that the problems associated with the current system may be inherent in
236 the system itself. Therefore, Chapters 2 and 3 give good reason to explore other
possibilities. This leads to Chapter 4, where I propose a mode of funding health
238 care that is based on an Aristotelian perspective on man and freedom, and whose
goal is to fund health care in a way that creates space for freedom (of deliberation
240 and choice) for care-givers as well as the recipients of care. It is characterised by
creating clarity on who is responsible for what (and why) and a system that guards
242 this. Essentially the system centralises the funding whilst decentralising health care
decisions where clients and health care practitioners together deliberate on what
244 is appropriate (and acceptable) care, all while respecting the interdependent social
context. The final chapter consists of a final reflection on the thesis as a whole with
246 a discussion, conclusion and some recommendations on further research.

In final, I would also like to direct your attention to a small extension to this
248 thesis which can be found in Appendix B. An often raised issue in health care
expenditure is 'scarcity of resources'. The report in Appendix B pulls this scarcity, or
250 at least its magnitude, into question by shedding light on a real and present financial
development, the rise of Institutional Cash Pools that increasingly have come to
252 attention of various economists as hoards of wealth that stem from questionable
methods/sources and cause serious social and financial problems.

254 Before continuing I would like to leave the reader (you) with a quotation attributed
to Aristotle (but not proven) that should be kept at the back of the mind:

256 *It is the mark of an educated mind to be able to entertain a thought
without accepting it.*

258 -Aristotle

Chapter 1

260 From Aristotle's Philosophy to health care

262 The purpose of this thesis is to propose a new mode of funding for health care. The
working assumption is that Neoclassical economics and the related funding modality
264 of health care¹, which are connected to Utilitarian (normative) philosophy, result
in less than desirable systems and outcomes.² Increased legislative control, substi-
266 tution, administrative control, privatisation, commodification, and so forth have all
been implemented in a bid to control the rising cost of health care. Deep going and
268 drastic measures that promised wide access with freedom to health care of quality
at an affordable cost. The result seems to be a deepening of bureaucracy, unrea-
270 sonable administrative load, rising costs with unsatisfactory tools for cost control.
This controlling nature results in controlling the decision made within the practice
272 of health care, curtailing the freedom of deliberation and therefore should be ques-
tioned if that is an appropriate avenue for cost control. The criticism is not directed
274 at the specifics of Neoclassical economics (NCE). Although in reading this thesis it
may seem as such, it is rather directed at the philosophy that forms its foundation.
276 The thesis is that (the application of) Utilitarian philosophy (in economics) is at the
heart of the undesired outcomes. Thus, if a solution is desired, a change is required,
278 and if change is required, then that change is of philosophic nature. Aristotle's (eth-
ical) philosophy has arguably been the most influential and is considered to be one
280 of the greatest philosophers in human history for millennia, even by those who have
criticised him. Perhaps returning to his long-lived, influential and well respected
282 philosophy is the only hope for forming principles of (organising) health care.

The problem of Utilitarianism is in the simplicity of the social utility function (the
284 felicific calculus)³ and marginal utility theory⁴. Effectively it means that the action
that nets positive utility is deemed morally right. The problem comes in determining
286 the utility. In the market, the metric for utility is the price. However, when the
responsibility for health care is entrusted to the government, the difficulty is to
288 determine the optimal level of public expenditure on health care (Tiebout, 1956).

¹The Neoclassical financing modality of health care is described in Chapter 2

²This working assumption is further investigated in Chapter 3 in relation to the Dutch health care system.

³The greatest possible happiness for the greatest number of people. According to Neoclassical economics, this is achieved through utility maximisation.

⁴Each additional unit of something returns an ever decreasing per-unit utility.

In Neoclassical economics, when government takes on this charge it also means that
290 there is no market anymore, thus there is no more price setting and ultimately no
information on consumer preferences. Without information on consumer preferences
292 government will be unable to determine the supply of health care it should supply.
The solution that has been proposed by Neoclassical economists is to organise health
294 care like a market. However, a market for public goods is often organised (by
government) in such a way that consumers and producers do not meet directly. The
296 government is given the responsibility to organise the supply of goods (Tiebout,
1956). So the problem to determine the quantity and quality of health care remains.
298 There is no way to govern and have policy according to utility principles without an
absolute accounting of happiness for each and every citizen until the end of their life.
300 NCE requires agents to be aware of their (life time) utility schedule. However, even
if this were to be assumed possible, governments would require god-like omniscience
302 to solve its problem under the Neoclassical paradigm. Worse yet, government and its
policies outlive its citizens. Now, the government is also required to know the future
304 utility schedules of its non-existing future citizens. Arguments can be made that
policies can be changed (at relative short time frames) as its citizens change and that
306 homo-economicus is satisfying its preferences, preferences which government should
be able to measure. At best government will only have limited ex-post information
308 on preferences within a given environment instead of the true preferences. The
political process can remedy the problem to a certain degree but voting is, again
310 a, poor reflection of true preferences for a myriad of reasons.⁵ To quote Tiebout
(1956) (p.417): *There is no mechanism to force the consumer-voter to state his true*
312 *preferences; in fact, the "rational" consumer will understate his preferences and hope*
to enjoy the goods while avoiding the tax. What is a government then to do other
314 than finding a way to attain omniscience?

What is required is a standpoint from which the *kind* of medical care that is
316 needed by the patient can be determined. But who can even determine what is
needed and acceptable for the (particular/individual) patient? That is only those
318 who are directly involved with the care for the patient and the patient themselves,
for they are the only ones involved with the practice of health care. With that,
320 the starting point for this thesis is that the doctor and the patient decide on the
medical care that is needed and the working assumption is that Aristotle's philoso-
322 phy (of eudaimonia) offers a foundation for a health care system that respects this
sovereignty of doctor and patient. This assumption is not without reason, because
324 in *Nicomachean Ethics* Aristotle goes into questions such as the end (*telos*) of hu-
man life and how man should best live. The work involves many, if not all, facets of
326 life. He lays down guidelines for arriving at *eudaimonia* (happiness and flourishing)
by developing virtue, including justice. Aristotle's *Politics* is a logical continuation
328 of *Nicomachean Ethics* and has rule (governance) as the central theme. The two
"books" together are used to form a perspective on the motivations of man and the
330 basis of flourishing.⁶ It is the philosophical basis chosen for the rest of this chapter

⁵It is well known that voting behaviour can be affected at a degree that would even miss-align with the values of the voters themselves. A well known example is that in or shortly after a crisis event incumbent parties are more likely to be reelected in to office. Furthermore in NCE agents can be expected to display legal but aberrant behaviour for their own benefit. A well known concept is freeloading. They all skew what can be gleaned from measurements on preferences, actions and politics.

⁶In particular Books I-III and V of *Nicomachean Ethics* (*N.E.*) and Book I ch. VIII-XI of

and the thesis in general. Note that *Politics* is used very sparsely because it seems to
332 me as not only a continuation, but also a further explanation/development of *N.E.*
in context of rule. Meaning that if *N.E.* is well understood, then *Politics* would
334 become redundant. The final product of this chapter is an Aristotelian standpoint
or basis for giving recommendations for the organisation of health care, which will
336 be further used in context of The Netherlands. Several challenges arise for forming
such a standpoint. Although Aristotle is known to use physicians as examples⁷, it
338 is usually to make a philosophical point primarily. He, understandably, does not
define a complete standpoint for health care explicitly. Rather, it is his philosophy
340 what matters. A conclusion being that the level to make decisions regarding health
care is the individual, and freedom being the requirement for the ability to judge
342 and make decisions. Giving recommendations from the point of view of Aristotle's
philosophy will require an in-depth review of his philosophy, especially of how man
344 should best live. This in-depth review is required because the Aristotelian paradigm
is entirely alien to the paradigms of popular (economic) teachings.

346 No works of other philosophers are used for this chapter and subsequent pro-
posal for health care system reforms. This is, aside from what is mentioned in the
348 Introduction, because I find Aristotle's perspective on man to be simple, straight-
forward and essential (for the proposed reforms). There are other contemporary
350 Aristotelian philosophers such as Nussbaum and MacIntyre who's works could have
been consulted. For that to be possible their perspectives must be in-line with the
352 end of this thesis and Aristotle. However, their perspectives do differ from Aristotle
and limit their applicability. Nussbaum finds Aristotle's concept of eudaimonia to
354 be narrow and limited, neglecting aspects such as emotions and interdependence
(Nussbaum, 2001). In *Nicomachean Ethics* nor in *Politics* do I find such neglect,
356 rather, I find an affirmation of them. For example, in *Nicomachean Ethics* Aristotle
does state emotions to be an animalistic aspect, but in no way, shape or form are
358 they dismissed from the human experience or their importance in human life. As
for being narrow and limited, I find his philosophy to be very simple and in its
360 simplicity an unmatched expansiveness. MacIntyre argues that Aristotle's view on
virtues is too individualistic (MacIntyre, 2007). Such a statement goes quite against
362 Aristotle's writing in *Nicomachean Ethics* in which he clearly states that justice is
the complete virtue, because it involves not only the individual self but also 'the
364 other'. MacIntyre also presents human dignity in such a way that it becomes an end
to be striven for its own sake (MacIntyre et al., 2021), which creates a problematic
366 perspective of human beings seeking two separate ultimate goals (*eudaimonia* and
dignity), which in Aristotle's perspective would mean serving two 'masters'. Gilligan
368 and Tronto are two Feminist philosophers/ethicists on health care ethics who also
claim to be greatly inspired by Aristotle. However, both are in fact also critical of
370 him. Gilligan's disagreements are similar to those of Nussbaum (Gilligan, 1977).
Tronto's criticism falls on points such as Aristotle's patriarchal ideas on the house-
372 hold and him neglecting the importance of care, the latter also holds for Gilligan
(Gilligan, 1982; Tronto, 2020). Aristotle's *Politics* can indeed be read (in my view,
374 misconstrued) as quite patriarchal, if not misogynistic. However in a careful reading
of *Politics*, in Book I chapter 13 1260a10-15 "*all akuron*" is used in the context of a

Politics.

⁷Probably that comes natural to him as he and his father were physicians too.

376 discussion on women's 'lesser' deliberative capacity, and with "*all akuron*" Aristotle
378 suggests that this idea is invalid/non-ratified/obsolete/improper. Chapter 13 is the
380 final chapter of Book I, a final word if you will. Regarding care, it is clear from
382 Aristotle that this must be regarded as a virtue, with its associated vices of negli-
384 gence and doting. Aristotle may indeed not have focused on care in his writing as
386 much as he has with other activities. However, his philosophy does not and cannot
388 exclude it in any way, as it cannot exclude any of the numerous virtues man can
390 have. What is evident is that many brilliant minds who claim to be Aristotelian (or
392 are heavily inspired by him) have in fact come with their own interpretations and
perspectives of man. Whether it is the man serving two masters or the man that
who is ruled by emotions or the man neglecting care tasks, they all show a different
reading of Aristotle and a different perspective on the human being. I have yet to
find a post-Enlightenment philosopher who sees the human potential as great as
Aristotle does with reason, reasoning and reasonably so.⁸ My proposed health care
reforms require and critically depend on a human being with a potential as great as
Aristotle thinks they have – the potential to feel *and* act in accordance with reason
– and who derives his feelings of dignity from that.

This chapter starts with what *eudaimonia* means (how man best live). It then goes
394 into the importance of freedom herein and touches on the subject of justice. This
all is done with the objective of forming an Aristotelian standpoint for health care
396 developed from his texts exclusively, staying as close to his writing and reasoning as
possible. It is the first topic to be covered so that, you, the reader too will be able
398 to read the rest of this thesis from an Aristotelian perspective.

An important note has to be made on the source text. For *Nicomachean Ethics*
400 two separate translations are used within this thesis: Peters' (1893) translation
and Bartlett & Collins (2011) translation. These two have been chosen for the
402 following reasons: Peters' ([Aristotle \(1893\)](#)) translation seemed to convey the spirit
of the original text best⁹ and Bartlett & Collins' translation is primarily used for
404 referencing to Becker numbering as Peters' version lacks such referencing, but also
serves as a secondary check. Thus all referencing of Peters' translation are to his
406 own work and Becker numbering by cross-referencing Bartlett & Collins (2011). It is
customary to reference Aristotle in Becker numbering, a privilege I extend only to a
408 reasonable limit when it comes to Peters' translation. Cited line numbers in Becker
numbering are always rounded **down** to the closest multiple of five. Due to this
410 unique situation referencing to *Nicomachean Ethics* will deviate from convention
and will be in the following form: (*Nic. Eth.*, Peters1893: [Book nr. in roman
412 numerals]. [Chapter nr.], [verse nr.]:[Becker numbering]), for example: (*Nic. Eth.*,

⁸I say this with care, some reluctance and humility. Although my knowledge of pre- and post-
enlightenment philosophy and religions is quite broad, on the philosophy side it is not deep enough
to say such a thing with utmost confidence.

⁹After reading several popular translations and a few not-so-popular ones I have found most of
them problematic due to use of modern terms that were not a part of Greek vocabulary and/or
inconsistent style of writing and/or the translation being too strongly linked with modern sensi-
bilities. Although Peters' translation is written in a somewhat old English, it is one that seems
to communicate Aristotle's, for the lack of a better word, 'spirit' the best when compared with
others. I do yield that this selection is, indeed, ultimately subjective.

414 1.1 Eudaimonia

Aristotle argues that all human actions (including our constructs and creations) are for a purpose and each specific purpose is to serve a higher/superior/superseding purpose, ultimately for a final end pursued for itself (*Nicomachean Ethics*, Peters 1893: I). Thus, some ends are means to other ends, but an end that is pursued as an end in itself is more final than ends that are pursued as a means to something else. Aristotle, in *N.E.* Book I chapter 7 writes on how he comes to this:

Now that which is pursued as an end in itself is more final than that which is pursued as means to something else, and that which is never chosen as means than that which is chosen both as an end in itself and as means, and that is strictly final which is always chosen as an end in itself and never as means. Happiness seems more than anything else to answer to this description: for we always choose it for itself, and never for the sake of something else; while honour and pleasure and reason, and all virtue or excellence, we choose partly indeed for themselves (for, apart from any result, we should choose each of them), but partly also for the sake of happiness, supposing that they will help to make us happy. But no one chooses happiness for the sake of these things, or as a means to anything else at all. (*Nic. Eth.*, Peters1893: I. 7, 4-5:1097a30-1097b5)

Clay to the brick-maker is for the purpose of bricks, bricks to the mason are for the purpose of walls, walls to the roofer are for the purpose of carrying a roof, together they are for the purpose of *being* a house and the house is for the purpose of shelter to the brick-maker, mason and roofer. The bricks, walls, roof they are means to the end of building a house. Ends of subordinate arts for the end of a more desired master art. It does not stop there as shelter also serves a purpose. With reasoning Aristotle asserts that one is able to determine the highest purpose, the ultimate end. According to Aristotle the ultimate end of the human being is "*eudaimonia*", which translates to *happiness*. It is sometimes also translated to *flourishing*. While flourishing seems more apt, both translations are crude and in need of clarification.

Aristotle describes happiness as "*an activity of the vital faculties*¹¹ in accordance with perfect virtue" (*Nic. Eth.*, Peters1893: I. 13, 1:1098a). Thus a perfectly happy

¹⁰A benefit to this notation is the ease it provides the reader to find the referenced by simply copying the Peters citation and Google-ing it in between quotation marks

¹¹"*Vital faculties*", is commonly translated and can also be understood as *soul*. 'Vital', here, refers to uniquely human: "... *life that consists in the exercise of the faculties ... The function of man, then, is exercise of his vital faculties [or soul] on one side in obedience to reason, and on the other side with reason*" (Peters1893: I, 7, 13-14: 1098a-1098a10). In book I chapter 8 verse 2, Aristotle distinguishes three goods (which will be handled later on) of which the soul is one and unique to man. "*Vital faculties*" relates to reason, but should not be separated from *activity/exercise*, there is still more to this. Vital faculties is not a term used in the Aristotle et al. (2011) translation. Instead they use *soul* consistently. Their perspective is however similar. Aristotle et al. (2011) Book I, footnote 42, notes that it (soul) is *both an activity and characteristic (hexis)*. The keyword translated here being *hexis*. Aristotle et al. (2011) probably sources this from Aristotle's *Metaphysics*. In *N.E.* (1098a14) Aristotle uses $\psi\upsilon\chi\eta\varsigma$ (*psychis*) which is indeed

person is someone who engages the vital faculties in accordance with perfect virtue.

446 This can be simplified to: *Happiness comes from the engagement in virtuous*
activity. Aristotle's happiness (*eudaimonia*) is more than mere pleasure (*Nic. Eth.*,
448 Peters1893: I. 5:1095b10-1096a10). Note that Aristotle does not say that hav-
ing virtues or acting virtuously equals *eudaimonia*, it is rather the engagement in
450 virtuous activity that results in *eudaimonia* or in other words *eudaimonia* is the
consequence of practice (*Nic. Eth.*, Peters1893: I. 13, 1:1102a5; Peters1893: X. 9,
452 1-2:1179a30-1179a35). Engagement being the operative word here, meaning that
the person has to internalise these virtues and act according to them from intrin-
454 sic willingness and volition (*Nic. Eth.*, Peters1893: III. 1, 1-3:1109b30-1110a; III.
5:1113b-1115a 5; X. 9:1-2:1179a30-1181b20). Inversely it is possible by evaluating
456 the outcome of an activity to determine whether it was, good or bad. Note that
though an act/activity might be deemed to have ultimately done good or bad by
458 evaluating outcomes, no such weighing can be applied to judge a person's virtue, nei-
ther can it be applied to deem acts as benevolent or malicious. For such a judgement
460 more is required than mere outcomes, for, a person can act involuntarily wrongly
under compulsion or due to ignorance and receive pardon (*Nic. Eth.*, Peters1893:
462 III. 1, 1-3:1109b30-1110a). It requires evaluating congruence between action and
outcome in terms of virtue.

464 1.1.1 From Purpose towards *Eudaimonia*

Up to this point it is still unclear what *eudaimonia* entails. Aristotle's answer to
466 this actually starts with the question on what purpose a human being has. The
question should not be confused with what the *meaning* of life is. The question
468 of purpose is one of much greater simplicity. Studying observable capacities (or in
other words faculties) which are finite is indeed easier than distilling a complete
470 narrative of meaning from eternity. Aristotle's philosophy is based on reasoning and
observation. Unlike Plato, Aristotle sets out to determine truths from observations
472 and with reasoning carries the empirical knowledge into philosophy. He does this
exact thing for explaining the purpose of man. By looking at faculties possessed
474 by man, especially those which set man apart and makes man unique compared to
other living beings. Plant, animal and man all poses the faculties of life that involve
476 nutrition, growth and (with animals in particular) those of the senses (*Nic. Eth.*,
Peters 1893: I. 7, 12: 1097b30-1098a). These are the inescapable commonalities
478 man shares with other life, requiring us to satisfy the needs of the physical vehicle
we possess. These are: external *goods* such as food, shelter and wealth (*Nic. Eth.*,
480 Peters 1893: I. 8, 15: 1099a30-1099b); *goods* of the body such as good health (*Nic.*

much more than just 'soul' or *logos*, and "engagement of vital faculties" is also remains a nebulous notion. I am painfully aware of this, especially as someone who is relying on these translations. To remedy this as best as possible I rely on multiple translations. Having knowledge of several languages and experience in translating also aids. The practice of translation across proto-language families is exceedingly difficult, let alone carrying it almost three millennia into modernity. Much is lost in translation or even untranslatable. The same goes with translating Ancient Greek words like *psychis*, *hexis*, etc, to notions of engagement of vital faculties, activities of soul, etc.. From experience, my advise to the reader is to suspend the need for exactness in writing and instead to take on an open disposition with conscious perception free of (pre)conception. I suggest a similar standpoint for further reading of chapter one. In case of failure of imagination the following partial definition suffices for this thesis: the continued possession, expression, exercise of consciousness and action with agency, in accordance to reason and with reason.

Eth., Peters1893: I. 8, 2: 1098b10; I. 8, 14: 1099b25). Note that "goods" and
482 "goods" have a different meaning. "Goods" are as one might expect indeed products,
while "goods" is to be understood as that which is "good in themselves" (*Nic. Eth.*,
484 Peters1893: I. 6: 1096a10-1097a10). Ultimately goods are means to goods (*Nic.*
Eth., Peters1893: I. 6: 1096a10-1097a10).¹² Before going on, an important note to
486 take into account on good(s) is; that which fulfils its purpose well must be good in
on of itself. A shoe that does its job well is thus a good shoe and consequently the
488 cobbler must be a good cobbler too. Of course, a cobbler is not necessarily good if
the shoe was good by chance or by mistake, there is an element of volition required
490 (which will be discussed shortly). According to Aristotle man has more than the
aforementioned faculties, a discerning quality which sets man apart from animal:
492 To find the uniqueness of man Aristotle first makes a comparison with other life,
with that he finds man's unique faculty, and thus purpose (which is its *good* use).

494 There remains then the life whereby he acts the life of his rational nature,
with its two sides or divisions, one rational as obeying reason, the
496 other rational as having and exercising reason. But as this expression is
ambiguous, we must be understood to mean thereby the life that consists
498 in the exercise of the faculties; for this seems to be more properly
entitled to the name. The function of man, then, is exercise of his vital
500 faculties [or soul] on one side in obedience to reason, and on the other
side with reason. (*Nic. Eth.*, Peters1893: I. 7, 13-14: 1098a-1098a10)

502 This unique faculty is the exercise of the vital faculty, activity of the soul, being
on one side in obedience to reason, and on the other side with reason (see footnote
504 11). It is this distinction (or rather human uniqueness), which Aristotle underlines
where the purpose (or rather the good use) of a human being specifically is to
506 be found. What now remains is understanding the exercising of the soul and its
resulting goods.

508 1.1.2 Virtue, a trained faculty or habit

As mentioned previously there are common faculties we share with other life and
510 their corresponding needed goods: external goods and goods of the body. What sets
us apart is the (human) activity of soul ($\psi\upsilon\chi\eta\varsigma$: *psychís*) with its own corresponding
512 goods. According to Aristotle from the goods of the human soul, the good life is made
possible (and thus is also the most good of all three types of goods) (Peters1893: I.
514 7: 1097a15-1098b5). So, much depends on the goods of the soul. When they are
good then the person who exercises them must be good too. What these goods are
516 Aristotle reasons by investigating the qualities of the soul:

518 A quality of the soul is either (1) a passion or emotion, or (2) a power
or faculty, or (3) a habit or trained faculty; and so virtue must be one of
these three. By (1) a passion or emotion we mean appetite, anger, fear,
520 confidence, envy, joy, love, hate, longing, emulation, pity, or generally
that which is accompanied by pleasure or pain; (2) a power or faculty is
522 that in respect of which we are said to be capable of being affected in any

¹²From this point on, context should be sufficient to determine which meanings of good(s) are to be understood (not requiring italicising anymore).

of these ways, as, for instance, that in respect of which we are able to be
524 angered or pained or to pity; and (3) a habit or trained faculty is that
in respect of which we are well or ill regulated or disposed in the matter
526 of our affections; as, for instance, in the matter of being angered, we are
ill regulated if we are too violent or too slack, but if we are moderate
528 in our anger we are well regulated. And so with the rest. (*Nic. Eth.*,
Peters1893: II. 5, 2: 1105b20-1105b25).

530 Passion and emotion while being the drivers of actions and motivation are not
judged good or bad in or of themselves (*Nic. Eth.*, Peters1893: II. 5, 3-4: 1105b25-
532 1106a5). The example of anger in the quote is an apt one. Anger (and its expression)
becomes bad when it is not regulated to a level which is appropriate to circumstance.
534 When it comes to power or faculty, these pertain to given capabilities¹³, in these
no one is judged good or bad for the capabilities they possess or for the lack of
536 (*Nic. Eth.*, Peters1893: II. 5, 5: 1106a5-1106a10). In both qualities (good or bad)
there is an important aspect lacking here, namely volition. One can not be judged
538 good or bad for things where there was no deliberate choice.¹⁴ Virtues on the other
hand are deliberate choices (*Nic. Eth.*, Peters1893: II. 5, 4: 1106a). Deliberate
540 choice goes hand in hand with reason. A choice made can be good as well as bad,
as consequence of good or bad reasoning. Aristotle concludes virtues to be habits
542 or trained faculties (*Nic. Eth.*, Peters1893: II. 5, 6: 1106a¹⁵). Thus finally an
unbroken line of reasoning can be drawn; from man's distinct capacities (capacity
544 for reasoning) to man's distinct actions (volition) and on to engagement of the vital
faculties (activity of soul), followed by virtues (as habits or trained faculties). What
546 still is not explained up until now is the meaning of *eudaimonia*.

1.1.3 Meaning of Eudaimonia

548 What Aristotle is trying to convey is that *eudaimonia* comes from the good habits
and trained-faculties. Happiness as understood from *eudaimonia* is not of a tempo-
550 rary and fleeting hedonistic happiness. Rather, it is a happiness which is, putting
it in modern terms, *sustainable* and *sustaining* up until the very end. As for habits
552 and trained faculties, there is good reason why Aristotle uses this term. Habits
and trained faculties are repeated voluntary actions¹⁶ of which the good ones lead
554 to happiness. All these distinct ways of defining happiness can be condensed into:
Happiness comes from the engagement in virtuous activity. Note that Aristotle does

¹³Capability in context: a given power or faculty one possesses and can bring them expression to the extent of available resources (capacity). Capability precedes capacity. I.e. A person might have the capability to be angry but may not have the capacity due to being too exhausted.

¹⁴An act is involuntary when done (a) under compulsion, or (b) through ignorance: (a) means not originated by doer, (b) means through ignorance of the circumstances: voluntary then means originated with knowledge of circumstances (*Nic. Eth.* Peters1893: III. 1: 1109b0-1111b)

¹⁵Bartlett's translation uses "characteristic" whereas Peters translates it as "habits or trained faculties". Neither translation is wrong when analysing the original ancient Greek text. The word of importance is *hexis*. The difference (to my understanding) is that to grasp what is meant with Bartlett's translation requires knowledge of text and context whilst Peters' translation doesn't and is more straight forward.

¹⁶Repeated or occasional but consistent involuntary actions are not habits or trained faculties. They are conditioning or instincts resp., neither fall within purview of judgement in terms of virtue or vice

556 not dismiss the importance of external goods or goods of the body nor the impor-
tance of the two other qualities of soul (Peters1893: I. 8, 14-17: 1099a25-1099b5).¹⁷
558 A lack in any of them diminishes the capability for happiness (Peters1893: I.
8, 16: 1099b-1099b5). So when capacities are curtailed so is the capacity for hap-
560 piness.¹⁸ Ultimately *eudaimonia* comes from the habitual exercising of that which
makes us distinctly human and done so virtuously. This way, the human being
562 reaches his ultimate purpose/end/goal (telos), which is good. When exercised with
malice or when not exercised at all makes one bad or base respectively. Therefore
564 it is of utmost importance that people develop and exercise their faculties so to act
in volition.

566 1.1.4 The Rule of Means

The previous subsections of this chapter have been concerning on what *eudai-*
568 *monia* is and the reasoning that lays in its foundation: *Engagement in virtuous*
activity. But what is virtuous? When is a decision good and when is it bad? These
570 questions are asked and answered since the dawn of man to date, and will undoubt-
edly, if not necessarily, be asked and answered in the future. To define what is
572 to be deemed virtuous Aristotle proposes in *Nicomachean Ethics* that each virtue
has associated vices that are a reflection of a deficit or excess of that virtue (Pe-
574 ters1893: II. 6: 1106a10-1107a25). Consider, for example, courage. When one has
a deficit or an excess in courage, that person would be cowardly or rash respec-
576 tively. It is between cowardice and rashness where courage can be found. Aristotle
presents this as the rule of means.¹⁹ The term is somewhat easy to misinterpret
578 as some mathematical measure. Virtue can't be found at the rigid deterministic
average point between two vices. Aristotle underlines contextual appropriateness
580 (Peters1893: II. 6, 6-8: 1106a25-1106b5). An action is virtuous when its measure is
appropriate in relation to circumstance, but this measure is difficult to exactly de-
582 fine and can only be decided once a situation requiring it presents itself (Peters1893:
II. 6, 9-11: 1106b5-1106b25 ; IV. 5, 13: 1126a30-1126b5). Circumstance not only
584 encompasses immediate context and outcomes but covers a wider context such as
culture and beliefs (in what is good/right, irrespective of time). Virtues are also a
586 social matter, not only that of a solitary individual, because *eudaimonia* can not be
reached without complete association (with others) which can be found in the (ide-
588 ally self-sufficient) community/society (Peters1893: IX. 9, 3: 1169b5-1169b10; X.
7, 4: 1177a25-1177a30; Sachs (2012) *Politics*: Book I. chapter 2: 1252a25-1253b).²⁰

¹⁷see quote in 1.1.2 for the qualities of soul.

¹⁸As such one can reason that *ceteris paribus*, a man with a disability can most definitely be as happy as one without a disability, but has different or fewer options available to be so.

¹⁹This mean is popularly associated with the term Golden Mean, coined by the Latin poet Horace: "*The power who cherishes the golden mean, Safely avoids the squalor of a hovel, And discreetly keeps away from a palace, That excites envy.*" (Horace, Odes II.10). Horace gives in this ode several examples of extremes of deficit and excess and calls for choosing the road that is in between. Its meaning and examples matches Aristotle rule of means. A similar message is pressed upon the visitors to the Temple of Apollo at Delphi which also existed during Aristotle's lifetime. The second of three Delphic Maxims inscribed at the entrance reads: *nothing to excess*. Similar notions are found throughout various religions and philosophies around the world and not an entirely alien or unique idea.

²⁰The self-sufficient community/society refers to Aristotle's ideal "polis"/city as described in *Politics*. Using "city" literally would not faithfully translate the meaning it actually carries.

590 Virtues also should be seen in context of lifetime, as happiness requires (consider-
ing) a full term of years (Peters1893: I. 7, 16: 1098a15). And all of this happens in
592 ever-changing circumstances with which man has to contend with in the exercise of
eudaimonia (Peters1893: I. 9, 10-11: 1100a-1100a5).

594 Aristotle doesn't give any prescription for specific behaviour. He merely states
that action should be appropriate in context. What is appropriate is best left to
596 be determined by individuals working in concert as a society (albeit in accordance
with reason). He doesn't assert any notion of infallibility and certainty in determin-
598 ing of what is good/bad and thus (in)appropriate (*Nic. Eth.* Peters1893: II. 9, 8:
1109b510-1109b20). Indeterminacy is an inherent prerequisite of virtue. Neither, as
600 stated earlier, does he give (visceral) pleasure as a requisite measure of virtuousness,
meaning that virtuous action could be unpleasant without detracting from *eudai-*
602 *monia*. Note that if abstinence from something that is bad for the health is felt as
not pleasurable, that is fine. However, when this makes the person feel unhappy,
604 or in other words 'further removed from eudaimonia', it is merely a sign that the
virtue of abstaining from bad habits has not yet been internalised. Aristotle's view
606 is that the *mean* is found through deliberation with intellect (nous) (Peters1893:
II. 9: 1109a20-1109b25), limited to what is finite (Peters1893: III. 3, 3: 1112a25),
608 limited to what is alterable (Peters1893: III. 3, 3: 1112a25), limited to what befalls
within man's agency (Peters1893: III. 3, 7: 1112a30), limited to where there is no
610 exact & absolute knowledge (Peters1893: III. 3, 8: 1112a30) and ultimately it is a
matter of (a non-relativistic and/or non-dialectic, but rather conscious) perception
612 (Peters1893: II. 9: 1109a20-1109b25). "*Matters of deliberation, then, are matters*
in which there are rules that generally hold good, but in which the result cannot be
614 *predicted*" (Peters1893: III. 3, 10: 1112b5). Deliberation is not for the purpose of
finding the end but rather the means to get to that end (Peters1893: III. 3, 11:
616 1112b10). Aristotle gives several examples, one of which is: "A physician does not
deliberate whether he shall heal,..." (Peters1893: I. 3, 4: 1112b10-1112b15).

618 Aristotle implicitly gives a powerful paradigm: Even knowing what eudaimonia
is, the measure of how well we can get-on-about reaching it depends on how far
620 individual and aggregate faculties, especially our vital faculties (passion or emotion,
power or faculty and habit or trained faculty), can be stretched (temporally) towards
622 (but never reaching) an unknown future yet to be, but eventually will be. Inevitably
this goes hand in hand with acceptance of exceptions, unfortunate instances where
624 virtues result in bad consequences and excludes meticulous calculations of conse-
quences with exactness, for such calculations fall within the purview of the (exact)
626 sciences. Therefore there is no room for felicific calculation as it becomes an ab-
surd object of maths. "*...it is equally absurd to accept probable reasoning from a*
628 *mathematician, and to demand scientific proof from an orator*" (Peters1893: I. 3:
1094b25).

630 1.1.5 Flourishing and Freedom

In section (1.1) I have tried to clarify in what *eudaimonia* is, that it goes fur-
632 ther than just happiness. To recapitulate what has been said: that which makes
us uniquely human are our *vital* faculties (soul) (Peters1893: I. 7, 13: 1098b); this

634 allows us to exercise our faculties (and action of various kinds) with *reason* (Pe-
ters1893: I. 7, 14: 1098b); "*anything is done well when it is done in accordance with*
636 *the proper excellence of that thing*" (Peters1893: I. 7, 15: 1098b-1098b5), and the
same applies to man too (Peters1893: I. 7, 15: 1098b-1098b5); good lies between ex-
638 cess and defect (Peters1893: II. 2: 1103b25-1104b); this mean point can't be defined
exactly with reasoning, it is a matter of perception²¹, yet still in accordance with
640 reason (Peters1893: II. 2: 1103b25-1104b; Peters1893: II. 9: 1109a20-1109b25)²²;
"*virtues are modes of observing the mean*" (Peters1893: IV. 7, 1: n/a²³); virtues
642 thus are habits or trained faculties (Peters1893: II. 5, 6: 1106a);²⁴ done so as a
social being within an every changing environment (Peters1893: I. 7, 6; Peters1893:
644 I. 9, 10-11). What is being described clearly isn't a 'happy' disposition in life. It
is rather a mode of living life. Virtues are not static but transient within (an ever
646 changing) society. When done well this mode of living is the *Flourishing of Man*, this
is eudaimonia, the ultimate end. Anything (be it deliberate or not) that removes,
648 suspends, diminishes or impedes humanity's ability to exercise the (vital) faculties
or any other factor in the *flourishing of man* is not just limiting humanity but is
650 dehumanising in its fullest sense. ²⁵

Flourishing then is a voluntary exercise (Peters1893: III. 1, 1: 1109b30). The
652 quintessential prerequisite for volition is freedom. Anything that lacks it fall outside
the realm of virtue because they are no matters of deliberation for the mean anymore
654 (Peters1893: II. 9: 1109a20-1109b25; III. 3, 3: 1112a25; III. 3, 7: 1112a30; III. 3,
8: 1112a30). This deliberation is about means, not an end (Peters1893: III. 3, 11:
656 1112b10). Then there must be means that are deficient or excessive in some way
in respect to the only one most virtuous of means (Peters1893: II. 6, 14: 1106b25-
658 1106b35). Deliberation being about means and not about an end is one of the central
themes here. To illustrate: "*A physician does not need to deliberate on whether he*
660 *shall heal,... but, having the proposed end in view, we consider how and by what*
means this end can be attained" (Peters1893: III. 3, 11: 1112b10-112b15) Without
662 the freedom to deliberate among possible and actionable means, there is no virtue,
no good, neither any bad. Again, anyone (be it deliberate or not) that removes,
664 suspends, diminishes or impedes this ability for deliberation is not just limiting
humanity but is dehumanising in its fullest sense. There is however one point that
666 may **seem** contrary:

668 Now, the laws prescribe about all manner of things, aiming at the com-
mon interest of all, or of the best men, or of those who are supreme in
the state (position in the state being determined by reference to per-
670 sonal excellence, or to some other such standard); and so in one sense

²¹In common vernacular "a matter" as it is used here has some dismissive/marginalising/dimin-
ishing connotation. It should be understood as having the same connotation of: about and subject
and object and objective and conscious and substance. Even this doesn't cover it. It is admittedly
being stretched to its limit of definition. The same applies to perception, it is not just sensing. It
is truly conscious perception of the senses and the mind.

²²In even further addition N.E. chapter 5, 6 and 9 of book 6

²³This Peters own additional contribution/interpretation

²⁴Observing the mean requires to make sense of what lies within the spectrum of excess and
defect. It requires observation and reasoning to make sense of it.

²⁵A harsh statement, but one should not shy away from.

we apply the term just to whatever tends to produce and preserve the
672 happiness of the community, and the several elements of that happiness.
(*Nic. Eth.*, Peters1893: V. 1, 13: 1129b15).

674 Aristotle considers justice to be a complete/perfect virtue and not a part of it
(Peters1893: V. 1, 15: 1129b25) and acting according to it makes one just (Pe-
676 ters1893: V. 1, 12: 1129b5). Justice distinguishes itself by expanding the circle of
virtuousness from the individual to that of society as a whole or at least in relation
678 to another (Peters1893: V. 1, 15: 1130a) The legislator prescribes according to the
law, by doing so is acting according to the law, and thus is declared to be just (Pe-
680 ters1893: V. 1, 12: 1129b10). The conclusion that then 'anything lawful is just and
thus virtuous' to be right is an erroneous one. It only applies when lawful relates
682 to only good laws and less so when it relates the laws that have been laid down
haphazardly (Peters1893: V. 1, 14: 1129b25). Everything that has been explained
684 in this chapter so far equally applies for all those who are involved in the process of
laying down good laws, especially the legislator. The implication of all of this is that
686 they are burdened with the heaviest of responsibilities and if they do not deliberate
legislation with excellence the wicked can be declared to be lawful and even worse
688 it can declare the virtuous to be unlawful. Such a dereliction of responsibility puts
the virtuous in a precarious predicament, effectively obfuscates right and wrong,
690 and ultimately breaks the covenant between legislator and citizen. The myriad of
consequences that follow from that need no further explanation.

692 1.2 Implications for health care

Much has been written on how health care should be funded, organised and prac-
694 tised, the topic of this thesis. What happens is that observations are made on health
care which result in models, generalisations and predictions. These in turn, with
696 great enthusiasm and best of intentions, are translated to rules, regulations, control
mechanisms, standards, protocols and various other means to the end of directing
698 every facet of health care. Unbridled expression of such enthusiasm would result in
nothing more than haphazard prescriptions that confuse a means (directing) with an
700 end (health care). Carrying that enthusiasm to this thesis would be quite contrary
to what has been asserted so far. What seems proper (for this thesis) instead is a
702 commitment to the expansion of capacities, the means to the ultimate end. Before
anything else, first what has to be understood is what health care activities mean
704 in context of Aristotle's ethics. Health care involves many disciplines though they
can be split into two distinct categories of activities. They are the application of
706 health care as a (curative/preventative/therapeutic) practice and health care as a
knowledge domain (that is explored). While the latter is a science, the former is an
708 art. The practice of health care involves the application of scientific knowledge to
real-world situations that require practical judgement and skill. Practitioners apply
710 their expertise, experience, and intuition to make decisions about care that are tai-
lored to the unique needs of each patient. While science is about generalisation and
712 art is about particulars. The practice of health care, as such, is an art, falls within
the purview of virtue, requiring deliberation and the freedom to do so.

714 Now we have to identify who is involved in the practice of health care by analysing
the end of health care, namely: health. To that end there are only two parties. There

716 are those who aid and those who are aided. With that, there is the doctor, the
patient, the nurse, the infirm, the therapist, the client, etc. in any number, so that
718 one or multiple doctors could be treating one or multiple patients in series or parallel.
I will group the two parties as "practitioner" and "client" respectively for future
720 reference. I use practitioner because a doctor, a nurse or whomever is active with
someone who needs their care are practising their art.²⁶ Health care is not a totally
722 insulated and discrete practice. Especially in modernity, there are other parties
involved *with* health, and thus not as a practice. These are government, insurers,
724 boards, unions, to name a few. The distinction is that these, unlike the practitioner
or client, are the regulators, funders and organisers of health care. Although different
726 in nature (legislative, financial and organising), they generally provide practitioners
and clients the means for the end of health. So instead of being practitioners or
728 clients, they are facilitators. In as such that the practitioner and client *practice health*
care, whilst the facilitators *practice facilitation* (of health care). Facilitators are often
730 seen as providers of health care. From an Aristotelian perspective facilitators are
providers of means, and not health care. The relationship is analogous to as what a
732 doctor (practitioner) is to a patient (client); what the landlord and drug producer
(facilitators) are to the doctor (practitioner); what the insurer (facilitator) is to the
734 patient (client). If the doctor is to treat a patient well, it would be absurd for the
landlord or the drug producer or the insurer to have control over how the doctor
736 is to diagnose and treat his patient. It is fair for the landlord to ask the doctor
not to knock down a load bearing wall, it is fair for the drug producer to inform the
738 doctor on the qualities/properties of the medication, it would be fair for the insurer
to expect an honest bill. None of them can tell how to treat the patient, for they are
740 not doctors, and they do not know the patient, and do not know the ailments. Even
if they were to be able and know, what right do they have to treat a person that has
742 not asked for it? What follows when we look at health care from the perspective
of Aristotle's philosophy is that both practitioner and client require the freedom of
744 deliberation and that the facilitators do not infringe upon this freedom. What this
means in more practical terms is handled in the chapter 4.

746 In closing, the application of Aristotle's philosophy to the management of health
care systems requires that any economic or political system to adapt to what health
748 and eudaimonia demand, namely: freedom to deliberate. The simple reason be-
ing that practising health care in Aristotelian perspective falls outside the political
750 and economic spheres. They are facilitators, which is just as important, but just
as different. Health care is part of the sphere of thinking or reason, and accord-
752 ing to Aristotle, this sphere requires that freedom. If freedom of deliberation is
infringed upon, in whatever art, it negatively impacts the practice of that art and
754 thus eudaimonia.

²⁶The term is to underline action, the repeated and habitual choosing of what is right in the art of healing is a practice. It should come to no surprise that a doctor doesn't have an "office", but rather a practice. Do not confuse the use of "client" as some market term from economics. One can be a sick, patient, a client, a health care seeker. The sick can be cured, the patient can be treated, the client can be helped, a seeker can be provided. In modern times, in mental health care it is preferred to call those who are being treated as a client. There are good reasons for this that need not explaining here. From the various possibilities I find client most appropriate here. In further reading I might refer to the practitioner as doctor and to the client as patient. I do not promise consistency in use of these terms, I promise only consistency of what I think to be appropriate.

Chapter 2

756 Managed Care

758 There exists a variety of different theories on how a health care system should
be organised and managed. They embody a certain philosophy with which they
try to achieve certain health care goals. The Dutch care system has developed
760 itself from the 80's to a system that resembles Managed Care most. There is much
public discontent on how this has been unfolding throughout the years and academic
762 critique on the current system has not been sparse either. The goal of this thesis is to
propose an alternative funding system. In this process it is important to understand
764 the (theory) of Managed Care. Understanding the Managed Care at its foundation
and especially its history of inception should shed light on what the perspective of
766 Managed Care is and the reasoning behind it. The challenge in this is that Managed
Care is not a clearly defined method, but rather a spectrum of activities carried out
768 in a spectrum of organisations, constantly evolving and changing clinical practice for
it to work (Fairfield et al., 1997). This chapter is meant to give insight in the origins
770 of Managed Care from a historic perspective and a description of its contemporary
form as practised in the U.S., it's birth place and most extensively applied country.
772 Before going into Managed Care some knowledge on health care systems and their
classification would be helpful to understand its extend.

774 2.1 Health care systems

Managed Care when applied forms a health care system. The perspectives on
776 how health care should be organised and funded differ, as do their application. Un-
derstanding what the distinctions among different classes/classifications of health
778 care systems are will aid in reviewing Managed Care, especially in context of pol-
icy. There are many criteria health care systems and underlying mechanisms can
780 be classified under to form a typology. To construct a typology that fits this thesis
best requires some review of existing literature. This thesis concerns the system of
782 funding health care and who is/are involved in the practice of health care (to which
classifying systems of organising can give important insights). Starting with the
784 systems of funding, the most well known and used is the standard tripartite clas-
sification of: 1) voluntary insurance; 2) social health insurance (SHI); 3) national
786 health service (NHS) (Böhm et al., 2013; Freeman & Frisina, 2010). Its typology
is based along sociological dimensions of regulation, financing and service provision
788 (Böhm et al., 2013). Using the tripartite classification has limitations causing differ-
ing systems to fall under the same classification and systems that are similar to fall

790 under different classification. Furthermore, they are of limited use to the purpose of
this thesis which has Aristotle's philosophy as the central theme and requires its own
792 typology as an addition to the classifications based on funding and organisation.

Toth (2016) proposes to adapt and extend the existing types in a manner that is
794 very useful for this thesis. For example, the current Dutch health care system is one
in which citizens are obligated to take on private insurance. This system can not
796 be classified faithfully by the tripartite system. While the insurance is private, it is
not voluntary, but neither is it an SHI because there is no collectivisation of social
798 groups or an NHS system in which there is a single payer system. In addition he
proposes a second typology based on what he calls integrated and separated systems
800 which will be reviewed after presenting the five system classifications:

Voluntary/Private insurance systems are characterised by no compulsion for
802 purchasing health insurance. People are free to choose from a myriad of organisations
provided by for-profit insurance companies or non-profit institutions or funds Toth
804 (2016). In such a system there are no regulations on the organisation and financing
of health care. Though, government is still free to apply financial incentives and
806 penalties to those who take or don't take insurance Toth (2016). Toth's Voluntary
insurance class seems to be comparable to Böhm et al. (2013) Private Health System,
808 a system that solely prevails in the U.S. among OECD countries. Market forces are
the dominating regulating mechanism for this system and operates on the principle
810 of equivalence¹ (service relates to the ability to pay) (ROTHGANG et al., 2005).
The principle of equivalence should understood as economic equivalence applied
812 to general norms and values. In such a society every person is financially equally
burdened irrespective of their financial carrying capacity. In case of an insurance
814 that means that income plays no role on the size of the net payed premium. Both
poor and rich pay the same amount for an insurance premium, without any financial
816 aid for the poor. Effectively this means that people with low income will opt for a
cheaper insurance with less coverage or stay uninsured, and visa versa.

818 **Social health insurance (SHI)** relates to the concept of social groups standing
together to organise their collective health care provisioning. Such a system is based
820 on the principles of solidarity (ROTHGANG et al., 2005). '*An essential feature of
SHI is that it is a typical occupational system*', in which the state requires certain
822 categories of workers to pay into a quasi-public, non-profit health insurance funds
(Toth (2016), p. 6). Government strictly regulates these funds, however health care
824 providers remain largely private entities (ROTHGANG et al., 2005; Toth, 2016).

Universal system is defined by being a single-payer insurance scheme covering
826 all residents and financed through taxation (Toth (2016), p. 9). In the universal
system health care is seen as a right of all citizens, to be payed through taxation
828 of not only income but tax in general (Toth, 2016). Toth (2016) notes that such
financing schemes turn out to be typically a progressive financing system. As ab-
830 solute (income/capital gains) tax rates grow in proportion with income, taxes from
higher incomes provide more funding on an absolute measure and (ideally) equally

1

832 burdened financially on a relative measure. Interpreting ROTHGANG et al. (2005)
analysis such a system could be classified as operating under the principles of equity.
834 However, this is only true if and only if government's tax income indeed grows due
to this progressive taxing and is proportionately spent on health care. Tax regu-
836 lation and enforcement are strong factors in how progressive such a system is on
the bottom line. As for the health care providers, they can be integrated into the
838 universal system or stay separate (more on this later), and therefore not synonymous
to an NHS (which is an *integrated* universal system). Depending on other factor
840 (integration) in such a system the dominant force will be regulation or regulation
and market forces.

842 **Compulsory national health insurance** is a system in which the government
requires all residents to be insured through a private insurer, be it for-profit busi-
844 nesses or non-profit organisations(Toth, 2016). The difference between this and the
Universal system is the mode of funding and the compulsion to take an insurance
846 (while health care is a right in the Universal system). Residents are free to choose
with whom they are insured in a competitive insurance market. *'The state may*
848 *provide subsidies for low-income citizens (...), and may impose a regulation, even*
a very strict one, of the insurance market'(Toth (2016), p. 7, text in parenthesis
850 omitted). This is a so called multi-payer system in which government regulation
controls what these insurers are allowed to offer and whether there is a minimum
852 coverage. Market forces are considered to be the dominant mechanism but often
government will regulate as compulsion comes with responsibility. The principles
854 behind such a system seems to be a mix of equity and principles of equivalence
depending on redistributing regulation. Government enforces equity to the extent
856 of its regulations, whatever is left falls under the dominion of market forces. As
such, the dominance of market forces are dependent on the extent of government
858 regulations/control.

Residual programs exist in countries where social or voluntary systems prevail
860 (Toth, 2016). Such programs are financed through general taxes and are reserved
for specific groups of the population. Generally these groups are those who are most
862 vulnerable for financial and health risks such as the elderly who might not be able
to pay for expensive geriatric care. Same goes for prisoners and refugees who have
864 no income. Depending on how equitable the general population is, such residual
programs can encompass a larger portion of the population. Another principle that
866 could lead such programs is duty. Government can judge certain occupations as
particularly important that health care is offered as a residual program. Military,
868 publicly employed care providers and civil servants are some examples. Unique from
other systems residual programs are reserved for particular groups financed by the
870 community and can coexist with other funding systems (Toth, 2016).

Aside from the five financing models Toth (2016) adds another dimension for pro-
872 visioning. Considering only the financing model for classifying health care systems
would not cover the entire interaction between user, insurer and provider (Toth,
874 2016). This additional classification gives insight on how health care is organised
by making a distinction between integrated systems and separated systems. It is
876 the way of organising that is the criterion. The integrated system relates to vertical

integrated businesses. In such a case the insurer provides (most) health care through
878 their own facilities and personnel, whereas in the separated system the provider is
functionally separate (Toth, 2016). Unfortunately Toth (2016) is not explicitly clear
880 how these applies to contracted providers. There are constructions imaginable that
would make this distinction quite unusable. Through strict contracting and nego-
882 tiations certain independent private health care providers can effectively be seen
as a quasi-integrated system. Some hospitals do not have physicians as employees
884 but contract an individual physician as an 'independent' practitioner or a group of
physicians as a partnership. Strictly speaking, if the insurer owns a stake in the
886 hospital Toth (2016) seems not to have a clear answer on whether it is an integrated
or separated system. Furthermore the dimension does not serve the purpose of the
888 thesis. For this thesis a typology is required that gives insight on who is involved in
the practice of health care. Ergo, how much and in what ways the practice of health
890 is controlled by those who do not practice medicine on the systemic level. Systemic
being a distinction between the *possible* parties in health care systems: receiver,
892 provider, insurer and government.

[ADENDUM] After having contacted Toth a newer publication came to light
894 *(Toth, 2020) where the issues concerning integration that have been previously men-*
tioned have been addressed. A change has been made to critically analyse notional
896 *separation on if they are in reality quasi-integrated systems due to contracting, etc.*
However, the core aspects (who is organising health care) and the purpose of inte-
898 *gration is unchanged and does not warrant rewriting what has been presented here,*
though it does warrant mentioning. Toth's typology is however very valuable to con-
900 *trast to. "Who is organising health care?" (Integration) can now be compared with*
"Who is involved in the practice of health care?" (Direction). I would like to express
902 *my gratitude here to Toth for his valuable knowledge, attention and above all his*
willingness on discussing these matters.

904 As an alternative I propose a different dimension that stays somewhat close to
what Toth (2016) proposes but is actually oriented on a specific, albeit important
906 aspect of organising health care: Who are practising health care. Generalisation,
non-health care practitioner control and freedom of choice come to mind. The spec-
908 trum is characterised by two points that span a spectrum; Directed and Autonomous
systems. A totally autonomous system is one in which the only parties involved in
910 the practice of health care are the patient/client (and potentially those who are
aiding in treating, such as nurses). Simply put, in an autonomous system there is a
912 freedom of thought and subsequent actions that follows it concerning the practice of
health care. This should not be confused with anarchy. An autonomous system still
914 has to adhere to laws and respect financial reality. For example, in an autonomous
system a doctor can still not prescribe any illegal substance, nor can an insured
916 expect restitution of a prohibitively expensive and useless treatment. The practice
of health care remains bound to laws and financial realities. A Directed system is
918 the opposite. The care receiver and provider both have no freedom in the seeking
and practice of health care respectively. The factors that aid in determining where
920 the system falls within the spectrum are: rigidity and meddling. Rigidity refers to
how rigidly the practice of health care has to follow generalised rules/protocols and
922 meddling refers to how much control is exerted by parties not involved in the prac-
tice of health care (which are the health care receiver and provider). An example of

924 a generalised rule/protocol in its extreme is as following: In *general* Phantasyamine²
is the most effective medication among others for treating ADHD, therefor Phan-
926 tasyamine is the only prescribed medication to treat *all* cases of ADHD, *without*
exception. The source of this generalisation does not matter for the classification, it
928 could have been cost-effectiveness, science or any other kind of 'authority' exerting
direct control. What matters here is the rigid universal application of that which is
930 only generally applicable. An example of an extreme case of etatist meddling: Health
care policy only allows the use of Phantasyamine as a medication for ADHD treat-
932 ment, prescribing anything else would open one to criminal persecution. In a fully
autonomous system government can still outlaw substances but never in the context
934 of health care. A requirement on the proof of competency to practice medicine isn't
necessarily meddling either. However, if the system to obtain proof of competency
936 is rigidly directed by economic or political actors, again health care becomes more
directed. For example, if medical students are only educated on Phantasyamine as
938 the sole possible treatment for ADHD whilst alternatives exist. Such a situation
can arise from what may seem most benign. For example, if government policy on
940 proof of competency includes the requirement of knowing at least the most effective
medication for treating ADHD; then there is no more need of educators to include
942 alternatives. If on top of that other interests are also able to crowd out research on
alternative treatments then it becomes neigh impossible for anyone to be free from
944 ignorance. An autonomous health care system is in essence the free cultural life in
which government, insurance companies and the medical industry are not allowed
946 to meddle with health care and medical research.

The proposed typology will be utilised to determine whether Managed Care has
948 an intrinsic typology and thus is a Health Care system of its own right or whether
it is a widely applicable management practice containing some intrinsic typology
950 modifiers depending on the financial system it is integrated with.

2.2 Origins: Health Maintenance Strategy

952 Managed Care finds its inception and development in the United States in the
70's (Fox & Kongstvedt, 2012). The term HMO was coined in the 70's (Fox &
954 Kongstvedt, 2012). The exact origin is unknown but started to become vernacular
with the passing of the HMO act in 1973 U.S.. An HMO is as its name says an
956 organisation that manages the provisioning of a customer's health care needs (in
exchange of a premium). A simplistic description but should suffice for now. At
958 the foundation of executing Managed Care lay two components: Policy and the
Healthcare Management Organisation (HMO). There is a rich history to how U.S.
960 health care organisations/systems started in the beginning of the 20th century to
current day Managed Care. Some insight into their history can give insight on the
962 historic perspective and the reasoning behind Managed Care seemingly being the
best solution.

964 Before the 1900's alternative ways to pay for health care did exist in the U.S.,
albeit uncommon. These were in the form of private pools, employer provided

²To be clear this is an imaginary medication.

966 health care and charities. Health care commonly followed the fee-for-service (FFS)
model, in which the patient is charged after services rendered. The patient lucky
968 enough with some form of insurance could then get those costs reimbursed. Such an
insurance model is also known as an *indemnity* insurance. These types of insurance
970 are differ essentially from what an HMO is. One of the earliest programs that
could be classified as a proto-HMO was provided by The Western Clinic in Tacoma,
972 Washington 1910 and is often cited as the first example of the prepaid medical group
practice (PGP) model (Fox & Kongstvedt, 2012). The program was made available
974 to lumber-mill owners and employees whom at the cost of a premium could benefit
from broad range of medical services through the clinic's own providers (Fox &
976 Kongstvedt, 2012). The purpose it served was to assure the Western Clinic had a flow
of patients and revenues (Fox & Kongstvedt, 2012). As time progressed the number
978 of similar programs increased, though to the disapproval of the American Medical
Association (AMA) who preferred indemnity type insurances (Fox & Kongstvedt,
980 2012). A point of interest are the motivations for setting up such insurances/benefits.
As can be seen from the Western Clinic the motivation is finance driven. The clinic
982 would financially benefit from a steady stream of patients. This direct relation is but
one form of financial motivation. Another example is the Group Health Association.
984 Founded at the behest of the Home Owners Loan Association to protect investors
against defaults on mortgages due to medical expenses (Fox & Kongstvedt, 2012).

986 Prior to 1910 T. Roosevelt initiated the effort towards health care as a social ben-
efit, however those types of plans would never come to fruition. It seemed that for
988 a long time there was never enough political support for such programs. First of all
the AMA's position remained as vehemently against anything that would threaten
990 their bargaining power through changes in the payment scheme (Physicians for a
National Health Program, n.d.). Somewhat reasonable considering collective bar-
992 gaining was not legally sanctioned (Physicians for a National Health Program, n.d.).
Furthermore the U.S. at the time was and still is characterised by its deep disdain
994 for socialism and anything that looks like it. Many attempts for reform, from uni-
versal health care to voluntary (government provided insurance), were frustrated
996 due to financial and political interest (Fox & Kongstvedt, 2012; Physicians for a
National Health Program, n.d.). Up until 60's not much would change other than
998 further expansion of what was present. One such example is the 1942 Stabilization
act which gave government the power to control wages and prices. Some employee
1000 benefit plans were spared and thus exempt from taxation, such as health care ben-
efits, and subsequent health care expenditure rose (Fox & Kongstvedt, 2012). At
1002 this point the population who was insured had risen to nearly 70%, but the coverage
was mostly for hospitalisations only (Fox & Kongstvedt, 2012). Similar insurances
1004 still exist in the U.S. under the name Catastrophic Health Insurance (CHI).

It wasn't until the Kennedy administration that some form of socialised health
1006 care would be introduced with Medicare, which mostly covered intramural care
and was later on expanded to include extramural care as a separate module (Fox &
1008 Kongstvedt, 2012). The Johnson administration kept this trend going and expanded
Medicare for the elderly and Medicaid program for low-income employees and their
1010 dependants. By this time the out-of-pocket spending fell sharply from more than
55% in 1960 to 23% in 1980 (Fox & Kongstvedt, 2012; Statista, n.d.). The period

1012 following did not have such a dramatic fall. This expenditure fell to around 11% in
2020, with the past 10 years hovering around 13% (Statista, n.d.). However health
1014 care expenditure as a fraction of GDP rose aggressively. While in the 60's it was but
5%, and had more than tripled to roughly 17% by the time of 2010. The expenditure
1016 growth from the 60's to 2020 each decade was 40%, 30%, 35%, 10%, 30% and
15% respectively (Statista, n.d.).³ Such a rise in expenditure was expected and it is
1018 here when Managed Care enters the stage.

Managed Care as it is currently known finds its true origins in Dr. Paul M.
1020 Ellwood's 1970 discussion with the Nixon administration on how to constrain the
budget rise in Medicare (Fox & Kongstvedt, 2012). With the Health Maintenance
1022 Strategy (1971) Dr. Ellwood presented his vision of how the U.S. health care system
should be organised financially and is the foundation of Managed Care. Dr. Ellwood
1024 (1971) saw only one of two possibilities for the future of health care, a continued/in-
creased reliance on Federal intervention (and ultimately resulting in a nationalised
1026 health insurance) or the promotion of a health maintenance industry. Dr Ellwoods
envisioned health maintenance industry pertains to all aspects involved with the
1028 delivery of health care such as insurance companies, doctors, nurses, their organisa-
tion, and so forth. Such an industry would be largely self-regulating, free to make
1030 independent financial and organisational decisions, without or as little as possible
government regulation on how they achieve their goals. According to Dr. Ellwood
1032 (1971) the system at the time did not functioned in the interest of consumers. Pay-
ment was on the basis of contact with a physician. With consumers unable to judge
1034 their care needs, would result in consumers paying for whatever treatment was told
to be necessary. Which is a bad thing if the assumption is that physicians tend to
1036 over-treat their patients as a default. Ultimately Dr. Ellwood (1971) was of the
opinion at the core of the poorly performing health system to be the structures and
1038 incentives which did not encouraging self-regulation.⁴ Without change, to manage
the budget problem, government would have to regulate the quality and quantity
1040 of all aspects concerning health care (Ellwood et al., 1971). The gigantic scope of
regulation required would be unfeasible (1971). Still, he did find nationalised health
1042 insurance to be compatible with his health maintenance strategy, though he did
not see it as the solution. The two arguments he put forth against a nationalised
1044 strategy are that such a system would not resolve existing (cost and quality) prob-
lems and would produce an impersonal and immovable bureaucracy (Ellwood et al.,
1046 1971). What would work according to him was a Health Maintenance Industry,
which is ... *essentially a market-oriented approach in which medical care is deliv-*
1048 *ered by businesses.* (Ellwood et al. (1971), p. 295). In essence, the self-regulating
mechanisms of the market would substantially lessen government's role in planning
1050 and management of health programs. The government need only to set policy and if
need be regulate certain aspects of health care as an industry (Ellwood et al., 1971).
1052 Dr. Ellwood proposes a market approach to health care delivery. His argument is

³Note that the dependent factors are of such multitude that not much can be concluded with these statistics other than their face value. Presidents come and go, policies change, wars, disasters, pandemics, etc all have. To give meaning to those numbers requires quite an in-depth analysis of all involving factors, with a reasonably high effect size.

⁴Note that according to Dr. Ellwood where health care performed poorly was availability and especially high expense (Ellwood et al., 1971).

1054 that market mechanisms such as free competition and informed consumer decisions
1056 will serve the goals of health care well. What can be concluded from Dr. Ellwood's
perspective is that the problem at hand is best solved by the economy with minimal
government interference.

1058 What was required according to Dr. Ellwood (1971, p. 292) were: 1) Private
enterprise and public agencies to join the health industry. 2) Incentives for creation
1060 of HMO's. 3) Elimination of legal boundaries for the creation of HMO's 4) For Fed-
eral reimbursement programs to purchase health care maintenance contracts rather
1062 than fee-for-service 5) A sufficient return within such contracts for HMO's. 6) Fed-
1064 eral review of HMO activity on if they promote or frustrate the health maintenance
strategy, and make (policy) modifications if required. HMO's and Health Main-
1066 tenance Contracts were the crux to Dr. Ellwood's Health Maintenance Strategy.
He envisioned that people would pay an annual fee to an HMO for their medical
1068 needs by means of a Health Maintenance Contract. This contract obligates HMO's
to guarantee their enrolled consumers with the delivery of medical care (Ellwood
1070 et al., 1971). In the conventional system insurers were required to guarantee re-
imbursement of fees. In the health maintenance strategy the provider *shares the*
1072 *financial risk of ill health with the consumer* by means of a contractual agreement
on care delivery (Ellwood et al., 1971, p. 295). Such a agreement was thought to
1074 resolve misalignment of incentives between consumer and provider. The incentives
Dr. Ellwood is speaking about exclusively financial. By contracting and investing
1076 an HMO would function, as the name states, as a management organisation. With
a multitude of contracted health care services in its portfolio the HMO would be
1078 able to deliver health care per its contractual obligation with the policy holder.
HMO's could utilise innovative information systems to gather data and use statisti-
1080 cal analysis to better understand the industry, close more competitive contracts and
ultimately make better financial decisions. In a competitive market HMO's would
1082 compete with each other on contracting providers and on pricing. The HMO would
have collective bargaining power stemming from its policy holders to bargain for
1084 lower health care fees. Health care providers free to collectivise could do the same
on their end. The assumed to be informed consumers could then decide on the best
1086 deal, in essence 'vote with their dollars'. Government role in this system was to be
of limited nature, only providing *clear policy* (Ellwood et al., 1971, p. 295). What
1088 these *clear policies* mean is not entirely made clear but Dr. Ellwood does explicitly
name some examples such as consumer protection from discriminatory practices by
1090 insurers, requirements on HMO performance and conservation of a competitive mar-
ket but government should stay out of how an HMO functioned as an organisation
1092 (Ellwood et al., 1971). The limited interference of government was expected to also
give HMOs the freedom of finding and implementing innovative an novel ways to
1094 improve their functioning and deliver health care as efficiently (read: cheaply) as
possible. All these mechanisms should ensure that the consumer would benefit from
all that a free market economy could offer. To quote Dr. Ellwood:

1096 The emergence of a free-market economy could stimulate a course of
change in the health industry that would have some of the classical
1098 aspects of the industrial revolution conversion to larger units of produc-
tion, technological innovation, division of labour, substitution of capital
for labour, vigorous competition, and *profitability as the mandatory con-*
1100 *dition of survival* [emphasis added].

(Ellwood et al., 1971, p. 298)

1102 The Health Maintenance Strategy was believed to resolve inefficiencies in health
1104 care that was supposedly impossible to manage with government regulation. It
1106 would transform health care into a self-managing system by means of a free market
1108 populated by profit-maximising businesses and self-interested, utility-maximising
1110 individuals whom both respond to financial incentives. Now government would not
1112 have an impossible to regulate health care management problem instead it would
1114 have a much more manageable task of goal setting and consumer protection. There
1116 are a few points in Dr. Ellwood's Health Maintenance Strategy that need some
1118 critical attention. One of them is a principal-agent problem. Originating from
1120 economics this problem characterises a conflict of interests arising from one party
1122 being both principal and agent. Any economic transaction can be modelled as there
1124 being a principal chief to an order charging this order to a (willing) agent who
1126 executes it. In this model both principal and agent are motivated by self-interest,
1128 therefor the principal is also charged to balance it all by the agent, often this charge is
1130 in the form of a fee. Customer demands, seller supplies, goods/money are exchanged
1132 and the universe remains at balance. However in the principal-problem there is a
1134 triangle relationship (in its simplest form) in which one party acts on the behalf of
1136 another as an intermediary, but because both parties are motivated by economic
1138 self-interest a conflict of interest arises. Although the intermediary might have legal
1140 fiduciary responsibility it is able to leverage any asymmetrical advantage to charge
1142 an agency cost to the detriment of potentially all other parties. The principal-agent
1144 problem is a problem within economics and arguably only occurs when economic
1146 self-interest exists. Economic self-interest creates an irreconcilable conflict because it
excludes per definition the interests of others. How this manifests within Ellwood's
vision for health care is as following: People seek health care from a health care
practitioner for the goal of health, simultaneously they seek financial protection of
the HMO for the same goal. The patient is thus the principal, both practitioner and
HMO are the agent in this relation. So far so good. Now the HMO organises health
care by contracting practitioners, ergo by going into a principal-agent relationship
in which the HMO is the principal and practitioner the agent. At this point there
is a potential for conflict of interest, because the HMO is both principal (*vis-à-vis*
the practitioner) and agent (*vis-à-vis* the patient). Now this need not be an issue, if
HMOs would simply execute 1:1 the wishes of the (sovereign) consumer, that is, if the
priorities of HMOs as principes are identical to the priorities of their own principes.
In this case HMOs would merely be a proxy and would have function as if they have
fiduciary responsibility only to their policy holders (and not their shareholders). This
is impossible in Ellwood's proposition, firstly because they do not simply execute
in what is envisioned, secondly and perhaps worst of all profitability is seen as the
mandatory condition for survival (of the HMO). Whilst health is the mandatory
condition for survival for people, it is profit for businesses. This is the principal-
agent problem often attributed in Managed Care and as stated earlier one that is
irreconcilable.

1144 I pose an even worse perspective on the matter. In a Neoclassical free-market
1146 system, Dr. Ellwood correctly stated, profitability is the principal requirement of
survival. Now, if Managed Care places health care in the free market system forcing

1148 it to operate like a business, then profitability is made principal to health care and
of existential importance. Ergo, health becomes the agent of profitability. Merely
1150 existing in a free market system inextricably binds those involved to *gain* in one way
or another when operating within that system, even as a nonprofit. This doesn't
1152 prevent any company to be solely motivated by profit, merely that it is an existential
requirement within that system. Theoretically (as in: NCE free market) a private
1154 business is thus free to maximise its profits whilst respecting an arbitrary set of pri-
orities. At first glance, it seems that within this theory various types of health care
1156 insurance companies are possible with various priorities. However, products and
services health care as a market provides and the insurances that come with it are
1158 different than most other market products/services and come with a risk of market
failure. Entrants into the market of health care and insurances require significant
1160 financial resources due to the market's capital intensive nature. ⁵ If most com-
mon health care is prohibitively expensive, which it is in developed countries, then
1162 insurance is the only real health care product accessible for most people. Health
when classified as a market product can be seen as an indispensable resource and
1164 by proxy health insurance becomes an indispensable resource (depending on the
cost of care without insurance). This also means that whoever can (afford to) take
1166 health care insurance will do so at the level they can afford, making competitors
interdependent in providing a differentiable albeit similar product. Further more,
1168 insurers are expected to contract health care services. Negotiations favour those
with bargaining power and thus the size of an HMO (and the number of insured)
1170 is ostensibly a big factor in this. The bigger the insurer the more it will benefit
from economies of scale. Especially because it is fairly easy and cheap to produce
1172 additional insurances.⁶ In addition the bargaining power between an individual
consumer and insurer favours the insurer due to its size and probable information
1174 advantage. These are but a few factors that would typically result in an oligopoly,
not to mention externalises and government meddling that can exacerbate it even
1176 further. In a free-market system (meaning: a Neoclassical world, especially when of
an oligopolistic nature) the HMO will maximise profit with whatever means neces-
1178 sary. There are no other interests and thus no other incentives. Nor can anything
else be expected in a free-market system. Government being barred from the (in-
1180 ner)workings of an HMO makes it entirely blind and lacks the tools to adequately
address factors that would lead to market failure within health care. If a govern-
1182 ment sticks with the Neoclassical paradigm for economics, then it will have only two
choices to deal with the issues. Start regulating goals and consumer protection on a
1184 much higher resolution, resulting in ever more detailed policy, policy rigidity, and a
run-away bureaucracy.⁷ The other option is to let it run uncontested, resulting in
1186 broad "accessibility" for only those who can afford it (or are lucky/unlucky enough
to qualify for government aid).⁸ How this happens is related to economics and will
1188 be expanded on at the end of this chapter. Further criticism is reserved for the final
section of this chapter.

⁵This can be exacerbated by government posed regulations, adding a compliance cost.

⁶The reason for this is because clients switching from one insurer to another do not change the health care demand. Furthermore, growth and contraction of health care capacity in such a system is regulated through price action.

⁷The state of the current Dutch health care system has parallels with this scenario.

⁸This scenario seems to best describe the state of the U.S. health care system.

1190 In summary, Managed Care essentially starts with the rise of HMOs at the turn
of the 19th century. In the 60's a limited form of government-funded health care
1192 came into existence. It wasn't until the 70's, with the contributions of Dr. Ellwood
and subsequent development of fundamental concepts, that Managed Care was in-
1194 troduced and somewhat formalised. The HMOs in the U.S. at the beginning of the
20th century should be seen as proto-Managed Care or elements of managed care
1196 which through incremental changes and developments has become the current day
Managed Care. To say that the HMOs of the early 1900s is not Managed Care would
1198 be like saying prehistoric humans not being humans. Managed Care is a very broad
term and its European variants are different implementations of the market oriented
1200 theme. The origin story of contemporary Managed Care presented in this section
falls somewhat short. There have been many developments especially in the period
1202 of the 80s to date, but chronicling every evolutionary development is beyond what
is necessary. A review of the theory serves the purpose better. The justification be-
1204 ing that current day Managed Care is the continuation of the Health Maintenance
Strategy, albeit further developed. The period of the 80's to date brought histor-
ically significant changes to the U.S. health care. The result has been that there
1206 are many types of organisational settings for carrying out Managed Care. HMOs
are but one type, another example is Preferred Provider Organisation (PPO) which
1208 have not been mentioned yet. However they are Managed Care organisations and
the perspective presented in the Healthcare Maintenance Strategy remains at its
1210 foundation. The perspective of Managed Care is what matters for this thesis, not
the myriad of different flavours it comes in. What is important is to understand that
1212 its history stretches back quite a while and that it promises controlling costs and
provision of broad accessibility to quality health care can be achieved through the
1214 mechanisms of free-markets. There are two interesting points to note. The first one
is that the proto-HMOs and modern Managed Care organisations are not only simi-
1216 lar in how they operate but also what they are, businesses. Secondly, when widening
the historic perspective it is interesting to note is that the 70's was also the period
1218 in which Keynesian economics started to fall out of favour. The period that followed
saw the resurgence of Neo-Classical economics and its derivatives. Unsurprisingly,
1220 Neoclassical economic theory is also the theoretical foundation of Managed Care.
What current day Managed Care is and its links with economics will be presented
1222 in the following sections.

2.3 What Managed Care is

1224 What can be distilled from [Ellwood et al. \(1971\)](#) is that Managed Care was meant
as a method of returning primacy over health care provisioning to the private sphere.
1226 All core benefits (quality, access, progress, affordability, etc..) were the actual goals
and seen as an inevitable consequence of market forces that would be present in
1228 a competitive economy. With minimal government direction the health care land-
scape would be populated with care receivers, providers and insurers as free and
1230 independent actors. Free to determine how health care is practised within a legal
framework that was, for all intents and purposes, limited to consumer protection.

1232 Current day Managed Care does not differ very much from what was proposed,
except it has been more fleshed out, bar some interesting developments. Managed

1234 Care has been defined in different ways as can be seen in [Rosenman \(1996\)](#); [West](#)
1235 [\(1998\)](#); [Sekhri \(2000\)](#); [Baker & Díaz \(2001\)](#); [NAMI \(2011\)](#), with that [Namburi &](#)
1236 [Tadi \(2022\)](#) seems to give a succinct definition that best encompasses Managed Care:

1238 "Managed Care is defined as a group of activities or techniques intended
1239 to control costs, utilisation, and maintain quality of care through health
1240 insurance plans. Many authors define Managed Care as a "Healthcare
1241 delivery system that

- 1242 1. integrates fragmented four basic healthcare delivery functions, i.e.,
1243 the financiers, insurers, providers and payers to achieve efficiency,
- 1244 2. implement control (manage) mechanisms in medical services utili-
1245 sation, and
- 1246 3. introduces price competition in health service markets, i.e., deter-
1247 mining the price at which services are purchased and how much the
1248 providers get paid.

1248 Managed Care and "Managed Care Organisation" (MCO) terms are used
1249 interchangeably in an organisational context." ([Namburi & Tadi \(2022\)](#),
1250 formatting added)

1252 Managed Care organisations (MCO) have an arsenal of tools to economise on
1253 health care. These organisational policies, enshrined in insurance contracts, range
1254 from incentives of financial nature to statistical analysis and certification. Control
1255 mechanisms form the majority of the jargon in Managed Care, a random grab from
1256 any comprehensive glossary will count upward of 400 terms. As an example some
of the most important are the following:

- In-network/out-of-network
 - 1258 – MCO contracts create a network of care providers policy holders can go to
1259 if they want the costs to be reimbursed. Out-of-network care is typically
1260 not covered or partially. A financial control mechanism to ensure cost
1261 and quality is in line with the requirements of the MCO. Allegedly a
1262 mechanism to control cost and quality, it is in practise (also) a mechanism
1263 to control what kind of health care is provided (by limiting the freedom
1264 of choice).

- **Co-pay and Deductibles**
 - 1266 – Both are financial control incentives, or rather disincentives. Insurees
1267 will have to co-pay a percentage of every medical bill. A deductible is
1268 the amount of money payed out-of-pocket before the insurance starts to
1269 pay for care and is annually reset.⁹ Co-pay and deductibles are inversely
1270 related with premium price. It incentivises less use of care in exchange

⁹I.e. medical bill is 1000 with a deductible of 500 and a co-pay of 20%. The insured pays of 500 to cover the deductible and another 100 for the co pay. Since the deductible is covered the next bill the insured only pays the 20% co-pay. Depending on the contract there can be a ceiling to the co-pay too.

1272 of a lower premium. Within the theoretical context of 'Healthcare Eco-
nomics' this is seen as risk management for the insurance holder. A fine
1274 example within the U.S. is the Catastrophic Health Insurance, which is
an insurance that only protects the policy holder from financially catas-
trophic health care bills. They have very high deductibles in exchange of
1276 low premiums.

- **Utilisation review**

1278 – An MCO evaluates if certain care is appropriate, at cost and at quality
of their requirements. If a provider is contracted, then cost and quality
1280 have already been approved and the MCO is only concerned with the
appropriateness. These reviews can be done prior, concurrently or retro-
spectively to determine coverage. These reviews are typically not done
1282 by health care professionals following a MCO guidelines/policy. I.e. a
doctor orders an CT, review points out that a X-Ray should suffice and
1284 rejects the request. Or finds the CT appropriate but requires the patient
to have it done in a contracted clinic.
1286

- **Pre-admission certification**

1288 – In case of a non-emergency hospitalisation insurance can require a pa-
tient to first acquire a certification beforehand. A review is done on the
1290 appropriates and a go-ahead is given (or not). Admission without a cer-
tification relieves the insurer to pay for services rendered in full or in part
1292 depending on the terms of the insurance contract.

There are too many mechanisms to name but what should be noted is that each
1294 and every mechanism is based on financial incentives/disincentives. The grab-bag
of examples is mainly to illustrate that control mechanisms different in nature share
1296 the same root goal of 'cost-effectiveness', a simple bottom-line calculation. Even
preventative care is motivated by a simple cost-benefit analysis. It is an inevitable
1298 effect of transplanting health care into the a profit maximizing economy. The ex-
amples given mostly relate to the insurer-insured relationship, many other control
1300 mechanisms exist to measure and control all parties. What is interesting is that
most, if not all, control activities done by an MCO is done by non health care
1302 practitioners. More often than not control mechanisms like utilisation management
are envisioned and executed by people without any or limited medical background.
1304 However this is still very much in line with the Healthcare Maintenance Strategy.
Current day Managed Care is no lesser than what it was envisioned in the beginning.
1306 It has developed into a complex set of mechanisms that spring forth from health
care being a market product. As for the question if Managed Care is a health care
1308 system in its own rights, the answer is fairly simple. Yes it is. Managed Care in its
purest form a Corporatist-Directed Private Insurance System. Application of it will
1310 inevitably morph its host system towards a Corporatist-Directed Private Insurance
System by its nature.

1312 2.4 Aftermath

1314 The aftermath of Managed Care in the U.S. is not essential for this thesis. Still, a
1316 short inventory of issues might help identify similarities in the Dutch system. There
1318 are many YouTube clips, TV programs, news articles concerning the state of U.S.
1320 health care. People fleeing from hospitals in a bid not to pay the bill; traffic crash
1322 victims begging bystanders not to call an ambulance in fear of financial destitution;
1324 YouTubers financing medical treatments out of philanthropy but sometimes also for
1326 sake of content; 'Gofundme' pages for funding live saving cancer treatments. Often
1328 touted as the country with the best quality health care money can buy, with good
1330 reason, is at the same time globally well known for its appalling state of health
1332 care provisioning in general. Private health insurances as presented can develop
1334 properties beneficial to health care provisioning, but in countries where it is the
1336 dominant system it often causes considerable issues concerning equity ([Colombo & Tapay, 2004](#)).
1338 Managed Care should have given rise to a highly competitive market
1340 with many players in the game. Unfortunately, consolidation was the actual effect,
1342 forming bilateral monopolies ([Fox & Kongstvedt, 2012](#)). It was expected to control
1344 the rise of health care costs. Alas U.S. health care spending constituted 16.7% of
1346 its 2019 GDP ([Global Health Expenditure Database, n.d.](#); [Health resources - Health spending - OECD Data, n.d.](#)).
1348 Placing itself at the highest position among OECD countries, followed by Germany at 11.7% citepGlobalDatabase, HealthData, who is
1350 well known for providing access to excellent health care and emergency contingencies (as seen in the COVID pandemic).
1352 That is a whopping 5 percentage points difference (30% relative) while U.S. per-capita spending on health care is double
1354 that of Germany and U.S. GDP per capita being roughly 40% more than that of
1356 Germany. The only conclusion that can be made is that U.S. citizens make less use of a much more expensive health care. A notable difference is that the German health care system has much less application of Managed Care principles. Utilitarian perspective would conclude that those who want to utilise health care are at the core of rising health care costs. In the U.S. this perspective is applied as Managed Care, but is clearly failing, especially when the huge dis-incentives such as financial destitution are considered. It would be therefore more apt to suspect Managed Care and the philosophy that stands at its foundation. It is from that standpoint that further investigation is conducted, looking at symptoms and relating them back to the philosophical foundation. Managed Care has created a system in which appropriateness and coverage of treatments are a function of statistics and cost-benefit analysis applied and enforced by non-health care providers in a privatised health care market. Freedom of choice is often an argument put forth in defence, but this is a faux-freedom, for freedom extends only to selecting an insurer/insurance. Freedom is in essence only for those with substantial means who can afford a decent insurance and only a real freedom if that market has not already devolved into an oligopoly. A largely self-regulating industry was envisioned, but government rule has broadened consistently for health care, hinting towards the inability for self-regulation in relation to social goals. Its dis-function should not be defended by 'ifs, ands or buts', Managed Care's failures are quite clear. Given the reality it is applied in, it can not be reasonably expected to function as envisioned by virtue of its nature. Reality seems to prove it.

1358 2.5 Linking Managed Care

1360 Managed Care can not be readily connected to neoclassical economics through a
1362 clear genealogical lineage. Looking at its features its ties with Welfare economics
1364 is quite obvious and thus consequently links, at least in part, back to neoclassi-
1366 cal economics and also Utilitarianism. Its features are clearly utility focused and
1368 market action driven. What should be noted is to classify a Health Care market
1370 under conditions of Managed Care a free-market as is understood in neoclassical
1372 economics is somewhat problematic. Health care markets in neoclassical economics
1374 do not allow for insuring risks through insurance contracts. There is no blanket
1376 rejection, but is rather a consequence (of the market failures that insurances bring
1378 with them). Information-asymmetry, adverse selection, moral hazard are but a few
1380 first order examples. Measures to deal with these issues add an additional second or-
1382 der layer of problems in the neoclassical perspective such as contracting limitations.
Ultimately requiring involvement of government control that result in a controlled
market competition which forms a third order issue (in the neoclassical perspective).
Alas, reviewing Managed Care gives the clear impression that utility maximisation
and competitive markets stands central to its supposed functioning, ultimately carry-
ing Utilitarian principles to health care. That core philosophy can be expected to
find a way to express itself in economic terms when placed in the economic sphere,
no matter regulations (that may run counter to neoclassical economics). Whatever
the initial hopes of Dr. Ellwood might have been, for all intents and purposes utility
maximisation and competitive markets go hand in hand with profit maximisation
and can be expected to express. In later years Dr. Ellwood has been interviewed on
his Health Maintenance Strategy and his reflections in hind sight are perhaps most
telling on this:

1384 "The whole HMO thing was perverted by the desire for *maximizing prof-
its* [emphasis added].

1386 ...
1388 Medical inflation has returned and the health system is adrift as too
many of the *economically driven* [emphasis added] managed care ar-
rangements have lost their credibility with the public and with medicine
as stewards of medical care.

1390 ...
1392 The policymakers and purchasers only understood and embraced the in-
flation fighting price competition idea. My own most compelling interest
as a physician was in quality accountability and consumer choices based
1394 on quality first and then, secondarily, price. *I could only sell HMOs as
an inflation buster.* [emphasis added]"

1396 -Dr. Ellwood (Source: [NeurologyToday \(2001\)](#))

1398 Dr. Ellwood's statements are quite tragic, but were they foreseeable? As men-
1400 tioned earlier, the Health Maintenance Strategy can be seen as rooted in neoclassical
1402 economics and shares its hallmarks. In neoclassical economics products are homo-
geneous, competition is only on price. Because of that a consumer would (in the
end) not have the freedom to "primarily" choose based on quality, there is only one
quality, the homogeneous product. Even if an alternative is made available, in neo-
classical economics this is merely a temporary imbalance that will 'inevitably' move

1404 treatments back to being homogeneous again. It would also not be a surprise for
a system where economic drivers have been set central, that those drivers will be
1406 expressed most dominantly. That driver is the desire for maximising profits which
Dr. Ellwood correctly observes corrupting the HMO system. This too can be ex-
1408 pected and can be illustrated with an example: Consider a person in need of life
saving cancer treatment and is to buy this treatment in a free-market. What will his
1410 utility curve look like? First of all, this person needs only one treatment program,
not a half, not two, but only the appropriate one and it can't be substituted by
1412 another treatment (for it is a homogenised product). This, on its own makes the
utility scheme a vertical line rather than a curve. Because it is life saving treatment,
1414 the value of the life saving treatment could be potentially infinite to the person that
needs it, and thus the price can be potentially limitless in a profit maximising free-
1416 market. Price competition becomes a somewhat strange exercise when the value
of a treatment is valued as infinite. As such, the theoretical optimum is already a
1418 worst case scenario.

A criticism can be that people don't always need life saving treatments and
1420 smaller treatments can be quantified. Even if it were true that people could faithfully
asses the value of a treatment, they will be valuing it within their socioeconomic
1422 status. This makes being medically treated (or not) a matter of (socioeconomic)
class. Furthermore, on the theoretical level the mere existence of the pricing issue
1424 concerning life saving treatments will inflate the price of other 'minor' treatments.
One obvious reason is that a profit maximising doctor would prefer to practice
1426 life saving medicine. Price inflation of health care in Managed Care is not a bug,
but a feature. The theoretical 'optimum' is already a worst case scenario and any
1428 regulation that restrict the neoclassical free-market dynamics is more probable to
slow down its inflationary nature than not.

1430 It seems that health care is not meant to placed in the economic sphere, nor to be
operated according to neoclassical principles, nor be based on utilitarian principles.
1432 On the theoretical level, in such a system patients have the 'freedom' to choose from
homogeneous treatments and have unlimited to medical treatment they as long as
1434 they can afford it. In other words, limited freedom if any at all and very limited
access to health care with ever inflating prices. The state of the health care system
1436 in the U.S. post-Managed Care could have been foreseen and a similar prediction
might thus be valid for The Netherlands too.

1438 2.6 Conclusion

When considering Managed Care in terms of Toth's typology, it can only applied
1440 within a compulsory health care system and voluntary system. The other health
care systems do not allow the competition between and among insurers and health
1442 care providers, which is considered vital in Managed Care. In theory Managed
Care is independent of integrated or separated systems (per Toth's classification).
1444 However it seems rather that in practical terms they tend to ultimately develop
the system into an integrated/pseudo-integrated systems. When considering this
1446 tendency and its nature, classification on terms of integration/separation does not
seem to be appropriate. For, the end is not streamlining or any of the other reasons
1448 for integration, rather, it is control. This type of control is not exclusive to Managed
Care and in chapter 4 it is clear that the Dutch government also widely applies

1450 control in the practice of health care. This warrants an additional classification to
Toth's, namely that of Directed and Autonomous systems. With that, Managed
1452 Care is a Directing framework and if the system it is applied to is not Directed
initially, then it will naturally tend towards becoming that (by force of its nature).

1454 The application of Managed Care seems not to fulfil its purpose of controlling
costs through freedom of choice (in a 'free-market') while offering a widely accessible
1456 health care of quality. The freedom of choice it presents/offers is actually very
particular and limited a form of 'freedom' (as we know it). What can be concluded
1458 is that it actually is unable to contain costs, curtails freedom of choice and ends up
being exclusionary. It is the consequence inherent to systems it creates that flows
1460 from the way it dictates how to control costs. It is due to its nature, the philosophy
at its foundation.

1462 Chapter 3

1464 Financing the Cultural Sphere: Dutch Health care financing

Chapter 1 showed that freedom is the most important requisite for eudaimonia. Chapter 2 showed that when this is not respected results in policies such as Managed Care. It is important to realise that such policies not only curtail freedom in practice but are also paired with an economic system. Therefore it does not suffice to underline issues in the practice of health care, but we also need to analyse economic realities. The benefit of doing both is that economic arguments are to be supported by philosophical analysis and philosophical arguments are to be supported with economic analysis. Such a feedback loop is quite Aristotelian. The chapter is partitioned into two main sections to prevent a single long-winded and convoluted review. The first section is dedicated to recounting the Dutch healthcare policy reforms in historical terms. The main goal here is take stock which modalities of funding have been applied in the past. The developments are grouped chronologically into three distinct era's of normative ideals and paradigms as presented by [R. Bertens & Palamar \(2021\)](#). The Dekker-report [1987](#) will receive some special attention, because it has been the most significant force for the move towards the current state of the Dutch health care system. The story of Dutch Managed Care essentially starts with the Dekker-report.

The second Section of this chapter constitutes of a description and analysis of the Dutch health care system in its current state. The previous chapters point towards problems springing from the conceptual level of Managed Care, the principles on which the current Dutch health care system is largely based. In Section two I use the knowledge gained in the previous chapters to understand whether the problems which the current Dutch health care system is suffering from are related to the system of Managed Care, and its principles. The focus is on factors that Managed Care is thought to affect positively, such as the costs of health care (which Managed Care promises to reduce through the introduction of competition in health care) and the Aristotelian understanding of freedom. This section thus takes an approach in which Managed Care related measures/policies/themes are analysed at face value and in Aristotelian perspective (that of freedom). Meaning, Managed Care related measures/policies are first analysed in context of its expectations and self-set goals of freedom, affordability, accessibility and quality (as far as that is possible/applicable) and also reflected in Aristotelian ethical context. For example, the privatisation of health care insurances is analysed on what kind of structures/landscape/results

1498 it has lead to, whether the expectations and self-set goals of the health care insur-
1500 ance market were met and all of this is reflected upon considering Aristotle’s ethical
1502 philosophy (primarily in context of freedom). The analysis is on themes that are ex-
1504 plicitly Managed Care, such as privatisation of health care and implicit themes such
1506 as dividends and marketing (which follow privatisation). This should bring clarity
in the relation between the (Dutch) application of Managed Care and freedom, cost,
accessibility and quality, as well as clarity on the Aristotelian perspective of that
relation. Clarity in those two items is useful and important for creating a proposal
for health care (system) reforms, which is the topic of the next chapter.

The Dutch system is a complex system regulated by several systems laws of which
1508 the Health Insurance Act (Zorgverzekeringswet) constitutes more than half of the
state budget for care, it is also the law that involves the privatisation of insurers.
1510 Other than complexity, the challenges in any research within this field is its sheer
magnitude, constant change and its opacity. Still, the system in its entirety will
1512 be explained to an appreciable degree. Descriptive statistics in these sections play
a role in so far to give a general understanding of matters or to underline causal
1514 relations. A further limitation is that the COVID pandemic hit the Netherlands in
the beginning of 2020 which can skew the statistics and therefore most statistical
1516 information is deliberately limited to years prior 2020.

3.1 History of Dutch health care funding policy

1518 3.1.1 Period up to 1941: The beginnings of a health care system

1520 The Netherlands has a rich and dynamic history of health care policy. What is
characteristic to the Netherlands is its piecemeal development of policies and asso-
1522 ciated financing modalities. Prior to 1941 there was a system of voluntary insurance
([R. Bertens & Palamar, 2021](#)). The per The period from 1941 and onward can be be
1524 subdivided into three distinct era’s marked by the dominant policy paradigms and
normative ideology of their time ([R. Bertens & Palamar, 2021](#)). As noted before,
1526 prior to 1941 The Netherlands had a decentralised and voluntary insurance system
for funding health care([R. Bertens & Palamar, 2021](#)). There were provisions for a
1528 public safety net enshrined in the 1854s Poor Law, but was limited to financial aid
by municipalities in case of absolute necessity and if all other financing options, such
1530 as charity funds, were exhausted ([R. M. Bertens & Vonk, 2020](#)). The Poor Law was
meant for those who had no stable income but that changed in time. While there
1532 there was wide political recognition for state-backed social health insurance (SHI)
not much was achieved legislation-wise. There was one exception of a small but sig-
1534 nificant change in 1912 to the Poor Law. The principle of absolute necessity was let
go and municipalities were now charged with organising health care instead of relief
1536 ([R. M. Bertens & Vonk, 2020](#)). The Poor Law now was also used for the prevention
of people falling below the poverty line due to medical costs without needing the
1538 qualification of "poor" ([Vonk, 2013](#)). Looking at this period and the relative lack of
legislative progress on the matter but with consensus on an SHI it is evident that
1540 solidarity and wide access was a growing value but did not weigh heavily enough

1542 in context of governmental control to overcome personal responsibility and belief
1544 in communal support (through private/non-profit funds such as philanthropic, re-
1546 ligious, worker, factory funds, etc.) (R. M. Bertens & Vonk, 2020). In the period
1548 between 1891 to 1941 membership to a fund grew from 10% to 46% of the population
1550 (R. M. Bertens & Vonk, 2020). The private sickness insurance funds that existed
1552 at the time were meant for people with a stable albeit low income and acted as
1554 an intermediary between health care providers and its insured for basic health care
1556 services/products (Vonk, 2013). Insurers made deals with local care providers and
1558 members would in essence acquire access to the package of products and services
1560 the insurer contracted (Vonk, 2013). Providers were payed by the insurer on basis of
1562 invoice or, more popularly, on a subscription base where the provider would receive
a fixed periodic payment for each member it had (Vonk, 2013). Becoming a member
of a private insurance fund was not as straightforward as one might expect. As a
method to manage their risk private insurance funds would keep high-risk potential
members away and if one was accepted it could take up to six months of paid mem-
bership before a member could enjoy the benefits (Vonk, 2013). The Middle class
was in general able to cover the costs for health care and only in later decades of
the 20th century when health care insurances would start to grow in count (Vonk,
2013). Such insurers did not provide access to a set of health care providers, but
rather would give restitution to health care expenses made by their members (Vonk,
2013). For that (later) period the case could be made that freedom of choice and
deliberation in the practice of health care was present.

1564 Although debate on the subject of public health care within politics was active
1566 there were no significant policy changes (Vonk, 2013; R. M. Bertens & Vonk, 2020),
1568 underlining a general preference against government involvement. This is quite
1570 unsurprising when looking at the *Zeitgeist*. Political economics with the inherent
1572 disdain for government involvement was already quite matured, neo-classical eco-
1574 nomics was on the rise and the Calvinistic influences (in politics) would naturally
1576 praise hard work, personal and communal responsibility. The neo-classical solution
1578 is to minimise government involvement and to leave health care up to the market-
1580 economy, the economic sphere (rather than the cultural sphere, the sphere of knowl-
1582 edge generation and deliberation). However health care can also be entrusted to the
cultural sphere which is characterised with deliberation and cooperation. In light of
these thoughts, it is only natural that government had but a minor role and even
with the 1912 amendment this remained largely unchanged. Just like in the U.S.
the Dutch medical society NMG (Maatschappij tot bevordering der Geneeskunst)¹
had a significant role in policy. It brought forth the Binding General Decision (Alge-
meen Bindend Besluit) forbidding its members (at the pains of serious fines) to sign
contracts with sickness funds (not to be confused with private insurers) that did not
satisfy a list of requirements (Vonk, 2013).² The fact that the middle and upper
class were able to pay for their own health expenses meant that a sufficient level of
income was earned and health care was not expensive. It is important to take note
of the Binding General Decision. Health care professionals voiced their grievances

¹The Maatschappij tot bevordering der Geneeskunst was an independent organisation, later to become KNMG (1949).

²Important requirements being remunerations being on subscription base and limitations on the wealth of members within the sickness fund.

1584 on the funding scheme which would broaden the inclusion of middle-income house-
holds to sickness funds. According to Vonk (2013) the concerns were that doctors
1586 would lose substantial income as they considered accepting sickness fund patients
as mainly charitable and a such broadening would threaten their practice. It is dif-
1588 ficult to say that doctors were trying to maximise their profits. At the time it was
customary for doctors to charge less when treating people with less financial means
1590 and compensate that with charging well-off people more.

3.1.2 Between 1941-1968: Centralisation

1592 In 1941 a drastic change came. With the German occupation came the Sick-
ness Funds Act (Ziekenfondsenbesluit), an introduction of a centralised system
1594 and compulsory insurance based on the Bismarckian insurance system in Germany
(R. M. Bertens & Vonk, 2020; R. Bertens & Palamar, 2021). With this, *broad access*
1596 but *private initiative* (that kept government at an arms length) became thematic for
the coming era. Right to health, social security (which for all intents and purposes
1598 can be understood as solidarity) and private responsibility³ were the normative val-
ues carried which mounded to paradigms of broad access to health care facilitated by
1600 private initiative (R. Bertens & Palamar, 2021). This ultimately meant that citizens
became obligated to take an insurance, to be purchased from a private insurer. If
1602 financial means were lacking then citizens would be accepted in the state insurance
fund. Government was adamant to ever-broadening access through legislative mea-
1604 sures such as the creation of senior's insurance and General Law Extraordinary Care
Costs (Algemene Wet Bijzondere Ziektekosten, abr. AWBZ)(R. Bertens & Palamar,
1606 2021). Government set up oversight councils (such as the Sickness Fund Council)
in which it secured a seat at the table, however, financing, price setting, oversight,
1608 decision making, etc. were for all intents and purposes still in control of parties
active in the health care field (including insurers) (R. Bertens & Palamar, 2021).
1610 Chapter 1 has shown that without freedom of deliberation efforts will be for nought,
beautiful words like solidarity and responsibility become political platitudes. While
1612 health care could be seen as still functioning freely, slowly the system for control
was growing.

1614 3.1.3 Between 1968-1987: Cost control through government oversight and democratisation of health care

1616 The system present in the period of 1941-1968 had due to its power dynamic
(which favoured hospitals and health care professionals) the potential for limitless
1618 cost growth (R. M. Bertens & Vonk, 2020), that was the political perspective. This
is probably due to the fact that doctors were able to pose a united front against
1620 political force. The question arises whether this lopsided power dynamic is at the
core of limitless growth of cost. It might as well be due to other economic factors
1622 or (ill conceived) legislation. Much of literature happily ignores or glosses over that
question, which is also understandable due to the complexity and limitations for
1624 such research. In the late 60s and 70s the government started to actively recog-
nise the fact that the growth of health care expenditure would start to crowd out
1626 other public expenditure (R. Bertens & Palamar, 2021). The period of 1968-1987 of

³Meaning that each person is responsible for their fate as an individual.

1628 cost-controlling by government guidance started. The values of right to health care
and solidarity remained (R. Bertens & Palamar, 2021). Another value was now also
1630 on the foreground: the democratisation of decisions in health care (R. Bertens &
Palamar, 2021). Because politics started to pick up the reigns it meant that society
1632 (through the democratic process) gained a voice in the decision-making process on
the health care sector. This might seem desirable, but if democratisation oversteps
1634 its boundaries it then risks the majority's tyranny or at the least governmental
overreach. That means that health care becomes politicised resulting in legislation
1636 prescribing how health care is to be practised through generalisation and protocol-
isation. Health care then risks of becoming following generalised protocols, while
1638 health care is a practice aimed at 'particulars'. Simply put health care becomes
'one size fits all' while 'one size fits none'. The paradigms of broad access to quality
1640 health care remained and still with a weak notion of cost control through stricter
government oversight. Several policies were introduced in this period to restructure
1642 the health care sector in order to get a better handle on rising costs. In 1974 the
Structure Memorandum Health Care (Structuurnota Gezondheidszorg) was pub-
1644 lished. It was an immense restructuring plan of health care that would partition
the organisation of health care according to regions funded through a single regional
1646 sickness fund and give government much more control on the organisation of health
care. The idea behind of such an organisation is that local funds understand their
respective regions better and would be able to organise health care better.

1648 Such ambitious restructuring plans received a lot of push-back from politics, the
health care field as well as a sociocultural push-back against a 'paternalistic' welfare
1650 state (R. Bertens & Palamar, 2021). A state which was not in dialog but command-
ing was frowned upon for limiting freedom. The result was that government was
1652 forced to abandon planning and adopt a strategy of piecemeal policy introduction.
Still, the underlying paradigms did not change but centralised control remained im-
1654 possible. Government was limited to try at limiting the growth of cost. Policies
were on the restructuring the insurance system which became increasingly expen-
1656 sive, tariff, budgeting, income, substitution of in-patient by outpatient care, hard
limits on health care expenditure and capacities. Tariffs setting meant to prevent
1658 price gouging, limits of various kinds meant to keep expenditure within constrains
and substitution meant to substitute expensive in-patient care for cheaper outpa-
1660 tient care. As for access and quality, government was unable to formulate effective
control over them other than using access and quality as factors in other health
1662 care policies. The challenges government had were mainly the complex nature of
the health care sector and sociocultural push-back.⁴ Ultimately (mid 90's) the sub-
1664 stitution efforts and corresponding tariffs were politically accepted as not working

⁴What is interesting to note is that both U.S. and The Netherlands were facing very similar and comparable problems. However the attempts and realised legislation by the Dutch were quite different to that of the Americans (at least up until 1987). Whilst the Dutch seemed to try and expand government control and socialisation, the Americans went the opposite direction. The U.S. House and Senate had predominantly Democrat majority while the Dutch political landscape moved back and forth between centre-left and centre-right. So far there does not seem to be a strong enough explanation on why legislatively they diverged in response to similar problems. However, Dr. Elwood did not present his idea to the House nor to the Senate, but rather to the president (Nixon) which was at the time a Republican president. The nine following presidential terms saw 6 more Republican presidents. There is another difference between the two countries on a constitutional level. U.S. does not include any rights to health care in its constitution whereas the Dutch constitution does in Ch. 1 art. 22.

(K. P. K.-P. Companje et al., 2021). Tariffs for hospital beds meant for short stay in-patient care were cut by half, combined with a slashing of bed counts created a situation of increased waiting periods for in-patient care and an out-patient care demand that could not be solved by throwing money at it (K. P. K.-P. Companje et al., 2021). This is an example of government overstepping its boundary, trying to exert control with arguably good intentions and ultimately by failing due to the nature of the measures.

3.1.4 Between 1987-2006: The Dekker report and the beginnings of the move towards Managed Care

The period between 1987 up to 2006 is a 20-year period of gradual transition. The Dutch system was slowly, albeit methodically transformed (following Toth's classification) from a social health care system to a mandatory national health insurance system. Funding shifted from a social system where the government felt not being able to exert control effectively to a privatised (albeit mandatory) system where (tools of) control were shared between private insurers and government. Insurers would manage most regular health care provisioning and government would pick up all the risks and activities that the insurers would not (such as "uninsurable" risks, long-term care funding, funding medevac facilities, etc).

Perhaps the most influential milestone in Dutch health care organisation was the completion of the "Readiness for Change" (Bereidheid voor verandering) report of 1987, also known as the Dekker-rapport. Some special attention is warranted as the current Dutch health care system seems to follow the outline created in this report. What the Health Maintenance Strategy was for the U.S. health care system, the Dekker-report was arguably that for The Netherlands. The report begins with naming some issues the existing system has. Of note are that insured were considered as having little or no freedom of choice as a "consumer and or patient" (Commissie Structuur en Financiering Gezondheidszorg; (1987), p. 6). What this "freedom" exactly entailed is not made explicit immediately. It's main criticism is that runaway policy-making combined with an excess of demand and supply of health care are responsible for the uncontrollable growth of health care expenditure (Commissie Structuur en Financiering Gezondheidszorg; 1987). Quoting the *Nota 2000*⁵ the report also underlined future problems on health in The Netherlands in general, with preventative care specifically. The report therefore advises to expand health care policy to include themes of prevention and improvement of health in general (Boot et al., 1987). Again, such an expansion of policies seems positive or at least benign, but only remains so if they do not infringe upon people's freedom. If the primary worry is not the protection of freedom, then such an infringement can easily become the case. The primary worry stated in the report is a future where health care becomes prohibitively expensive, requiring rationing health services in which the poorest of the population would suffer the most (Boot et al., 1987). According to the Dekker-report 1987 the general consensus is becoming that government should

⁵The *Nota 2000* was a report on the general health of the Dutch and future outlook. It stated that improving the health of the Dutch was dependent on many other factors than just curative health care, defended a position that health should be a general factor in policy, underlined the importance of preventative care and gave suggestions on health care reforms (Boot et al., 1987), though not in the calibre of the Dekker-report.

1706 step back in to governing health care. Limiting itself to creating policies that would
1708 support health care as a system by setting policy in such a way that when health
1710 care is transformed into an industry⁶ that it can adapt autonomously to health care
1712 needs (by, for example, easing the process for creating small specialised clinics) for
1714 the best possible health care outcomes. Another criticism it noted was the absence
1716 of incentives that would prevent the creation of ineffective policies, inefficient/inap-
1718 propriate application of health care and inefficient/inappropriate practice of health
1720 care ([Commissie Structuur en Financiering Gezondheidszorg; 1987](#)). A great deal
1722 of importance is given to the term of 'market' in the report, as it is used 11 times in
1724 the executive summary of this extensive health care reform report.⁷ The assertion
1726 was that *many*⁸ held the opinion this was due to the lack of *market mechanisms*
1728 within the system and the lack of separation between the funding and organisation
1730 of health care: "*Many believe that our health care system, in particular the health in-
1732 surance system, contains insufficient incentives for effective policy, use and action.
1734 This is attributed to the lack of market mechanisms and separation of financing and
1736 planning*"([Commissie Structuur en Financiering Gezondheidszorg; 1987](#), p. 8). The
1738 Dekker-report also underlines issues in freedom of choice. Members of the then sick-
1740 ness fund system could only make use of health care that were connected to the
1742 collective fund. If one wanted free choice, then they had to take a private insurance.
The irony is that the current system is not much different with with 'payed in kind'
and 'restitution' type insurances. In summary the Dekker-report states that without
major systematic changes to the organisation of health care health care will become
too expensive. It also finds that those who need health care have little freedom of
choice if any. The reasons put forth are growth of supply and demand, ineffective
policy and disproportionate scope of government control. The curious part of this
all is that these observations are not untrue. However, the previous quote ending
with "separation of financing and planning" and not including the practice of health
care points towards a perception that has been limited by conceptual thinking.
That concept being neoclassical economics and thus market mechanisms become
the Birmingham screwdriver for organising health care.⁹

1736 With the conclusions of the Dekker-commission of 1987 a new era started for
1738 the Dutch health care system; a slow march towards regulated competition in a
1740 separated Mandatory National Insurance system¹⁰. The belief was that (organising)
1742 health care as a market would guarantee broad access to quality health care, while
ever increasing costs would be reigned in. Government would have minimal, but
strong, control by determining what is absolutely necessary, protecting the patient
(now consumer) rights and the people from undue cost burdens. Market forces would

⁶The term industry was not used. When looking at the past of Managed Care, the Dekker-report and the terms that are used, then industry is the appropriate descriptive word.

⁷They can be found in [Commissie Structuur en Financiering Gezondheidszorg; \(1987\)](#) on pp. 8, 9, 13, 15, 18, 19, 30 and 32. The summary extends a total of 28 pages, and thus appears once every 3 pages on average.

⁸Who these *many* were that held the opinion is never substantiated.

⁹A Birmingham screwdriver refers to the concept of Maslow's hammer and can be understood by the the following simple proverb: "If the only tool you have is a hammer, it is tempting to treat everything as if it were a nail."

¹⁰As per Toth's definition such a system would be a health care system in which citizens are obligated to take insurances from a private for-profit or non-profit organisation and privatisation of health care services.

then take care of the rest such as low prices through a competitive market. Despite all efforts the growth of health care expenses has kept on growing gradually, see Fig. 3.2. As such the Dutch government started steadily working towards the creation of a competitive, albeit regulated health care market. Herein the government would function as a market master. The most significant change came in 2006 with the Health Care Insurance Act where the system of Sickness Funds and Private insurance was changed into a completely privatised insurance market. Insurers now would provide two types of insurance. The "Basis" (basic) insurance formed the basis of any insurance plan which every citizen by law is compelled to purchase and a voluntary insurance for expenses not deemed essential (including dental care!). The coverage of the basic insurance is determined by a so called independent government organisation (The Dutch Healthcare Authority) and thus identical across all insurers. What is essential in this process is that although the basic coverage is determined by an independent government organisation this is not as it may seem, because those decisions are still a process of legislation (see footnote 11!).¹¹ Furthermore, directors of all independent government organisations are appointed by the ministries they fall under and have to follow the mandate imposed by those ministries. Meaning that the definition of 'independent' in this context is quite different from how it is understood in general.¹² The implication of this all is fairly severe. In context of health care everyone has to pay into the health care system, however a majority determines their medical fate.

Insurance companies became obligated to accept any and all who applied for it without exception. Also a yearly deductible was introduced with the purpose of increasing "customer" awareness on costs and as cost control. Note "customer". A patient is seen as a utility maximising agent in a market system of economy. It cynically defines a person in need of health care as economising their malady with money. Still, the yearly deductible at the time was reasonably low posing not a huge burden. For those who do not have the means the government provided financial aid for paying insurance premiums in the form of a subsidy. The financial subsidy can range from a minor amount to the entirety of the basic insurance premium. The way insurers can differentiate is pricing on the basic insurance and offer various supplemental insurances to expand coverage. Citizens thus have wide access to affordable healthcare in line with the time's paradigms of solidarity and the right to health care. Meaning that citizens and residents (depending on their legal status) are obligates to buy health care insurance which is compensated on their ability to pay for the premium, in addition an income based and employer taxation was also introduced for the purpose of funding health care. Both societal and individual responsibilities are recognised while the individual has gained freedom of choice, in

¹¹The "Regeling zorgverzekering" (Health insurance scheme) is connected to the Health Care Insurance Act and is part of legislation. Furthermore it is a "scheme" which falls under ministerial prerogative. The purpose such a prerogative serves is to not unduly burden legislation processes with details. However, the Dutch constitution does not recognise such a prerogative in laying down laws, only the parliamentary process. Ministers can enact their prerogative with ease, especially if there is a majority coalition in the lower-house. Having to only pass the Senate's legal scrutiny.

¹²They do publish reports and give advise that run counter to policy propositions of a ruling cabinet. Though, this is by virtue of mandates being primary and not being under the direct control of a minister.

theory. The insured gained the freedom to choose their insurer, more often than not
1782 most practitioners are covered/contracted so freedom of choosing one's care provider
was also wide, though there is a snag and a catch. As mentioned earlier not much is
1784 different currently concerning freedom of choice, merely the wording and superficial
structures have changed in that context. "Natura" (payed in-kind) insurance are
1786 effectively very similar to how sickness funds operated, restitution (a rarity now)
and voluntary insurances are effectively what private insurances were.

1788 **3.2 Privatisation, regulation and the cost of health care**

1790 In the time span between 2006 to date many new rules and regulations were brought
into effect and were the continuation of the principles of Managed Care. Initially the
1792 Dekker report was of the opinion that changes could theoretically be implemented
not in decades but in several years. This did not happen and the changes took two
1794 decades to come to actual fruition and almost another two decades to be further
refined to its current state. Of the thirteen government terms five were of a net centre
1796 coalitions and eight were centre-right coalitions. The relative slow implementation
of Managed Care principles¹³ can be related to the changes in political power. The
1798 minutia of political processes is not of importance here except that the piecemeal
implementation of Managed Care was ever present, some terms more than others
1800 depending on the (net) political alignment of the ruling coalition. This section is
an analysis of the current system with the goal of analysing whether Managed Care
1802 has resulted in what it promises and how freedom is impacted, as described in the
introduction of this chapter. Before going into that analysis a clear overview of the
1804 health care system is given, particularly based on the structure of financial flows
and governing health care systems laws.

1806 **3.2.1 A general overview**

Some general knowledge on the health care system as a whole is required to un-
1808 derstand the analysis that is going to be presented. The current Dutch health care
system can be seen as a fragmented system governed by laws held together by the
1810 constitutional right for affordable and accessible health care of quality. The consti-
tutional right flows from Article 22 of the Dutch constitution, which obligates gov-
1812 ernment to take appropriate measures to protect and improve health. The laws gov-
erning health care are of great number with five "systems" laws laying down the core
1814 of its organisation and funding. These are the Health Insurance Act (Zorgverzek-
eringswet), Long-Term Care Act (Wet langdurige zorg), Social Support Act (Wet
1816 maatschappelijke ondersteuning), Youth Act (Jeugdwet), Public Health Act (Wet
publieke gezondheid). Health Insurance Act is in-line with what was in envisioned by
1818 the Dekker-report. A further explanation of these laws are given in list 3.2.1. There
are a myriad of other regulations such as the Health Care Market Regulation Act
1820 (Wet marktordening gezondheidszorg) which in this case regulates the health care

¹³For all intents and purposes Managed Care politically aligns right. For those more familiar with American politics, for better or worse, both Democrats and Republicans would be considered centre-right to right wing in the Netherlands

market, article 11 of the Dutch constitution which enshrines physical sovereignty,
1822 Health Act (Gezondheidswet) which regulates the organisation of health, and so
forth. All laws are for the purpose of forming a mastered market system for health
1824 care with the goal of wide access to affordable health care of quality. In reading
the mentioned regulations, freedom does not seem to be the primary or even major
1826 topic of concern. On the client side it can be inferred that freedom is something
that can be bought. On the practitioner side there is substantial requirement/space
1828 for self-regulation at face value, but what really counts is autonomy in their prac-
tice of health care. Considering contracting, coverage regulation and so forth one is
1830 justified in being concerned whether health care can truly be freely practised. As
for quality, this item seems to be quite difficult to regulate through legislation as
1832 it is mentioned but not in a concrete manner except for hard requirements such as
qualification. It seems more that insurers are made responsible for further quality
1834 requirements.

The five systems laws (Health Insurance Act, Long-Term Care Act, Social Support
1836 Act, Youth Act, Public Health Act) form the Dutch health care (funding) system
and is depicted in Fig. 3.1. It seems as an overly complicated scheme, to an extend
1838 it is, but the funding scheme of each individual systems law is fairly uncomplicated.
Still, it is good to see the system in its entirety.

1840 **Laws associated with the streams of funding in the Dutch health care system:**

- 1842 • [\[Blue\]](#) The Health Insurance Act regulates the system of health care concern-
ing the Basic coverage. It is also the regulation that requires every citizen
1844 to be insured and room for voluntary insurances. Some important aspects is
the mandatory minimum and maximum deductible for care (385 to 835 Euro
1846 respectively) and a separate mandatory medication deductible of 250 Euro.
Further more it also regulates subsidies for aiding less well-off households in
1848 paying for their basic coverage. This subsidy can rise up to cover the entire
insurance costs. There are currently (2023) types of basic insurance:
 - 1850 – ‘Natura’ (in kind) policy covers health care expenses fully of only con-
tracted (in-network) providers. Policy holders are ‘free’ to choose from
1852 in-network providers. Care from non-contracted providers is not or parti-
tially covered. In practice, coverage of such care is often a percentage of
1854 the average price of contracted care or a percentage of the price guide-
lines set by the NZA. Payment goes from insurer to provider according
1856 to contract terms.
 - ‘Budget’ is a more stringent form of ‘Natura’ and is the cheapest among
1858 the three types.
 - ‘Restitutie’ (restitution) insurances refund the costs declared by the pol-
1860 icy holder. It is the most free form of basic insurance and also the most
expensive. Policy holders can freely choose any practitioner that falls
1862 within the basic coverage and fully refund costs that are in line with the
NZA price guidelines. If care is more expensive, level of magnitude of
1864 coverage is determined on a case by case basis ([ECLI:NL:PHR:2022:972](#),

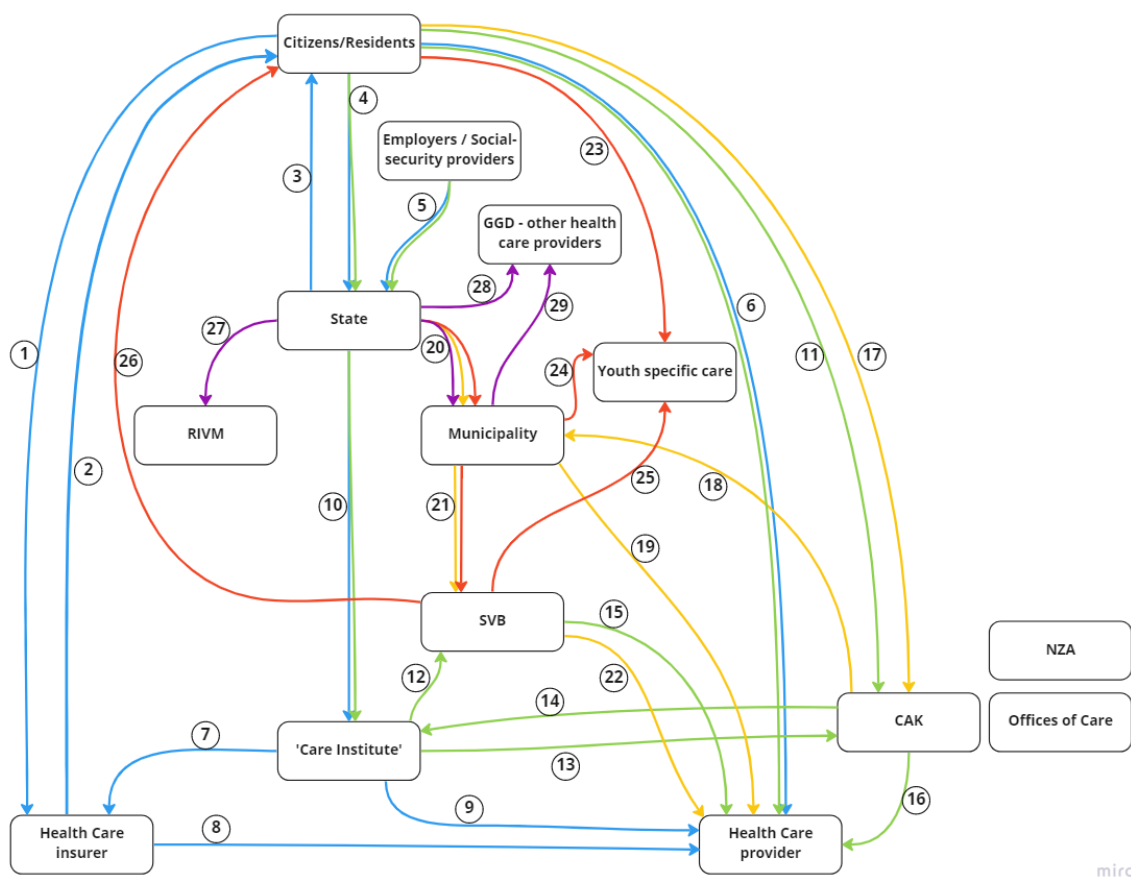


Figure 3.1: Streams of funding in the Dutch health care system: [Blue] Health Insurance Act; [Green] Long-Term Care Act; [Orange] Social Support Act; [Red] Youth Act; [Purple] Public Health Act. (Argumenten Fabriek, n.d.). Schematics for each individual law is within the source material. Fig. 3.1 is a (self made) composition of those. A legend is provided in Appendix A explaining everything depicted and is essential in further readings of this section.

1866 *Parket bij de Hoge Raad, 22/00094, 2022*). Often this means that some
 1868 co-pay is required. Payment of providers is often done by the insurer as
 1870 an ancillary service, and often not on the basis of a health care contract.
 An insurer can potentially have contracts with health care providers,
 and restitution (where needed) still can be function of these contracts
 (*ECLI:NL:PHR:2022:972, Parket bij de Hoge Raad, 22/00094, 2022*).

- 1872 • [Green] Long-Term Care Act is limited to organising long-term care. The
 separation of basic and long-term care is due to the (non-insurable) risks and
 costs of such care that a private insurer would not be able to reasonably carry.
- 1874 • [Orange] Social Support Act; [Red] Youth Act; [Purple] Public Health Act
 are all laws organising matters of special public interests.

1876 An important point to note is that as of January of 2015 the AWBZ was replaced
 1878 by the Long-Term Care Act. This was not merely a formality, it redefined what was
 covered by the public in long term care. Many aspects that previously fell under the

AWBZ after the implementation of the Long-Term Care Act became a part of the Health Insurance Act. The changes are quite substantial and of importance. Qualification for care under the Long-Term Care Act was cut to patients that permanently required constant oversight and/or round-the-clock care.¹⁴ All other care was to fall under the Social Support Act and Health Insurance Act.¹⁴ The principles behind the Health Insurance Act was to ensure cost and quality control. As for what fell under the Social Support Act, by deferring to the municipalities it was believed that its closer proximity would be of benefit in ensuring that organising the health care was better tailored to the person in need (more on this later).¹⁴ The reasoning put forth was that the AWBZ was envisioned to carry aprox. 70,000 persons including demographic changes costing 275 million euro (nominal to 2013), however by 2013 the number had risen to 800,000 costing 27 billion euro.¹⁴ Interesting to note here is that throughout from 1968 to 2013 the cost of AWBZ care ten-folded and also take note of the left side of Fig. 3.2. It doesn't seem to have been effective. The fundamental reason in the face of rising costs given was the following: "Solidarity is the foundation of our healthcare system. If this is challenged, the most vulnerable will get the short end of the stick. That is not the society the government envisions."¹⁵

3.2.2 The rising cost of health care

Health care in The Netherlands is privatised, but strictly regulated. Meaning that there is essentially no public health care, but government plays an important role as market master. The system depicted in Fig. 3.1 and its description give an impression how this works. Various independent government organisations such as The Dutch Health Care Authority and The Care Institute function as an important link in setting prices, budgeting, setting regulations, inter-mediating among parties and so forth. They all are envisioned to form a control mechanism to keep expenditure and the cost of health care within reason, whilst achieving the stated goals of facilitating accessible health care of good quality. Note that to this day the stated goals have still not been achieved and 35 years has passed while freedom has been curtailed on all fronts for clients and practitioners. One thing that seems to have remained consistent among all other factors is the consistent expansion of Managed Care principles. Dutch health care is rated quite high and criticism of its current state might seem to some as being unreasonable. However, finishing 1st in a marathon does not mean one is a good at running, merely being faster than the rest.

The state budgeting of health care for 2022 was 91.1 billion Euro, of which 54.5 billion is related to the Health Insurance Act, 30.2 billion relating to the Long-Term Care Act, constituting aprox. 60% and 33% of the entire budget respectively ([Argumenten Fabriek, n.d.](#)). This means that improvements on the funding of health care are best focused on those systems, however that would cloud investigating the system as a whole. The numbers and their size are important, but the subject of investigation is what the current mode means. What follows now are subsections on various aspects of the funding modality that contribute to costs and also uncover ill considered relations with the focus on how well the self-stated goals have been

¹⁴Kamerstukken II 33891, nr. 3

¹⁵Kamerstukken II 33891, nr. 3, p. 5

1922 achieved. Furthermore these analysis are also considered through the perspective
of setting freedom as primary and how cost increases can be explained through this
1924 perspective.

Evolution of costs and per-capita burden

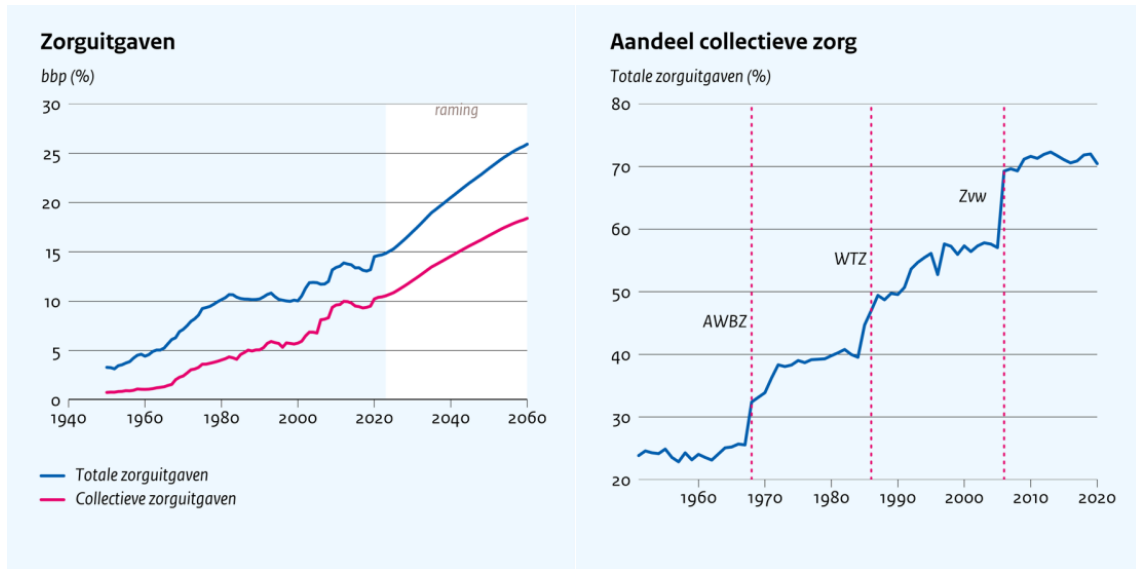


Figure 3.2: Left: Total health care expenditure as a function of time and percentage of GDP. The [blue] line is the total health care expenditure, whereas the [red] line signifies public expenditure. The white section is a forecast. Right: Percentage public expenditure of total expenditure and implemented regulations. (source: CPB et al. (2022, p. 5))

1926 Fig. 3.2 shows that health care expenditure has been rising and is expected to
rise. What is interesting to note is that in the period between 2000 to date, the
1928 total health care expenditure has been quite unstable. It would be improbable to
assume that those were due to the health of people, but rather due to regulatory
1930 pressures affecting the demand for health care. Fig 3.2 tells only a part of the story.
When the price index of care is analysed, some anomalies become evident.

1932 The rise of the price indexation in (depicted in Fig 3.3) follows the introduction
of the Long-Term Care Act. The one-year lag can be explained by the sluggishness
1934 of the privatised market adjusting to its expansion and the system transitioning
to a new status-quo. This is all the more reason to have a closer look on how
1936 privatisation has affected health care expenditure. Another concerning statistic is
the per-capita health care burden as shown in Fig. 3.4 and 3.5. Although the
1938 health care burden have remained reasonably stable, there is a serious disparity
between income brackets. Note that this does not include any burden incurred
1940 from voluntary insurances and elective care. From the numbers one can conclude
that policy decreases the burden carried (as a percentage of income) as income
1942 rises above the modal income. It clearly shows that the stronger shoulders do
not carry heavier burdens on the relative scale exclusively. Another interesting
1944 observation is that single-person households with a minimum wage are better off

Zorguitgaven; volume- en prijsontwikkelingen

Onderwerp: Prijsindexcijfers

2015 = 100

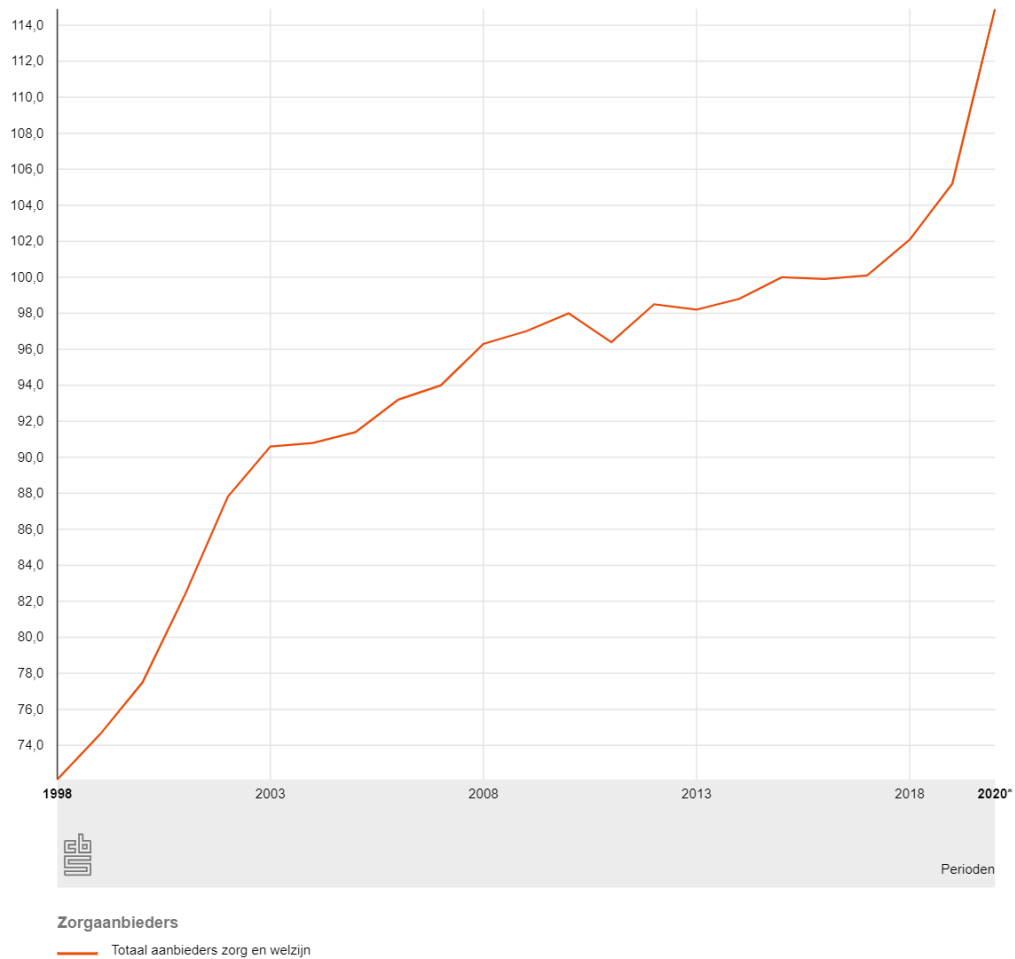


Figure 3.3: Price index of care. Index year is 2015 (source: *StatLine - Zorguitgaven; volume- en prijsontwikkelingen* (n.d.))

1946 than dual-minimum-wage-income households with children. Potentially this can
1947 cause a negative externality on family formation on the lower rungs of society. On
1948 the other hand maintaining a single person households is generally considered as
substantially more expensive. The disparity does create the question whether widely
held values of solidarity are reflected in policy.

1950 In any case, it is quite clear that the Health Insurance Act requires some more
scrutiny especially concerning privatisation and policies have to be reevaluated on
1952 their congruence with morals and values. If a widely accessible and affordable health
care is the stated goal, but is not achieved for decades, then at least some of the
1954 financial burden could be transferred to 3x modal income (and up) households. The
fact that their burden has even effectively decreased means that the ruling govern-
1956 ment is not committed to this goal. The same could be said about their constituents,
unless they are ill informed, which is an even worse prospect. Note that these num-
1958 bers are averages and considering that certain cases will have higher expenditure
and others lower accessibility and affordability come to question, especially in lower

Alleenstaanden	2010	2011	2012	2013	2014	2015	2016	2017-I	2017-II	2018	2019	2020
Bijstand (in €)	€ 3.224	€ 3.436	€ 3.416	€ 3.507	€ 3.220	€ 3.170	€ 3.081	€ 3.094	€ 2.880	€ 2.884	€ 2.919	€ 2.910
Bijstand (in % bruto inkomen)	23%	24%	24%	23%	22%	22%	21%	21%	19%	19%	19%	18%
Minimumloon (in €)	€ 3.688	€ 3.943	€ 3.910	€ 3.964	€ 3.597	€ 3.639	€ 3.377	€ 3.383	€ 3.074	€ 3.114	€ 3.142	€ 3.138
Minimumloon (in % bruto inkomen)	20%	21%	21%	21%	19%	19%	17%	17%	15%	15%	15%	15%
Modaal (in €)	€ 7.421	€ 7.891	€ 7.788	€ 7.989	€ 7.902	€ 7.744	€ 7.573	€ 7.692	€ 7.209	€ 6.934	€ 7.111	€ 7.296
Modaal (in % bruto inkomen)	23%	24%	24%	25%	23%	22%	21%	21%	19%	20%	20%	20%
2x Modaal (in €)	€ 8.687	€ 9.385	€ 10.400	€ 10.860	€ 10.737	€ 10.791	€ 10.978	€ 11.067	€ 10.189	€ 10.137	€ 10.599	€ 10.872
2x Modaal (in % bruto inkomen)	13%	14%	16%	17%	15%	15%	15%	15%	14%	15%	15%	15%
3x Modaal (in €)	€ 9.721	€ 10.538	€ 11.536	€ 11.873	€ 11.919	€ 12.528	€ 12.675	€ 12.776	€ 11.523	€ 11.371	€ 11.896	€ 12.234
3x Modaal (in % bruto inkomen)	10%	11%	12%	12%	11%	12%	12%	12%	10%	11%	11%	11%

Figure 3.4: Per-capita total health care burden of single-member households (in percentages and euros). The rows bracket gross income level as: Social security income level, minimum wage, modal, two times modal and three times modal income. (Kammerstukken II 35300-XVI nr. 10, p14)

Tweeverdieners met kinderen	2010	2011	2012	2013	2014	2015	2016	2017-I	2017-II	2018	2019	2020
Bijstand (in €)	€ 3.954	€ 4.254	€ 4.269	€ 4.463	€ 4.210	€ 4.350	€ 4.186	€ 4.204	€ 3.870	€ 3.911	€ 3.810	€ 3.762
Bijstand (in % bruto inkomen)	22%	23%	23%	24%	22%	23%	22%	22%	20%	20%	19%	19%
Minimumloon (in €)	€ 3.954	€ 4.254	€ 4.269	€ 4.463	€ 4.210	€ 4.350	€ 4.186	€ 4.204	€ 3.870	€ 3.911	€ 3.810	€ 3.762
Minimumloon (in % bruto inkomen)	22%	23%	23%	24%	22%	23%	22%	22%	20%	20%	19%	19%
Modaal (in €)	€ 6.710	€ 7.183	€ 7.110	€ 7.382	€ 7.661	€ 8.191	€ 7.717	€ 7.827	€ 7.226	€ 7.276	€ 7.349	€ 7.394
Modaal (in % bruto inkomen)	21%	22%	22%	23%	22%	23%	21%	21%	20%	21%	21%	20%
2x Modaal (in €)	€ 8.244	€ 9.027	€ 10.001	€ 10.284	€ 9.832	€ 10.815	€ 10.326	€ 10.500	€ 9.458	€ 9.357	€ 9.558	€ 9.863
2x Modaal (in % bruto inkomen)	13%	14%	15%	16%	14%	15%	14%	14%	13%	14%	13%	14%
3x Modaal (in €)	€ 9.377	€ 10.298	€ 11.248	€ 11.616	€ 11.348	€ 12.643	€ 12.532	€ 12.697	€ 11.253	€ 11.042	€ 11.525	€ 11.967
3x Modaal (in % bruto inkomen)	10%	10%	11%	12%	11%	12%	12%	11%	10%	11%	11%	11%

Figure 3.5: Per-capita total health care burden of dual-income households with children (in percentages and euros). The rows bracket gross income level as: Social security income level, minimum wage, modal, two times modal and three times modal income. (Kammerstukken II 35300-XVI nr. 10, p. 16)

1960 income households. Spending 300 euro monthly on health care is a substantial frac-
tion of monthly spendable income when earning modal income, let alone on social
1962 security (further discussed in subsection 3.2.2).

Market dynamics: competition and centralisation

1964 The justification for the privatisation of health care insurances is that the competi-
tion that goes with that will bring prices down. Insurers have to compete with each
1966 other on premiums for customers and thus incentivises an insurer to operate effi-
ciently and bargain hard for better contract terms with health care providers. The
1968 same applies to health care providers. Thus health care is then thought to become
efficient, cost effective, of quality and would ultimately bring health care expendi-
1970 ture and insurance premiums down. The linchpin in this theory is the competitive
market through privatisation. However, competitive markets do not necessarily fol-

low privatisation. Depending on the product and circumstances a market can evolve into any market state. As explained in the previous chapter, health care as a market product has reasons for it to form an oligopoly. This theory is reality in the Dutch health care insurance market and also to a degree on the health care provider side. Gupta-strategists published a report in 2015 commissioned by the ACM (Dutch consumers authority) in which was stated that the health insurance market was operating under a oligopoly (see 3.6).

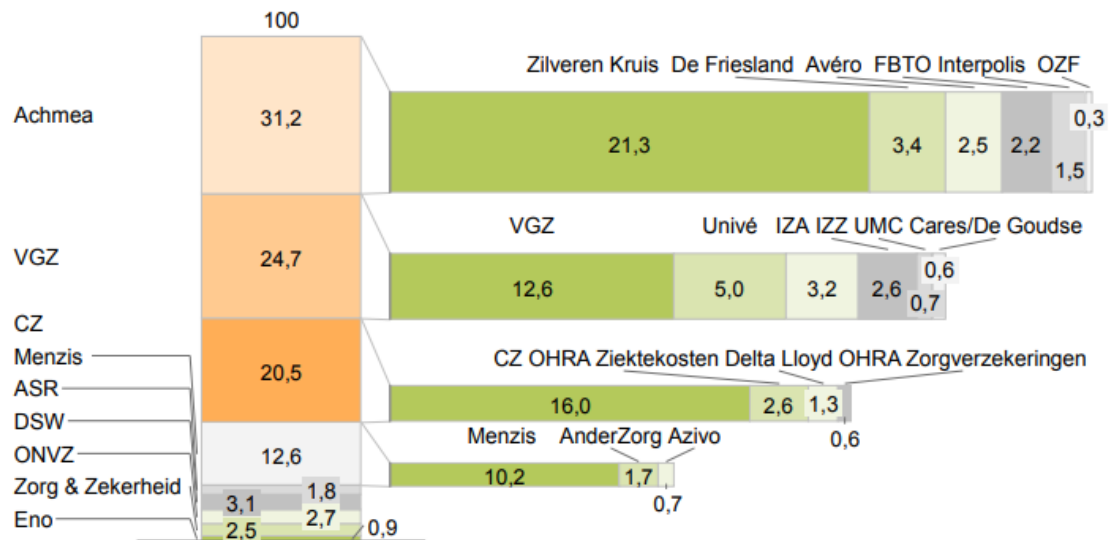


Figure 3.6: Market share health care insurers by parent and sister companies. (Strategists, 2015, p. 10)

Currently the four biggest organisations constitute 85% of the market (NZa, n.d.), as such the situation has not changed appreciably in the past seven years. That is quite a contrast to 65% (HHI) in 2006 (Markten, 2016). Further more Markten (2016) reports that effective competition was not evident and insurers did not sufficiently utilise available means for competition. The stated-goal of a competitive market is consistently not achieved. Instead of competition the policy changes resulted in mergers/acquisitions and conglomeration (Okma & Crivelli, 2013). This conglomeration was not limited to the insurers, similar movements were also present on the provider side in a similar bid to bundle bargaining power, which is in part due to government policy stimulating centralisation (Okma & Crivelli, 2013). Where there were 200 independent hospitals in the early 1980s, around the 2000's that number had dropped to 100 (Okma & Crivelli, 2013). The conglomeration of the care market does not only apply to hospital care, but is a trend that is shared in care in general (van den Elsen, 2017; Vardetun, n.d.). However, hospital/specialist care is subject to policies that force concentration and currently (2023) a very lively point of contention in political discourse. Arguments by proponents for concentration is that it will improve quality of care, though without an unacceptable decrease of accessibility. In reality quality improvements of patient outcomes are shown not to be the driving force for centralisation but that of strategic and organisational interest (Consortium Onderzoek Kwaliteit van Zorg et al., 2012). In the 2012 report of The Netherlands Institute for Health Services Research, Erasmus University

2000 and Scientific Institute for Quality of Healthcare unsurprisingly concluded that the
2002 quality improvements were not apparent. Even worse is the conclusion that health
2004 care costs are not reduced either but in most cases have even increased ([Consortium
Onderzoek Kwaliteit van Zorg et al., 2012](#)). As for the implications for accessibility
2006 and freedom the topic of obstetrics (childbirth) is underlined by the 2012 report and
2008 also gives a clear picture on the implications in general. Concentration has resulted
2010 that those who prefer home-birth are forced more often to undergo a hospital-birth
2012 ([Consortium Onderzoek Kwaliteit van Zorg et al., 2012](#)). In in summary, due to
concentration policies patients now have less choice, have to travel further for more
expensive care with no apparent benefit to quality. As for specialised care practi-
tioners such as doctors, they are forced to become part of a larger organisation and
the protocols that come with them. Which in turn limit the freedom of practising
their profession in the way they deem fit. Yet again the client loses freedom of choice
due to homogenisation of health care.

2014 It is generally accepted that oligopolies increase prices and that the current health
2016 care market state is not conducive to price reduction. It also poses high costs
2018 for entrants, diminishing diversity to exercise freedom of choice. One can criticise
2020 government by pointing out concentration policies that are implemented which forces
2022 the formation of oligopolies. However, the insurance market does not have such
2024 policies and yet it also forms an oligopolistic market structure. As it has been
2026 explained in the previous chapter, health care if considered as a market product
2028 will tend to form an oligopolistic market due to its nature. In response consumers
could in the past unite and collectivise their bargaining power as a counter. Another
market mastering policy government applied recently was the abolishing of client
side collectivisation. Clients could in the past group their bargaining power to
negotiate lower premiums. The reasoning behind banning this practise was due to
collectivisation being at the detriment of non-collectivised individuals. They were
charged higher premiums by the insurers to compensate for the loss of income from
discounted premiums. Freedom it seems is only meant for the insurers and backed
by government.

2030 It becomes more and more apparent that none of the goals stated are achieved
2032 by the current mode of health care regulation. The application of Managed Care's
2034 market principles in The Netherlands has not improved freedom of choice nor has it
2036 resulted in a reduction of costs. On the contrary, it has made it worse. Commitment
to principles of governance that consistently fail to meet stated goals strongly points
towards faulty principles or principles not being congruent with stated goals or
government is committed to differ goals than the stated ones.

Marketing

2038 Marketing and the free-market go hand in hand. In The Netherlands there are
2040 stringent rules on marketing health care. In The Netherlands no marketing is allowed
2042 to the public for anything that requires a doctor's prescription or referral. Alas, the
2044 parties that fall under that category (such as pharmaceuticals) are not the object of
study. As for marketing care providers in general, this is a difficult item to measure
but has been approximated as no more than 1% of turnover in health care and would
roughly equate to the contribution to total health care cost. Insurers on the other

hand quite active in marketing. The marketing expenses of insurers has steadily
2046 been decreasing throughout the years from 58 million in 2012 (van Aartsen, 2012)
to just shy of 30 million in 2018.¹⁶ Though these costs are purely ads expenditure.
2048 When retention, online services and other customer 'quality of life' expenditures
are included the costs rise an order of magnitude to around half a billion in 2014
2050 (Marketing Tribune, 2014). It would be thus fair to say that marketing contributes at
least (but not much more than) 1% to the total cost of health care if both provider
2052 and insurer are added up. Furthermore, privatisation does stimulate marketing,
and one has to consider if one's health care choices should be affected by marketing
2054 schemes. Although this topic seems minor it has all the potential to grow out of
hand. Marketing exists for good reason, when done well it can be quite effective
2056 in gaining customers. However, health care even when considered as a product is
not like any other consumable/durable goods. The target group, even in health,
2058 are in a vulnerable position when making the decision to seek medical aid. One of
the tools for a market industry is marketing, but marketing to a vulnerable target
2060 audience is an unethical and unscrupulous. Upcoming European legislation will
expand regulation on this matter. Considering the oligopolistic market structure
2062 and considering the unethical practice of marketing to a vulnerable group, one has
to wonder if deliberation on the choice of health care is done freely or through a sort
2064 of one way street by marketing.

Care provider dividends

2066 The Care Institutions Admission Act (WTZi; Wet toelating zorginstellingen) reg-
ulates whether a party is allowed to operate in health care (be it care provider or
2068 insurer as a commercial facilitator), the five systems laws include provisions on when
it is allowed to distribute dividends. Institutional profit (that serve to improve the
2070 financial position of an organisation) and personal income are not considered here
(which are subject to regulated limits). Profits are reflected in the solvability posi-
2072 tion growth of care providers from 24% in 2013 to 31% in 2017 and improved liquidity
position of about 14% (Baeten et al., 2019). The exception to this are independent
2074 individuals, where profits are in essence an additional taxable income next to salary
income. Furthermore information and the possibilities to gather them are limited
2076 for reliable measurement (Kok et al., 2020). As for the performance of care as an
industry was (2017) 1.8%. Another challenge in measuring profits is the relative
2078 prevalence of fraud in care provisioning in those sectors that allow dividends (*Rap-
port Signalen fraude in de zorg 2020*, 2020). Currently the following care providers
2080 are allowed to distribute dividends: extramural care providers, subcontractors of in-
tramural care (within the boundaries of the Health Care Insurance Act Long-Term
2082 Care Act and Youth Act) (Kok et al., 2020). The ability to distribute dividends is
also dependant on the legal form of a party. Foundations and non-profits are such
2084 legal entities. 25% of yields in care can legally distribute dividends. About 30%
of organisations within that sector are legal entities that can distribute dividends
2086 (Baeten et al., 2019). Meaning that 7% of all profits of all care providers can be dis-
tributed as dividends. What actually was payed out was approximated to be around
2088 275 mln euro in dividends, aprox. 605 for solo practitioners as additional income,
totaling to 880 mln for the year 2016. Note that certain financial constructions,
2090 fraud, privacy laws, make it impossible to measure the real magnitude. For 2016
that means that, conservatively, dividends of care providers were almost 1% of total

2092 health care expenditure (private and public). Considering that health care yielded
2094 1.8% (one has to wonder if such a term should be used in health care), half of that
2096 yield was distributed as dividends by a group that only constitutes 7% of health care
2098 providers. That capital is effectively flowing out of health care. Such an outflow of
2100 capital by such a small group seems not to be congruent with solidarity, but is to
be expected considering the nature of the system. The freedom to distribute dividends is an entirely different thing than the freedom this thesis underlines. What is described here is the free-market in optima forma for 7% of health care providers and its results are an increase in health care costs.

Insurer profits and dividends

2102 According to the Health Insurance Act health care insurers are not allowed to pay
2104 out dividends. Profits have to flow towards one of two ends, (1) discount for pre-
2106 miums, or (2) improvement of financial position (solvability). The legislator can
2108 influence this by nominal premium price setting. It is a fairly involving process
to evaluate how these have been budgeted in the past, how insurers have moved
within the market, how solvability has affected contracting, and so forth. There are
a myriad of factors and more apt for a more focused research. Still the issue can be
approached by looking at solvability. In the the period between 2015 to 2018 the
top 9 insurers showed minor fluctuations in their solvability.¹⁶ What is important
to note is that none of them dipped below the required level. Further more, insurers
had a solvability of 9.1 billion whilst 6.3 was required. Meaning that the 2.8 billion
of excess had been accumulating with insurers.¹⁶ Note that health care insurers are
required to be 100% solvent. The 2.8 billion excess plus the 6.3 billion mandatory
solvability thus implies a 144% solvability. Although it good for any organisation
to be financially healthy, an excess of 44% can be a point of discussion. Excess of
50% solvability is seen as a industry standard by the Dutch health care insurers.
Given their nature and risks involved in private operations it is a position that can
be defended. On the other hand, insurer investment portfolio's can be subject of
economic malaise and capital can simply evaporate when the conditions allow it.
Furthermore, do financial risks associated with health care insurance in a managed
market truly warrant an additional 50% solvability? The reserves that insurers hold
may have the positive aspects of stability and act as a financial assurance. On the
other hand, what are the consequences of the retaining more than 1% gdp worth of
assets for the solvability of only the health care insurance market, of which almost
a third is in excess? At least they do not flow out of the system, though they come
with other issues. Such reserves are classified as Institutional Cash Pools (ICP), al-
though they seem benign at first sight there can be some serious implications. The
topic of ICP is not central this thesis but an analysis has been included as an ancil-
lary illustration of issues that can arise from ICPs and can be found in Appendix B.
If freedom is understood as a free-market industry, then government reveals through
its actions clearly that it does not truly trust it will ensure continuity and imple-
ments policy that can only have cost driving mechanisms. What can be concluded
from this is that the assurances government requires due to risks involved with the
free-market and social considerations merely result in less than desirable practices.

¹⁶Kammerstukken II 35300-XVI nr. 10

2136 **Operational costs insurers and government**

2138 Insurers have year by year on average been able to reduce their own organisational
2140 costs and thereby reducing their contribution to the cost of health care. These or-
2142 ganisational costs involved with the day-to-day operation of the company, such as
2144 salaries, ICT and so forth. These costs of the top 12 Dutch insurers went from con-
2146 tributing to 3.7% in 2014 on costs related to the Health Care Insurance Act to 3.0%
2148 in 2018. That is a roughly 1.5% contribution to the total health care cost.¹⁶ Another
2150 14.6 billion was spent for the government to run its day-to-day operations in the
2152 same year (*Ministerie van Financiën, 2018*).¹⁷ Meaning that the cost of executing
2154 the the health care on the government side was roughly between 15% to 20% of all
2156 health care costs and should be seen as an additional overhead cost. This should
2158 not immediately be misconstrued as runaway government expenses. The various
2160 government organisations such as the NVa, Care Institute, Ministry etc. all have
important functions which private insurers benefit from. Price setting, research,
mediation between insurers and care providers, deciding coverage and all other re-
sponsibilities are very costly but necessary, though still to be questioned. With this
in mind, the expenses insurers which are but a small portion of health care contribute
substantially to health care costs relative to their function. Undoubtedly there are
also inefficiencies but finding out what those are exactly would require extensive and
detailed research or at least some creative hocus-pocus financial analysis. What can
be said is that government commits substantial efforts and expenditure to act as a
the market-master, yet again driving up costs. Note that in this category of costs
by care providers are excluded, because it would form a biased perspective due to
additional administrative/bureaucratic burdens due to the privatisation of health
care insurance, but are the topic in the next subsection.

Contracting and Bureaucracy

2162 This is perhaps the most important part of care provisioning. Managed Care brings
2164 with it the health care maintenance contracts, or simply contracting. The contracts
2166 between insurer and provider are of great importance, it is there where prices for
2168 health care are set and quality is demanded. However, the price-quality optimisation
2170 process is not only a process of discrete sectoral competition between insurers and
2172 providers separately. Note that the prevalence of contracting differs per sector and
2174 the coverage of that goes with it. The insurer is free to choose between contracted
2176 and non-contracted care. In general terms, the contracting practices in terms of
2178 having enough contracted practitioners seem to be sufficient according to the NZa
(*Monitor Zorginkoop en beleidsbrief, 2014*). However, quality is by and large not an
2180 important theme in contracting, instead financial themes of volume and price lead
contracting, because quality seems to have little incentive and is hard to define for
contracting purposes (*Monitor Zorginkoop en beleidsbrief, 2014; Stolper et al., 2019*).
The way health care expenses are suppressed through contracting is by inclusion of
budget ceilings and/or patient limits. When such a limit is reached the contracted
care provider can not accept any new patients under that contract. 19% of hospitals
have issued a intake stop and an additional third deliberated it but did not enact.¹⁶
For hospital care there are legal provisions that require deferral to other hospitals
to ensure care is still provided and covered. A patient stop should therefore not

¹⁷Note that operational costs of government has risen to roughly 27 billion for 2022

jeopardise access, though it does curtail freedom. For mental health (MH) this is not the case and an intake stop does not come with deferral. Aprox. two thirds of independent MH care providers and one third of MH organisations also had to stop client intake.¹⁶ These ceilings are strictly enforced and often difficult to circumvent. In case they are breached care providers are sued by the insurer as can be seen in some case material (Nysing, 2020). The contracts essentially determine the cost of treatments and insurers publicly share their contracting policy (and are freely accessible through their web-pages). A lesser known fact and not readily shared are the different tariffs depending on performance, administration and various statistical inspections. To substantiate this requires more in depth research and is best done through interviews, which falls outside the scope. In any case, the real question remains how much costs are "saved" in this manner and if the care need has been actually fulfilled. Health care contracts were expected to be an efficient way of ensuring low costs while accessibility and quality was ensured through the insurer-provider dynamic. The evidence shows that this is not the case. The reality of the matter is that costs are controlled through rationing. There are other stipulations in contracts to control costs, one of which is transformation agreements and is briefly handled in the next subsection. Ironically rationing was exactly what Managed Care and the Dekker-report wanting to prevent.

Aside from price and volume, contracting introduces administrative load and government regulations also add on to that. The government initiative [Ont]Regel de Zorg (de-regulate the care bureaucracy) and its associated office research what the administrative load was among various health care professionals. They polled how much administrative load was seen as reasonable and how much their current load was:

	Acceptable % of time	Actual % of time	Discrepancy
Specialised Medical Care	27%	42%	15%
Pharmacy	15%	33%	18%
Paramedical Care	19%	35%	16%
GP	17%	30%	13%
Curative MH Care	19%	37%	18%
District Nursing	16%	27%	11%
Geriatric Homes	23%	35%	12%
Disabled Care	22%	33%	11%
Youth Care	21%	41%	20%
Social domain	26%	43%	17%

Table 3.2.2: The acceptable amount of time care providers are prepared to spend on administrative work, followed by actual measurements and the delta between both.

(Source: *[Ont]Regel de Zorg Statusrapport Merkbaarheidsscan (2019, p. 5)*)

Table 3.2.2 shows that a substantial amount of time is spent on in day-to-day administrative work. The amount of time that is deemed as acceptable is also not unreasonable. The main complaints are doing duplicate work, differences among contractual obligations, the extensive detail and redundancy. It is quite obvious that even day-to-day operations of health care workers are inundated with bureaucratic hassle and not for quality concerns on the part of the insurer. Approximately 15% of

2212 time is wasted by care workers on administrative work that is not deemed necessary
and is a result of the care system. There are also serious implications to the freedom
2214 of health care practitioners due to these contracts, for there is much more to the
bureaucratic hassle. They are in part meant to track a care provider's actions
2216 and ensure generalised protocols are followed as required. This severely limits the
freedom in which a practitioner can act. The next subsection expands upon that.

2218 **The insured**

The Dutch are required to take a health insurance. Everyone pays into the system
2220 through taxes and premiums. They are free to choose their insurer and are free to
choose the type of contract (in-kind or restitution). Both come with their own terms
2222 as described earlier. Insurers that offer restitution contract have greatly decreased
with time and are substantially more expensive (van Wensen, 2021). Additional
2224 care can be insured through voluntary insurance or out-of-pocket. The freedom of
choice of health care has decreased, but still present and expansion of it comes at
2226 an extra fee. To put it bluntly, it seems that freedom can be 'bought'. Whether
this 'freedom' is at all affordable (and thus accessible) for lower income households
2228 requires a bit more investigation on the expense structure such as deductibles and co-
pay. Insurance policies come with a mandatory minimum and maximum deductible
2230 (385 to 885 euro) for all care that falls under the basic coverage and constitute
roughly 1-2.5% of the **gross**¹⁸ yearly modal income depending on the min/max
2232 deductible. An additional deductible of 250 euro applies for medication specifically.
Depending on the type of care (such as long-term or youth) an additional co-pay
2234 may be required, however co-pay is capped. The amount differs for long-term care
and can be anything between roughly 175-900 Euro per month depending on the
2236 ability to pay.

When considering the 'variety' or rather alternative treatments to freely choose
2238 from these have been increasingly curtailed. As the previous sections show, pro-
tocolisation and standardisation eventually exclude treatments from coverage that
2240 would be rejected by some but happily accepted by others. For example a herniated
disc can be managed with periodic physical therapy and exercise, but is not covered
2242 because surgery is considered cheaper and superior as 'cure'. Considering the risks
of surgery, the risks of the 'quick fix' not treating the underlying issue that caused
2244 the herniation in the first place, the benefits of structured exercise, the ancillary
benefits of regular contact with a health care professional (such as catching other
2246 health problems in early phases), the case for surgery might not be as evident as
it seems initially. Still, a person is 'free' to pursue the alternative, but does so by
2248 paying out-of-pocket.

What results from this and the previous sections is that although there is sub-
2250 stantial freedom of choice in theory, it is limited by the financial means of policy
holders. Worse yet, the various deductibles and co-pay schemes burden those of low
2252 income substantially and can justifiably be perceived as threatening. Freedom with-
out the means to exercise it is de facto a lack of freedom. This seems to be echoed by
2254 the numbers brought by NIVEL which concludes that 8% of people do not seek care

¹⁸Note that this is gross income, net income after fixed expenses in The Netherlands is on average roughly 50% of gross. From this income food, clothing, incidental, etc. expenses are excluded. Various co-pay and deductibles become a substantial chunk of income.

or reject treatment due to the costs (*Toegang tot Zorg, 2022*). Freedom, equality and solidarity it seems then not so strongly represented by the health care system. If the marginal tax pressure is also accounted for, which in The Netherlands bulges for the middle class, a conclusion one can make is that low to middle class income households participate most in solidarity. Freedom seems to be more in line with the idea that everyone is free to buy a Ferrari, but a luxury car is something else than the basic need of receiving health care. Even with access to a doctor, the question remains if the treatment remains affordable. In theory co-pay is income dependent to prevent destitution, but with already limited financial means the current system offers essentially two choices: 'your money or your life'.

Technology effects

An often named issue that affects health care irrespective of Managed Care is the technology effect. As technology progresses the possibilities in the field of health care are broadened. These advancements are often also seen as cost drivers in health care on one hand and labour saving on the other. In a recent report by the OECD technological advancement, on average, contributed 35% to the rise of health care expenses and is expected to add 0.9 percent points yearly to health care expenditure until 2030 among OECD countries (*Marino & Lorenzoni, 2019*). Technological progress seems not to be a measure for controlling costs. Productivity gains do not measure up to the costs technological progress within health care brings. This should not be misconstrued as an advice to prohibit implementing advancements in health care, an artificial pancreas is much better than an insulin pen in all measures, except costs. What should be remembered is that, counter to widely held beliefs, technological advancement in general probably is not the solution to cost issues. Contributing a third to the growth in health care expenditure is a significant measure and to be accounted for.

3.2.3 Policy and Protocolisation

Protocolisation finds overlap between policy and contracting. The BIG Act regulates titled health care practitioners such as psychologists, specialised doctors, general practitioners, physical therapists, nurses and so forth and covers a pretty much all care professions. Depending on their profession they are tied to their respective boards, such as the Royal Dutch Society for the Promotion of the Healing Arts (KNMG; Koninklijke Nederlandsche Maatschappij tot bevordering der Geneeskunst) which applies to doctors and stipulates their codes of conduct. These codes of conduct only stipulate proper conduct of their respective arts. For example the KNMG code 7 says: "*As a doctor, you provide good care in accordance with professional standards, including quality standards.*" (*Gedragscode voor artsen | KNMG, n.d.*). This might be misconstrued as way for contracting/protocolisation to creep in. This is not the case as the description of the code shows that it only applies to what supports practising the art, as an art and the art alone. As in having the proper qualifications, proper hygiene, proper ways of engaging with the patient, applying treatment with consent, etc.. Furthermore there are standardised guidelines to treatments. These are guidelines only and it is the doctor's prerogative to follow them or not, though following them must be with reason. Such a reason should not be any different than what is involved with following guidelines, the process should be

2300 identical and without compulsion. However, as one can imagine, code 7 combined
2302 with standardised guidelines might result in curtailing freedom of deliberation and
2304 choice. When the funding side also is considered then this actually becomes the
2306 case, as will be explained now. On the funding side there is the Health Insurance
2308 Scheme (Regeling Zorgverzekering). The law stipulates what falls under and what
2310 doesn't fall under the coverage of the basic care and under what condition. For ex-
2312 ample the ADHD medication methylphenidate (more popularly known as Ritalin)
2314 can freely be prescribed for the indication. lisdexamfetamine on the other hand is in
2316 a different list and can only be prescribed if all other medications did not result in
2318 the desired therapeutic outcome. As described earlier, governmental organisations
2320 decide which treatments are allowed and which treatments fall under the Health In-
2322 surance Scheme but do note footnote 11. For that there are methods put forth and
2324 guidelines to be followed. QALY (Quality Adjusted Life Year) is used as a method
2326 to calculate economy of care and play a deciding role on the coverage as well as
2328 price of care ([Zorginstituut Nederland, 2018](#)). The theory essentially can compare
2330 two different treatments. For example treatment A and B extend life 10 and 7 years
2332 respectively, but A offers half the quality of a healthy life, B gives 90% (noted as
2334 0.9) quality of life and no treatment means death. Treatment A would equate to 5
2336 QALY and B 6.3. It seems then B would be a "better" option. The concept is not
2338 a foreign one, and there can be something to be said for especially if the decision
is left up to the individual. Managed Care carries this further and economises this
by determining (through various polling and statistical means) what the monetary
value of a QALY is, the monetary value of a healthy life year.¹⁹ This system then
can be used for determining cost-effectiveness, thus affects in which list a treatment
is placed in and ultimately a determining factor on coverage. In practice, in The
Netherlands the monetary value of a QALY is not set in stone, however there are
guidelines ([Zorginstituut Nederland, 2018](#)). For example in the most severe case
the guideline is that the monetary value of a QALY is 80,000 (eighty thousand)
Euro. Taking the aforementioned ADHD medication example. A psychiatrist might
quickly realise that lisdexamfetamine is the right medication but has to burden her
conscience, burden the patient and burden the funding with needless actions (having
to first go through all alternatives before the appropriate drug can be prescribed).

2332 When this framework is combined with health care contracting, especially consid-
2334 ering budgetary limitations, one has to wonder. Due to contracting pressures and
2336 laws practitioners are more likely to follow protocols or are forced to follow protocols
2338 rather than follow what the art demands of them. A practitioner doing what they
think is right can result in litigation (due to regulations) or suspension of the prac-
tice (due to patient stop) or curtailment of their own income (due to contractual
requirement).

Another example are transformation agreements. Contracts between insurers
2340 and hospitals/medical-specialists also involve so called transformation agreements
in which the care provider is obligated to prevent, transfer or substitute the care

¹⁹The argument in defence is that a QALY is rather the amount one is willing to pay for a full
quality life year in respect of sickness. Measuring that happens within a set social order. As soon as
currency is involved in the current world order with different classes of wealth such measurements
are questionable at best and the averaging practice that is followed is disrespectful for life itself.

2342 within the terms of agreement ([Dohmen, 2021](#)). This doesn't mean denying care,
2344 cases that fall within those clauses are to be deferred to out-patient care (or what-
2346 ever the agreement postulates). In such a case the outcome might be identical to
the professional opinion of a doctor, but it has nothing to do with practising health
care anymore. When a deferral is made on those terms, it is no more a medical
decision, it is an administrative one. As such the doctor ceases to be a doctor.

2348 **Decentralisation of funding management for long term care**

The privatisation of the insurance market had the intention of creating a competitive
2350 field. Such a field is characterised of needing many players instead of few and results
in a form of decentralisation. The Dutch Government has introduced decentralising
2352 legislation for their own health care funding management too. It decentralised
long-term health care to the municipalities. Fifty years of cost control in Dutch
2354 healthcare. Part I: 1965-1995 and Part II: 1995-2020 shows that benefits of decen-
tralisation such activities can not be substantiated and the management costs due
2356 to decentralising the management of funding towards the municipalities to be **eight**
times higher ([K. P. K.-P. Companje et al., 2021](#)). This should not be misconstrued
2358 as a categorical rejection of decentralised systems or approval of centralisation. This
rather shows that decentralised management of health care funding seems to be have
2360 detrimental effects. Health care as a practice on the other hand is as can be seen
from the previous (sub)sections seems on the other hand to be centralised by being
2362 Directed in various ways. The insight what can be gleaned from this is that perhaps
the managing the funding must be centralised (whereas the practice of health care
2364 should be decentralised, or in other words 'Autonomous').

Costs of runaway Bureaucracy and Mistrust

2366 As has been shown, the administrative load and bureaucracy as at the least resulted
of 15% time less spent on practising care than acceptable. In response of this the
2368 government has recently started the "[Ont]regel de Zorg" initiative and is the lead-
ing organisation to standardise insurer side administrative demands and eliminate
2370 administrative load that does not serve the patient directly or indirectly. This quite
an important initiative because it underlines the fact that the practitioner and client
2372 are the central theme of health care, all other considerations are to be secondary.
Whilst this now only applies to administrative load it is a much needed gesture of
2374 conceding other interests in favour of the practitioner-client interest. Bureaucracy
also often leads to opacity and mistrust. In recent years government has stated to
2376 wanting to moving towards simplicity and transparency concerning its operations.
It allows independent auditing of financial streams and objectives. However, mis-
2378 trust is one of the biggest, if not the biggest, issue the current government faces.
The sheer amount of scandals the Dutch government has been shown to be involved
2380 in of the past several years is mind boggling. Mistrust of insurers is a prevalent
issue ([Stolper et al., 2019](#); [K. P. K.-P. Companje et al., 2021](#)). When considering
2382 that insurers operate in a free-market, their motivation for opacity is quite under-
standable. Knowing how tariffs are affected by various contracting constraints are
2384 only truly observed by practitioners them self. While more transparency on the
part of insurers will improve trust, the real question is if the required level of trans-
2386 parency is possible in a free-market system, for it would eliminate most competitive

advantages.

3.3 Conclusions

In this chapter I have reviewed the history of the funding of health care since the mid 1800's to its current form, and investigated the evolution of the costs of health care and freedom of health care since the introduction of Managed Care in the Netherlands. The Netherlands has had several modes of funding health care, with various outcomes in terms of freedom, costs, accessibility and quality. (Though quality seemingly remains a difficult to analyse topic.) At no point did the Dutch system have truly freedom in health care (that of choice and deliberation) and a funding modality that is in support of this. It seems that at any time some trade-off was made between the two, whilst this trade-off seems to actually have the opposite effects of what was desired in general. The Dutch government health care reforms of 2006 in favour of Managed Care, was perhaps the most drastic change of health care management in its history. It has resulted in a complex system that seems not to be able to achieve its stated goals of health care being affordable, accessible and of quality whilst having freedom of choice. Managed Care has come with cost inflation due to bureaucracy, the market structure and government's market mastering efforts. They are essentially 'free-market' costs (of something that seems not to fit in a free-market, at least not in the current state of affairs.). The reason for implementing principles of Managed Care is rooted in its perspective on man as exclusively utility maximising entities, which in turn means that both doctor and patient are self serving and requires man to be forced into a system that can direct maximising behaviour towards efficient outcomes. This system is controlled competition. However, following what comes from such a perspective on man (Managed Care) has resulted in a system where freedom has been severely curtailed, health care has become less accessible, quality to remain largely ignored and preventative care to be virtually non-existent. Worse, the aspect of cost reduction where it is unequivocally is certain about reducing has actually risen as can be seen in table 3.3. Note that this chapter does not give a exhaustive list of cost drivers linked to Managed Care. I expect that there are many others with complex interactions.²⁰

Looking at table 3.3 individually these increases in costs seem very small. The

²⁰In subsection 3.2.3 an example was given on ADHD medication. Core to the coverage policy is that methylphenidate can be produced as a generic drug whilst lisdexamfetamine can only be sold under branded names (Elvanse/Vyvanse). It's branded counterpart Ritalin is not covered unless circumstances demand it and can be justified by a psychiatrist. Switching to generic drugs has been associated with changes in therapeutic effect, requiring additional medical attention and processes of readjusting dosages. The additional costs associated with this curtailment of freedom is but superficial. Looking deeper there lie producers of inferior generic drugs such as Aurobindo and Sandoz.²¹ The myopic focus on cost control has allowed these companies to set target prices (in policy) and keep profiting. It should be of no surprise that Aurobindo buying a domestic producer of quality generic drugs (Apotex) and moving its production to India. The production facilities were ultimately not moved, because the COVID pandemic caused concerns over transferring knowledge and production capacity abroad as it was the largest supplier of pain medication for The Netherlands. A Dutch startup (InnoGenerics) was able to buy the company and keep the facilities local with some hefty financing aid by the Dutch government. This is but a single scenario that probably had, again, a minor contribution to cost that can, again, be led back to the core perspective on health care.

Factor	Effects
Complex system	Unknown loss due to friction
Long Term Care Act	15% CPI rise in 4 years
non-Solidarity	9% spread between low and high income households
Care → municipalities	8 fold admin costs compared to state managed
Oligopolistic market	Insurer Oligopoly and Provider Conglomeration
Insurer reserves	1% GDP liquidity trap
Insurer operation	+1.5% health care costs
Marketing	+1% health care costs
Dividends	+1% health care costs
Bureaucracy	+15% health care costs
Avoidance due to cost	8% of care seekers
Technology effect	+1% point to yearly growth of health care cost

Table 3.3: Overview of the effect of factors on health care costs as a percentage component. The table also includes some detrimental effects that are not a component of health care costs or can't be readily translated to health care costs.

In case of technology, measure of increased administrative costs with decentralisation of funding management to municipalities, liquidity traps due to reserves, spread of health care burdens between well off and not so well off households, etc. These components all relate to the previous (sub)subsections and are not an exhaustive list of all existing factors.

odd one out is bureaucracy which is easily measured and simple to understand, thus
2420 understandably resulted in '[Ont]Regel de Zorg'. However, many small cost drivers
2422 add up to something substantial and less evident cost drivers can remain hidden or
2424 seen as inconsequential. When these small cost-driving mechanisms are investigated
2426 more thoroughly it points towards a theme that is shared in common. What they
2428 have in common is a philosophy, the Utilitarian perspective on man. Note that being
2430 trapped in system that is designed considering man as Utilitarian might arguably
2432 require man to act Utilitarian, because it favours such behaviour. They have no
2434 other choice than to 'maximise utility', abandoning appropriateness for maximised
2436 consumption. It creates an impulse of infinite growth instead of appropriate size
2438 and application. Such a mind set is perhaps more appropriate to consumer goods
2440 and commodities rather than health and health care, for one is healthy or not
2442 and treated appropriately or in deficit or in excess. It does not have to be like
2444 this and has not been the case in the past. The Netherlands has managed price
limitations for hospital/specialised care and pharmacies before the Health Insurance
Act. This was achieved through so called covenants between government and health
care organisations (K. P. K.-P. Comanje et al., 2021). It wasn't perfect (which
was partially due to insurers meddling), but it had the intended effect (K. P. K.-
P. Comanje et al., 2021). Before the Health Insurance Act government had also
tried setting hard price constraints on hospital beds for stimulating in-patient to
outpatient substitution. This led to increased waiting times and unmet demand for
outpatient care which was of such magnitude that it could not be solved by throwing
money at it (K. P. K.-P. Comanje et al., 2021). The difference between the two
cases is that in the former freedom of deliberation was applied in which parties could
come to a reasonable agreement (with reason(ing)). The latter lacks 'the freedom of
deliberation and was more a decree that fits more with kingly rule. One can pose

that what here is being considered as a decree might be based on research. The
2446 problem with such a defence is that it is well known that these health care systems
researches for policy makers have been notoriously unreliable and/or inconclusive.
2448 The relative success of such covenants also points towards a willingness and ability
to understand to deal with the reality of the day. Not everyone might have been
2450 perfectly content with the outcome, but ultimately when looking back it seems to
have been the best possible one given circumstances. Covenants are therefore also
2452 an interesting topic for the proposal presented in the next chapter.

What is evident from all this is that the freedom promised by the system of
2454 Managed Care refers to the freedom of the utilitarian 'free-market' rather than to
(Aristotelian) freedom of deliberation for doctor and patient. Freedom of choice and
2456 deliberation in health care (between practitioner and client) are at best secondary.
In Chapter 2 section 2.5 Managed Care was linked with neoclassical economics and
2458 utilitarian principles. From that some expectations were formulated. It seems that
the empirical evidence supports those predictions for the Dutch health care sys-
2460 tem. Uncontrollable price inflation, decrease in accessibility, quality as a secondary
theme if any at all and curtailment of freedom in both choice and deliberation. The
2462 most significant differences between the U.S. and The Netherlands when it comes to
Health Care is that The Netherlands has more a much more regulated health care
2464 market with a higher degree of market mastering. Still, they are not adequate and
create other types of issues of their own.

2466 It might sound harsh but the Dutch health care system can be best characterised
as a system for controlling untrustworthy practitioners and untrustworthy clients
2468 through competition and strict government control in which ultimately the bill is
mainly picked up by the middle class and where lower income households could be
2470 faced with choosing between their life or livelihood. The irony is that the system is
heavily controlled by parties that are mistrusted them selves. The classification of
2472 the Dutch health care system as a 'separated mandatory private insurance system'
(per Toth's classification of health care systems) should be readjusted to 'heavily
2474 directed, pseudo-integrated, mandatory private insurance system'. With that, it is
clearly communicated that freedom of deliberation is not an intrinsic characteristic
2476 of the Dutch health care system.

Chapter 4

A different modality

2478

In Chapter 1 foundational principles for a different mode of funding have been presented. Chapter 2 presented intellectual history of the idea of Managed Care and some empirical data to contextualise it. In Chapter 3 substantial empirical data were presented to give insight into the Dutch health care system and how especially freedom, costs and accessibility have been affected by implementing Managed Care. In this chapter I propose, based on the insights gained from previous chapters, basic principles for a mode of funding health care that safeguards freedom of choice in health care. The chapter begins with a recapitulation of the problem studied in this thesis (in Section 1). The proposal follows in Section 2.

4.1 Recapitulation of the problem at hand

2488

In Chapters 2 and 3 we have reviewed certain problems associated with Managed Care that seem to be (logically) inherent to the system. Policies and systems are created with good intention but when they are not grounded in realistic and sound reasoning they may result in an end state that goes counter to the intentions. Realistic and sound reasoning is not limited to facts, figures and pragmatism, it equally involves being realistic in values and philosophies. Applying two different philosophies only results in hypocrisy and quite likely to a problematic end. This applies to how health care is to be structured, financed and provisioned. The previous chapters have shown this. Chapter 1 argues that any undertaking, including the organisation and practice begins with sound philosophy. The review in Chapters 2 and 3 of the problems associated with Managed care suggests that a health care system founded on Utilitarianism may not be able to prevent rising cost while protecting freedom of choice. And chapter 3 details its expression in the Dutch system. Surmised, an extensive privatisation combined with broad governmental and organisation control have formed a Pseudo-integrated Directed Compulsory National Insurance System¹ unable to contain rises in costs while significantly curtailing the freedom of practising medicine and running counter to its own values. Patients have limited freedom in choosing their health care professionals, whilst the health care professionals are in practice more limited in their freedom to treat than it seems, all for the purpose

2506

¹The Compulsory National Insurance System part of the classification is based on Toth's classifications and the Pseudo-integrated part refers to the additional classification suggested as in Chapter 2.12.1.

2508 of controlling costs, ineffectively at that (or at least woefully short of expectations)
and wasting precious resources.

2510 Let us start with the topic that seems to be the motivation of most policies,
costs. The current system drives costs in several ways. The most evident is the
2512 profit private insurers have to make for their shareholders (even though they are
not allowed to pay out dividends). Dividends payed out by a small section of health
2514 care also constitutes approx. half the total yield (monetary return on investment)
of health care as a sector and add roughly 1% to the total health care cost (see
2516 table5. Secondly, a wide range of staff and supporting staff have to be employed
to manage the operation of the insurer and is also needed to enforce the myriad
2518 of rules and systems of incentives patients and health care professionals operate
under. The administrative load on both patient and professional is time and money
2520 not spent on treatment, and thus is also a driver of cost. The system requires the
existence of a myriad of boards and advisory organs that advise on health care, assess
2522 risks of each insurers patient portfolio to fairly doll out risk compensated funding,
defend interests of various groups (patient, professional, insurer, government), pay
2524 for what is uninsurable and so forth. Furthermore, health care as a market seems to
conglomerate. This is best displayed by the insurer market being an oligopoly. The
2526 system has created an environment that wastes at the least 20% of resources that
can be readily quantified (see Table 5. Not counting all the governmental expenses
2528 on managing the market and losses that are associated with this.

While Costs are a well-known problem associated with the current health care
2530 system, a much less-recognised problem is its impact on freedom in health care.
Health care providers, more often than not, have to negotiate a contract with insur-
2532 ers. These contracts pose "quality and quantity" requirements, but end up being of
financial nature. Regulations, substitution clauses and budget ceilings infringe on
2534 practising the art of health care. Client's freedom of choice is curtailed and freedom
of deliberation is limited. Non-contracted care is often only partially covered or not
2536 covered at all. Contracting and (indirect) protocolisation can then homogenises the
care. How much choice and how much freedom for deliberation does one have when
2538 everything is homogenised?

Organisations such as the NZa and the Care Institute are so-called 'independent'
2540 organisations; therefore, they should be able to independently pursue their mandate.
However in the Dutch system, politics might have more say in determining what is
2542 covered than expected. The COVID-19 pandemic and recent scandals/news on the
dynamic between government and the RIVM have shown that this independence
2544 might not be that absolute. The democratic process already has the influence of
having a say in what the mandate should be, but due to the legislative process it is
2546 not limited to only setting a mandate.

As described in Chapter 3, Both insurers as well as health care organisations have
2548 consolidated among themselves in a bid to strengthen their bargaining power, while
the 'consumer' is not able to do this. The system requires heavy handed government
2550 control. Titans on the side of insurers, titans on the side of care providers and the
titan of government. All in a struggle with differing interest of profit, practising

2552 health care and social welfare respectively. The people are stuck in the middle, ill
informed and ill equipped to be a free-market agent. Stuck in a system where all in-
2554 terests are allowed to conglomerate power, except the people they are meant to serve.
Government within the system seems to want decentralisation based on free-market
2556 ideals, but market parties end up conglomerating where possible, with detrimental
consequences. When it tries the same with governance, through decentralising care
2558 through municipalities, it also has detrimental effects.

All that struggle, control and profit interest has led to mistrust. Practising health
2560 care according to one's conscience both on the client and practitioner side has be-
come challenging. The funding system turns out to run counter to what people hold
2562 as important values. Describing the system requires an Orwellian type of double-
speak. At the end of the day no one is satisfied except who reap the financial
2564 benefits. Half of the yield (monetary returns on investment) from health care being
payed out as dividends by a 7% minority is questionable at best. It is of no surprise
2566 that fraud is so rampant in the sector. The deterioration of moral values is only
natural, the system wills it.

2568 The Dutch health care system doesn't really have a funding problem, those are
only symptoms of a malfunctioning system. The root cause of the rising costs and
2570 declining freedom are the pernicious principles that form the foundation on which
the system is built upon.

2572 4.2 A Proposal for Funding Health Care - The Basics

2574 Many parties are involved with practising in health care, with complex inter-
relationships. Besides the practitioners and their clients, there are two other kinds
2576 of parties which can be grouped according to their purpose, which are, respectively,
funding, and organising / legislating. The funders and the organisers/legislators
2578 together could be called *facilitators*. The justification for this is that none of the
facilitators are actually practising health care. The legislator in a democratic system
2580 is allowed to, for example, effectively prescribe a medication to a client it has not
consulted with (through legislation on medication prescription). One could argue
2582 that it could be democratically decided that the legislator acts on behalf of the client.
However, a legislator can only decide about things that are generally applicable,
2584 while a practitioner (doctor) tries to find a solution that is appropriate for a specific
case which may differ from the 'average' in statistical studies. Making the legislator
2586 practice health care is also unfair to the legislator, because it puts an impossible
burden on the legislator. Giving medical advice is something to be done by a
2588 qualified practitioner on a case-by-case basis. **For health care to realise its end
it requires freedom for case-by-case deliberation, an insight gained from**
2590 **Chapter 1.** Because legislators and funders do not practice health care they can
also be no part of it other than to facilitate it and create the appropriate legislative
2592 and financial framework. They are limited to providing the means (i.e. the political
and financial support) required, but these means are not 'health care' of nature.
2594 Only then has health care the freedom to deliberate on how to make use of the

financial and legislative means to the best of its capability and capacity. This is the
2596 simplest basis for an Aristotelian health care system.

Inspired by the insights received through study of *Nicomachean Ethics* in Chapter
2598 1, an Aristotelian health care system is proposed here that assigns responsibilities
and sets clear limits to each group within systems of health care:

2600 1. **The legislator**

- (a) The legislator does not meddle with the content of health care.
- 2602 (b) Parliament deliberates and decides whether freedom of choice in health
care and freedom of deliberation on the part of the client and the health
2604 care practitioner are to be enshrined in law.
- (c) Parliament can deliberate on and decide the organisational requirements
2606 a facilitator has to fulfil, such as requiring it to operate as a non-profit.
- (d) Parliament can deliberate and specify conditions for on the funding of
2608 health care, such as:
 - 2610 i. How funding is accrued, such as solidarity through an income-based
taxation.
 - 2612 ii. How funds are assigned, such as a single-payer system that gives
restitution for (medical) services rendered.
- (e) Parliament can decide to put forth legislation requiring the medical pro-
2614 fession (rather than the legislator) to establish a procedure to ensure
health care quality.

2616 2. **The funders**

- (a) Funders do not meddle with the content of health care.
- 2618 (b) Funders are independent organisations.
- (c) A centralised organisation collects the funds through the channels and
2620 powers that have been granted to it by parliament.
- (d) Funds are transferred to an (independent) administrative organisation
2622 that is responsible for executing payments. The organisation that collects
the funds can be the tax authority (in which case it will not be made
2624 responsible for settling the health care payments) or an independent (non-
market, non-government) organisation.)
- 2626 (e) The administrative organisation receives requests for payment or restitu-
tion for payments made or bills received by the patient. After checking
2628 whether the services are rendered by a qualified practitioner, the funds
are transferred to the appropriate party without further questions.

2630 3. **Health Care (clients, practitioners, etc)**

- (a) The medical profession is responsible for ensuring the quality of health
2632 care. Practitioners can set up various advisory/oversight/research insti-
tutions to accomplish this goal. (Some examples: disciplinary boards to
2634 investigate cases of malpractice, a medicine evaluation board to evaluate
efficacy of medication, educational and research institutions for further
2636 developing practitioner capabilities/capacities.)

- 2638 (b) Practitioners are free to practice their profession as they see fit (within their given profession and in deliberation with the client).
- 2640 (c) A client's freedom to choose is paramount and of essence to a well functioning health care of quality. Clients require the freedom to leave 'bad' practitioners for 'good' ones. Subsequent waiting lines that might arise from this are merely a clear indicator for further research. Client choice is a natural and useful indicator for quality at the smallest resolution.
- 2642
- 2644 (d) Educators and researchers in the field of health care ensure the quality of education and research within their respective fields.

2646 4. All involved

- 2648 (a) All parties deliberate together on subjects concerning health care² such as:
- i. What are the means available?
- 2650 ii. What is possible with these means?
- iii. Where can additional means be found?
- 2652 iv. What is the role of technology and technological progress within health care and what should it be?
- 2654 (b) All parties ensure transparency.

2656 All of the above is simply a process of applying Aristotle's ethics. In its simplest terms the result on the question of how health care should be funded lies behind a simple concept: If flourishing is the end we seek, which we do, then for a health care system it is necessary to ensure the freedom of deliberation.

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2660 What is presented is an ideal that can be seen as unachievable. However, that is not the point, rather progress towards it *is*. Ironically that is exactly what flourishing means. We do not have to be at the final destination for eudaimonia, we just need to move towards it and appreciate that.

2662

4.3 Netherlands moving towards

2664 There are many issues within the health care system that can be changed for the better. Before going into the normative, the end goal must be made salient again. Those are the virtues and loop back to the foundation of philosophy. The subject here is organising a good health care system. What that means has been explained in the previous section. What is missing is specificity in relation to The Netherlands. What thus remains is its organisation in relation to widely held ideology specific to the Dutch. In this subsection the observations made in prior chapters is used in conjunction with the foundational principles of the previous section (4.2).

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²This requires the involvement of every member of society in one way or another. Conscious voting, well funded education and research, clear channels of communication (between parties), freedom, etc, are all necessary to make the system function well. "Team-work makes the dream work."

2672 Solidarity is that value which is much praised in The Netherlands. The Dutch
also value their individuality and is quite obvious within the culture. This might
2674 sound contradictory, but it means that solidarity is not limited to social sub-groups
and therefore blankets the entire country.³ From the *N.E.* emerges an image of
2676 society consisting of three realms of human activity: cultural life (the world of the
philosophers), the legal-political realm, and the economy. As Aristotle makes clear,
2678 liberty is required in cultural life, while economic life requires solidarity (or ‘justice’
as Aristotle calls it). Solidarity in health care means that the higher income groups
2680 pay for the health care services which the lower income groups need but cannot
afford. A social insurance system (per Toth’s definition) would not be appropriate.
2682 Rather a socially funded (single-payer) system of universal health care is an apt
one. Solidarity also means that the financial burden should be equal on a relative
2684 scale (and not in an absolute scale), making it income dependent. The fact that
currently the health care burden as a fraction of income decreases as one earns more
2686 income does not belong in a society that values solidarity. This is the case in The
Netherlands and if solidarity is still valued, then citizens may wish to correct this
2688 via parliament. The result will be: more funding for health care or more disposable
income for mid- to low-income households or a combination of both depending on the
2690 scheme. More funding towards health care could potentially result in a better health
care. Increasing lower-income households’ purchasing power instead is beneficial for
2692 the economy as those groups are generally known to have a lower propensity to save.
Note that according to [Cnossen \(n.d.\)](#) higher taxes do not mean lowering of living
2694 standards.

The market system of private insurance, even when well done, has unnecessary
2696 costs of various kinds and results in just as many ethical dilemma’s. Allowing private
insurers to generate income from health care insurance whilst the non-insurable
2698 risks are left to the public is questionable. Similarly, allowing profit generation from
health care while 8%⁴ of people cannot afford the health care they need is a situation
2700 whose desirability may need to be reconsidered. Arguably, such circumstances have
no place in the ideology of solidarity. In the current system government organisations
2702 have to deal with conglomeration of both health care practitioners AND insurers.
Laissez-faire policy would result in similar outcomes as in the U.S.. What remains
2704 is a single-payer system that does not meddle with the content of health care, an
autonomous health care system. As can be seen in Fig. 3.1 eliminating the insurers
2706 poses no serious systemic change. Much of the work which the insurers are doing
in a free-market system, like price discovery, risk equalisation, basic coverage, etc,
2708 is already being done by various governmental organisations. The reason for that
is again, solidarity. With that in mind, the insurers could easily be replaced with
2710 an institution collecting funds and an independent single-payer organisation. The
same goes for the municipalities, centralising their funding practices in the same
2712 single-payer would eliminate the eight fold management costs. To put it simple, the
funding of health care is to be centralised.

³Meaning that solidarity is not just held among farmers for only farmers or factory workers for only factory workers or any other sub-group for its own sake only.

⁴[Toegang tot Zorg \(2022\)](#)

2714 As for the practice of health care, practitioners should be freely practising their
art. Their only concern should be adherence to their code of conduct which extends
2716 only to the patient's welfare and the doctor's proper practice. Guidelines may be
helpful (especially, perhaps, for the less-experienced care-givers) but they may differ
2718 between different schools in medicine and should always be subject to open and
general discussion. In the 'healthcare market' and the system of Managed Care,
2720 private owners of capital strive to draw financial returns from health care. This
too, does not seem to be in line with the value of solidarity, nor with the value of
2722 freedom in health care. Meaning that for The Netherlands incidental profits (due to
how the system is organised) could be permissible on the practitioner side, though
2724 only in case those profits are reinvested into health care and without loopholes of
unreasonably high wages/bonuses. Effectively it means that practitioners -at least-
2726 operate as non-profit entities.

Clients require freedom of choice and with that have the freedom of deliberation.
2728 When this right is generally recognised, it could be formalised as a fundamental
right by parliament. Making it a right prevents creep of mechanisms/organisations
2730 to intentionally/unintentionally cross beyond their responsibilities. Unlike funding,
the decision making in the practice of health care is to be decentralised and can be
2732 better described as an Autonomous⁵ health care system.

4.3.1 Counter-arguments

2734 A reflexive reaction to my proposal – of centralised funding, decentralised (au-
tonomous) decision making and discussion of common issues between the three par-
2736 ties in health care (legislator, funders, and practitioners/clients) – is to say that it
is irresponsible and creates an opportunity to practitioners to abuse the system. It
2738 might be so in the reality of the current system (and perhaps even in the current
social system). On the other hand, government covenants with health care practi-
2740 tioners have had relatively good results (K. P. K.-P. Companje et al., 2021). Not all
parties were satisfied (though this had more to do with insurers), but it is a clear
2742 signal that deliberation when given the chance with well willing parties results in a
better outcome and is exactly what is predicted in this thesis. Budgeting becomes
2744 a political matter requiring active participation of citizens on deciding what is a
reasonable sacrifice for health care, the rest is entrusted to those who are responsi-
2746 ble for their own respective fields. All of this requires quite a societal change and
will probably take generations to fully develop while straining the developing sys-
2748 tem. However each step towards it is a step towards a health care that is good and
thus accessible, of high quality and affordable. These initial pains should be seen as
2750 growing pains rather than a negative.

The system that is proposed places independence of practitioners central. A criti-
2752 cism to this could be that practitioners could become unaccountable. A fair criticism
that already in current times is fairly well addressed. Amongst practitioners them-
2754 selves there already exist Medical Disciplinary Boards. On the judicial side there
are also protections and ways to litigate for accountability (of errors in Health Care

⁵See 2.1 for the definition of Autonomous health care systems.

2756 practice). Research can play a fortifying role in accountability, the proposal does
not put any barriers for independent watch-dogs to be set up for investigating any
2758 misgivings within Health Care and as a system. The Netherlands has for example
the National Ombudsman who fulfils a similar role in dealing with government and
2760 governmental organisations

Another counter-argument that is often made is the insatiable appetite for health
2762 care. This can be in terms of count and intensity. As in, one could demand health
care unnecessarily frequent (demand care for the smallest of things) and/or demand
2764 the most extensive of unnecessary care. First, let it be clear that this idea of the
insatiable client is one that originates from Utilitarian philosophy. Even though
2766 the demand is limited it could still be that the limit is unreasonably high. The
Dutch health care system already has a gate-keeping solution for this, the general
2768 practitioner. This need not change and the aforementioned covenants can remedy
demands of intensity. Managing the (unreasonable) expectations of a client is just
2770 as much practising health care as administering medication and is done through
deliberation. A curious characteristic of the Dutch that is positive in these objections
2772 is the general reluctance of seeking medical aid too soon. It is probably a remnant
of its Calvinistic past.

2774 One question that will inevitably be posed is 'what to do with the myriad of
governmental organisations such as the NZa and the Care Institute'. These organ-
2776 isations will probably need restructuring. Certain operations such as negotiating
with insurers will have no purpose, but can repurposed according to their exper-
2778 tise, it would be a waste to not do so. For example departments that are meant
to negotiate with insurers can be repurposed for improving the communication be-
2780 tween Health Care and government/politics and with that facilitate the striking of
covenants.

2782 Scarcity of means is also a counter-argument that is given. Even if everything
is organised as it should be, the fear is that there are not enough resources and/or
2784 it requires too much of a sacrifice. It is a very understandable fear, but instead of
running away from it, this fear should be engaged. By open deliberation certain
2786 limitations become acceptable and spur on independent free research to find ways
to mitigate them. This can be done by, for example, research on improving health in
2788 general and preventative care, requiring less care in later years. Another example,
on the financial side, is research on capital flows to find unreasonable accumulations
2790 of it. For the latter example I have written an extensive report which can be found
in Appendix B and emphatically encourage reading it.

2792

Chapter 5

2794

Conclusion, Discussion and Recommendations

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Managed Care finds its origin in Dr. Ellwood's Health Management Strategy and was put forth as a system/method to control costs, expand freedom of choice, ensure quality and accessibility of health care. The application of Managed Care in the U.S., arguably the most liberal application, seems to have failed on at least two fronts, namely that of cost and accessibility. Something could also be said about the freedom of choice, however the U.S. was not the focus of this thesis. The Dutch health care system also transformed to implement a form of Managed Care which is bridled by expansive legislation and strict government control. The major difference that can be attributed to this is that proper health care is a constitutional right in the Netherlands, which then falls within the responsibilities of government.

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In The Netherlands the policy reforms seem to have failed on the front of cost control and freedom of choice. The failure on the cost control is made evident through The Netherlands not achieving their budgetary goals year on year, a steep CPI growth after implantation of health care reforms and expansion of health care costs both privately and publicly. Some examples of this have been analysed: from the effects and relations concerning privatisation to the financial burdens of policy holders. Although the research done here is not conclusive, the evidence strongly supports the claims made in this thesis. The most important market extrapolations of the Dekker-report and its theories (of Managed Care-like reforms) leading to a competitive market has been shown to be false, with a confirmed oligopolistic insurance market as well as conglomeration among health care providers as the ultimate result.

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Profit incentive combined with contracting caused the implementation of all sorts of statistical methods and control mechanisms that result in generalised protocolisation. This inevitably meddles how health care is practised. The care provided by contracted practitioners are thus not dependent on what the practitioner in concert with the client think is best for their particular case but probably follow predetermined protocols. Government regulation compensates this by essentially forcing coverage of alternative treatments/medication as long as protocols are followed. While this does theoretically expands freedom of choice, but comes at a cost as the right treatment might not be the initial treatment (as required by the protocol)

2826 requiring additional followups.

2828 By applying Managed Care, health care has been made to be a profit maximising industry requiring extensive control between client & insurer, which is done by extensive government oversight, and between insurer & practitioner, which too requires extensive administration. Both profit maximisation and associated extensive bureaucracy also inflate costs and limits the freedom of both client and practitioner 2830 without any effective benefit. Not to mention all the ethical dilemma's they cause. 2832 A quick recap of adverse results and their effects:

Factor	Effects
Complex system	Unknown loss due to friction
Long Term Care Act	15% CPI rise in 4 years
non-Solidarity	9% spread between low and high income households
Care -> municipalities	8 fold admin costs compared to state managed
Oligopolistic market	Insurer Oligopoly and Provider Conglomeration
Insurer reserves	1% GDP liquidity trap
Insurer operation	+1.5% health care costs
Marketing	+1% health care costs
Dividends	+1% health care costs
Bureaucracy	+15% health care costs
Avoidance due to cost	8% of care seekers
Technology effect	+1% point to yearly growth of health care cost

Table 5: Overview of the effect of factors on health care costs as a percentage component. The table also includes some detrimental effects that are not a component of health care costs or can't be readily translated to health care costs.

In case of technology, measure of increased administrative costs with decentralisation of funding management to municipalities, liquidity traps due to reserves, spread of health care burdens between well off and not so well off households, etc. These components all relate to the previous (sub)subsections and are not an exhaustive list of all existing factors.

2834 The conclusion is that the application of orthodox market theory in health care has not achieved the goals that were set out for it. What can be tentatively said 2836 that a non-profit type privatisation could function as long as covenants are respected and transparency is present. The final conclusion is that The Netherlands should 2838 aim for a Universal Autonomous Health Care system. Here everyone has the right to health care which everyone pays into and its funding is managed in such a way that 2840 health care providers and seekers are free to determine what is appropriate without force from a third party.

2842 Through the lens of Aristotelian philosophy the practice of health care is one that requires deliberation and the freedom to do that. Primarily because health care is 2844 complex, resides in an ever-changing field and its practice is an art. By creating the environment that is conducive to freedom of thought and action/choice both 2846 practitioner and client are given the opportunity to choose what is right. With this theses In this thesis I have undertaken a first investigation into the question whether

2848 the undesirable effects of Managed Care (on costs and freedom) could be avoided
by replacing the utilitarian foundation of the current health care system with an
2850 Aristotelian philosophical foundation. By starting from the penultimate question of
human life a whole new understanding and standpoint was piece by piece built for
2852 the health care system.

Managed Care tries to limit freedom in the name of keeping costs down. However,
2854 if the practice of health care is free in considering and applying the means to do
what is right in its widest sense, then this should per definition result in the best
2856 possible scenario. Freedom of deliberation combined with transparency is likely to
or is expected to improve both cooperation and efficiency while also exposing and
2858 suppressing malicious intents and actions.

So far the landscape has turned into titans clashing, alas Chronus could devour his
2860 own children only for so long. Here Chronus is not the government, not the health
care providers nor the insurers. It is the philosophy at the core of the health care
2862 system.

5.0.1 Weaknesses, Limitations and Recommendations

2864 This thesis is primarily a thought piece with substantial, but not conclusive,
empirical analysis. There are several themes where it fails when considering the
2866 goals that had been set out to achieve at the start.

Limited depth of empirical analysis

2868 Several detrimental effects such as the 1% GDP of liquidity trap and 8% of people
of need not seeking the appropriate health care due to costs remain un-quantified
2870 and some lack a clear effect measure. The problem of satisfying such deficits is that
it requires a many fold increase in research load. The goal of the empirical analysis
2872 was not to unequivocally prove and exhaustively quantify detrimental effects, but
rather to cast a wide perspective to reasonably substantiate the premise. The result
2874 seems to warrant much more in-depth research. Not only in terms of quantification
of said effects but also to do research on the mechanisms behind rising costs. Quite a
2876 few of the subjects presented in Chapter 3 have already been extensively researched
(such as wasted resources due to bureaucracy and dividends) but several have not
2878 enjoyed such research.

My recommendations would be to research first and foremost how contracting
2880 affects the day-to-day decision making of practitioners, such as how much time and
labour is wasted on bureaucracy. Some informal meetings with several health care
2882 professionals (I have had) hint that this topic will probably yield some important
conclusions. [Engelen et al. \(2023\)](#) seems to have done a similar investigation and
2884 indeed yielded quite shocking results. Unfortunately I have come across his article
at the end of my thesis and could not include it in a meaningful way . Furthermore,
2886 the effect of health care costs due to the Long Term Care Act is also poorly un-
derstood. The octupling of administrative costs and the sharp rise in CPI shortly
2888 after (< 1 year) might be a sign that here too are some interesting results to be
found. The price effects of the oligopolistic insurance market and conglomeration of

2890 health care providers are also yet to be quantified. The same goes for the liquidity
trapped as insurer reserves. The scarcity counter-argument that often is put forth
2892 is a subject that warrants further investigation of economic surpluses and finan-
cial streams. Labour saving due to technological progress, for example, creates a
2894 (labour) dividend. This is a good target for investigation, especially concerning how
these dividends are distributed in the economy. Do they finance cheaper products,
2896 or do they result in a labour surplus driving wages down while other sectors such
as health care suffer from shortages? An important aspect those researches should
2898 include is the philosophical aspect. Appendix B gives some insight into a similar
subject of institutional cash pools where vast amounts of liquidity are stored with
2900 no real purpose other than storage.

Linking theory and empirical evidence

2902 The thesis starts with the theoretical claim/hypothesis that the problems in Man-
aged care are related to the theoretical (utilitarian) foundations of the underlying
2904 economic theory. Whilst, Chapters 2 and 3 present empirical material that supports
or at least does not falsify this hypothesis, there is little coupling back to the theo-
2906 retical foundations other than Chapter 2.5 where the link with theory is superficially
addressed.

2908 What arises from this is that it is not clearly answered that the rising costs of
Dutch health care, declining accessibility, declining freedom and consumer sovereignty
2910 are related to the neoclassical market mechanisms and not due to Managed Care's
managed market competition. Their differences, or rather their commonalities and
2912 their theoretical basis that that is linked to these effects are thus insufficiently pre-
sented. At its core my hypothesis is that health care when considered as a market
2914 product is a peculiar one in neoclassical terms. The demand for health care is on
the individual level not continuous (an exception could be made for preventative
2916 care). One only needs health care when one is sick and is not in the know what
their individual risk is. Furthermore, depending on the severity of malady the util-
2918 ity curve for health care can become infinitely steep (up to the utility level of the
remaining lifespan in case of a life threatening situations). This opens the door for
2920 near infinite growth of health care prices (your money or your life). When health
care becomes in-affordable, it becomes de facto inaccessible. Furthermore, health
2922 care treatments are not like other goods for consumption such as apples and phones.
'Consuming' more or less of an antibiotic or choosing for a different one is dubious
2924 at best and life threatening at worst. In neoclassical context this brings funda-
mental problems where products are homogenised and no 'alternative' exists. Such
2926 homogenisation (which is an essential requirement in neoclassical economics and for
the models to hold) limits the freedom of choice and threatens consumer sovereignty.
2928 In such context there is only one treatment, it is the maximised treatment, and the
only treatment that should be applied. Alas, these themes have not been further
2930 explained. Currently there are sufficient publications that can be used to link these
themes on a theoretical level and link theory with empirical evidence. Compiling
2932 and developing them would complement this thesis significantly.

Linking Aristotle's Philosophy and Economics

2934 The development of an Aristotelian economic theory was envisioned on the outset.
Quite quickly it became evident that such an endeavour when done correctly would
2936 constitute a thesis in its own rights. As such I have refrained from developing an
incomplete economic theory based on Aristotle's philosophy but to present an Aris-
2938 totelian funding modality. However there is much benefit in revisiting the economics
theme, especially for guiding future research in the right direction. Aristotle gives in
2940 *Nicomachean Ethics* and *Politics* all that is necessary to develop an economic theory.
Book V of *Nicomachean Ethics* is a good point to start from. Especially in chapter 5
2942 and onward can be used to develop an essential part of economics, price formation.
Aristotle states the importance of differing goods/services, including quality and
2944 quantity, being commensurate and that equating with money serves that purpose.
Price setting is made before an exchange, where beforehand a seller has determined
2946 what the just price for their product is (the same goes for the purchaser). Finally
a price can be struck in the exchange. This has many features of what we consider
2948 free-market exchange, but has a crucial difference in the nature of those who are
setting their prices. The setting of price is not on profit/utility maximisation ('how
2950 much can I get away with'), but one based on virtuous people engaged in what is
considered to be just (and reasonably justifiable). In a sufficiently populated market
2952 with appropriate consumer protection these things can be left for the markets to
decide. However, in problems arise when it is difficult to determine this just price.
2954 Aristotle has an answer for such scenario's and can be derived from how one seeks
justice in the face of injustice. Aristotle gives the example of a magistrate that can
2956 determine as an independent thirds party what a justified requital would be (and
is something that can be under continuous review). This idea is not foreign to The
2958 Netherlands. The NZa for example already does create pricing guidelines for med-
ication, treatments, hourly rates, etc.. A similar tradition has been implemented
2960 since 2006 for civil servant wages, the Balkenendenorm, limiting salaries of civil ser-
vants to 130% of a ministers' salary. In Aristotelian economics there would be thus
2962 two distinct domains of price setting (including those in the factor markets). One
domain can carefully¹ be relegated to 'the market' and the other (where 'what is
2964 just' remains up for debate) is guided by guidelines². Through these mechanisms the
self-interest of each person is protected while respecting their relation to the 'other'.
2966 The Aristotelian economics I present is incompatible with orthodox economic the-
ory, however it does not upend most economic interactions we already practice as
2968 humans on a day-to-day basis. The reason for this is, I think, is because at our
core, we seek *eudaimonia* above all else and use our sense of justice in that pur-
2970 suit (amongst other things). These economic ideas still need further development
and formalisation to form a true economic theory, both of which are unfortunately
2972 lacking in this thesis.

¹Under labour, consumer and environmental protection regulations

²Guidelines pertain to primarily wages and can be determined in various ways, such as an NZa setting a guideline for remuneration level of various medical professions.

5.1 Closing remarks

2974 Philosophy stands at the base of all of our human endeavours. Malfunctions in
social systems such as health care but also economics seem to stem from, ignoring the
2976 importance of philosophy and/or faulty application of philosophy and/or following
pernicious philosophies³ and/or indifference to them. I present here but one view
2978 that welcomes challenge, or rather deliberation, for that is the mode of progress.
As such, I part with these words: A life well lived is walking on the path of choosing
2980 what is right freely towards a unifying goal, an ideal. The goal has been set on the
horizon, the path is on this sphere we call the universe and round and round we go
2982 merrily for all eternity.

³I do not take saying this lightly.

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Appendix A

Legend and explanation for Fig.

3.1

Involved Parties:

- **Citizens/Residents** pay taxes to the state and premiums to insurers for funding (the health care system). Non-Citizen residents, depending on their legal status are eligible and in some cases even obligated to take part in the health care funding system.
- **Employers** and **Social security providers** both are income sources that are also taxed separately for funding. Citizens/Residents, employers and social security providers are the initial sources for funding.
- The **State** is the central source of funds distribution. Tax incomes are funnelled to the state and subsequently doles out funds to municipalities and various independent administrative organisations according to governing regulation. The only direct payment to providers it does is under the Public Health Act (28). It also provides income dependent subsidies to the insured.
- **Municipalities** in the Netherlands have become responsible of administrating various social health care regulations. Excluding the Health Care Insurance Act, they are the intermediary link between for public funding of health care between the state and other organisations.
- **Insurers** are private profit/non-profit/ organisations or foundation that receive funds in the form of (1) premiums and (7) risk equalisation contribution to pay for what is covered by the Health Insurance Act. Part of the premium can also be from an additional voluntary insurance that provides additional coverage. Depending on the policy contract, insurers pay providers costs directly under terms of health care contracts or to the policy holder as a restitution or provide the restitution to the provider as a proxy.
- **Providers, Youth specific care** and **GGD/other** are the parties that ultimately receive all the funding for the practice of health care. Each fall under different regulations. The GGD (Municipal Health Service) focused on general social health themes and execute various programs on guarding and improving social health.

- 3284 • **Care institute** (Zorginstituut) is an independent administrative body with
the mission to ensure quality and accessibility of care through efficiency and
3286 quality standards. It acts as an advisory organisation for the state. They are
responsible for defining the Basic insurance coverage, provides ⑦ equalisa-
3288 tion contribution as a risk compensation for insurers in case the health care
risks of its portfolio of policy holders is skewed, pays providers ⑨ availability
3290 contribution to pay for the availability of expensive resources such as aerial-
medevacs.
- The **CAK** (Central Administration Office) administrates funding of what falls
3292 within the Long-Term Care Act and Social Support Act. It does this in co-
operation with the **NZA** (Dutch Care Authority) and the Offices of Care. It
3294 also administers over the centralised funds for long-term care and social care.
 - The **Dutch Care Authority** is an independent administrative organi-
3296 sation and fulfils several roles. It supervises the execution of long term
care and lays down regulation where is needed, sets price limits in care
3298 (tarifs in free market segments), distributes budgets to **Offices of Care**
for contracting long-term care, sets contract conditions and transparency,
3300 imposes administration and information obligations, enforces them
 - **Offices of Care** instruct the **CAK** to make payments to providers and
3302 transfers co-payments¹ into the a central fund administered by the CAK.
- **SVB** is the Social Insurance Bank. They administrate the funds according to
3304 whatever legal framework the transactions fall under.
- The **RIVM** (National Institute for Public Health) is comparable to the Amer-
3306 ican CDC. It as independent agency of the Ministry of Health, Welfare and
Sport. It conducts research and has an advisory role for the promotion of
3308 public health and a safe living environment.

Individual streams (sourced from [Argumenten Fabriek \(n.d.\)](#)):

- 3310 • ① Obligatory insurance premiums, voluntary insurance premiums and deductibles pay-
ments.
- 3312 • ② Restitution for care payments in 'Restitutie' insurances.
- 3314 • ③ Basic health care insurance subsidy. Depends on income and can possibly cover the
entire insurance expenses.
- ④ Taxation of income, split according to the relevant regulation.
- 3316 • ⑤ Taxation of income, split according to the relevant regulation. It is the part contributed
by the employer.
- 3318 • ⑥ Co-payments (capped) and out-of-pocket payments to the provider.
- 3320 • ⑦ Risk equalisation contribution, to compensate for insurers that have a portfolio of policy
holders with a skewed health risk.
- 3322 • ⑧ Payments on the terms of a contract or a restitution (depending on the insurance type)
- ⑨ Availability contribution to pay for the availability of expensive resources such as aerial-
medevacs.

¹Note that in the Netherlands co-payments capped.

- 3324 • (10) State contribution to Health Insurance Act and Long-Term Care Act.
- (11) Co-payment (capped).
- 3326 • (12) Funds related to personal budget. For example a budget to cover home nursing a client can utilise to pay for an approved institutions of choice.
- 3328 • (13) Funds for (payed in-kind) contracted care.
- (14) Transfer of co-pay.
- 3330 • (15) Payment for provided care.
- (16) Payment for provided care.
- 3332 • (17) Co-pay (capped)
- (18) Transfer of co-pay for tailored (to the patient) care resources.
- 3334 • (19) Payment for provided care.
- (20) State contribution in accord with the Social Support Act, Youth Act, Public Health Act.
- 3336 • (21) Funds related to personal budget in accord with the Social Support Act, Youth Act
- 3338 • (22) Payment for provided care.
- (23) Out-of-pocket payments to the provider (if applicable).
- 3340 • (24) Payment for provided care.
- (25) Payment for provided care.
- 3342 • (26) Payment to parents/guardians that manage the care to whom they have guardianship.
(23) can be sourced from this stream.
- 3344 • (27) State Contribution.
- (28) State Contribution.
- 3346 • (29) Payment for provided care.

Appendix B

3348 A curious case of scarcity: 3354 Institutional Cash Pools

3350 It might seem that the age old sayings suggest that being happy under a bridge
3352 with friends rather than alone and depressed in a villa is one that still applies. No
3354 matter where one stands on this proverbial description, it also forces a conceptual
3356 false dichotomy. It is fairly simple to put forth a narrative that the advice given in
chapter 4 is impossible and that there is not enough money to finance it. In essence
saying that due to scarcity there wouldn't be enough means. The following example
of Institutional Cash Pools will show that this might not be that "natural".

In the previous chapter health care insurers were found to have substantial solv-
3358 ability and the sector as a whole can be seen as managing an institutional cash pool.
These types pools of cash are a form of stagnant wealth and warrants a methodical
3360 analysis.

The 2007-2008 Financial crisis had a significant impact on the world economy.
3362 To put it very bluntly: A surplus demand for safe and stable investment vehicles
3364 combined with securitization which seemingly offered safe fixed income investment
3366 and the rise of the real-estate market formed a vicious feedback loop. It saw to
the real-estate market bubble which was followed by an inevitable pop. When the
3368 market for securitized products crashed it dragged all of its investors with it into the
abyss of the Financial Crisis. Opinions on why it happened differ between schools of
3370 thought in economics. Still, many of them can be bundled into a litany on greed and
ineptitude forming almost a nihilistic view on humanity. However, others look at
why there was so much money flowing into this market. The answer to that question
is Institutional Cash Pools, which also is the problem and possibly a solution.

3372 Institutional Cash Pools (ICP) are centrally managed, short term cash balances
in excess of \$1 bln US ([Pozsar et al., 2011](#)). They are of global non-financial corpo-
3374 rations, foreign exchange reserves and institutional investors such as asset managers
and pension funds ([Pozsar et al., 2011](#); [Aronoff, 2016](#)). ICP are a fairly recent phe-
3376 nomenon, where before the 90s they were insignificant in size, by 1997 they had
grown to an estimated \$2 trillion US ([Pozsar et al., 2011, 2015](#); [Di Iasio & Pozsar,](#)
3378 [2015](#)). This growth didnt slow down in the following years. Just before the crisis
hit, ICPs had mushroomed to an estimate of over \$5 trillion in Q2 of 2007 ([Pozsar](#)

3380 et al., 2011, 2015; Di Iasio & Pozsar, 2015). These pools kept on increasing in size
 throughout the crisis and are estimated, conservatively, to total over \$6 trillion US
 3382 in Q4 of 2014 (Di Iasio & Pozsar, 2015). To put it in perspective: The size of ICPs
 in Q2 2014 was practically equal to the 2014 GDP of Germany and France, com-
 3384 bined (OECD, 2014)! More than a third of US 2014 GDP (OECD, 2014). Another
 important aspect of ICPs are their secular growth, meaning, they keep on growing
 3386 and dont go through a cyclical boom-bust trend (Pozsar et al., 2011, 2015; Di Iasio
 & Pozsar, 2015).

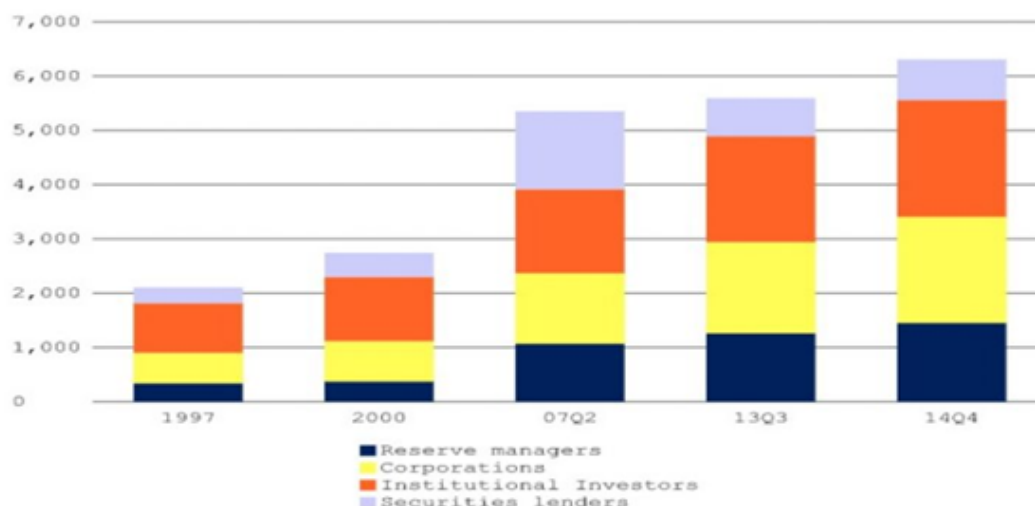


Figure B.1: Institutional Cash Pools by type, y-axis is in billions of dollars (Pozsar, 2014, p. 25)

3388 The centrally managed nature of ICP means that Cash Pool managers are bound
 by rules of their respective institutions Table B.2 gives some insight on the invest-
 3390 ment prioritisation of institutions with cash investment policies.

Prioritized Order of Short-Term Investment Objectives <i>% of all institutions with cash investment policies (over 75% of institutions).</i>							Institutions with Cash Investment Policies <i>% of institutions with revenues of over \$1 billion.</i>					
	2006	2007	2008	2009	2010	2011	2006	2007	2008	2009	2010	2011
Safety	-	67	80	86	74	80	92	91	95	94	86	89
Liquidity	-	17	18	14	25	16						
Yield	-	16	2	-	1	4						

Source: Annual AFP Liquidity Surveys 2006-2011, Pozsar (2011)

Figure B.2: Institutional Cash Pools' Prioritised Investment Objectives (Pozsar et al., 2011, p. 8)

3392 As can be seen in the table, there are three simple goals for a cash pool managers:
 The first and foremost mandate is Safety of Principle, meaning that there should
 be minimal to no risk of losing the principal investment, the money (Pozsar et al.,

3394 2011). The second mandate is Liquidity, meaning that investments should be easily
accessible and convertible into money for transactions or other investments (Pozsar
3396 et al., 2011). The third and by far of least importance is Yield, getting a return on
investment (Pozsar et al., 2011). Storing an ICP as a bank deposit is not realistically
3398 possible. Reason for this is that (commercial) bank deposits are only insured to a
limited amount. Up until 2010, insurance on bank deposits in European insured
3400 banks were 60,000 Euro and \$100,000 in the US. This amount is a far cry from
the size an ICP. There is the option to spread the pool across multiple banks, but
3402 that is not a real solution for several reasons. One of them is that there are not
enough insured banks to cover the demand (Pozsar et al., 2011). To make it worse
3404 the amount of insured banks had been decreasing from 15,000 to 8,000 from 1990
to 2010 respectively in the US (Pozsar et al., 2011). Thus the degree ICPs can
3406 be spread across insured deposits is extremely limited. There are of course other
factors, amongst others: tax considerations and concentrated/central management
3408 prevent storing cash pools spread over multiple bank deposit (Pozsar et al., 2011).
After 2010 the insured amount has increased to \$250,000 in the US and 100,000
3410 Euro in Europe, but this is still is not an adequate solution. For all intents and
purposes, uninsured bank deposits are seen as the most junior form of investment
3412 for ICPs. Outside of central bank foreign exchange reserves (FX) no other ICP has
access to central bank deposits. The final outcome is that ICPs by and large are
3414 stored outside the regular banking system.

The next best options are short term government instruments such as govern-
3416 ment bonds and treasury bills (Pozsar et al., 2011). Instruments originating from
trustworthy governments satisfy the safety aspect and being of short term assures
3418 liquidity and safety. Furthermore these types of investment vehicles have a fixed
face value, guaranteeing a fixed amount of cash come maturation. In some cases
3420 they also offer a degree of yield, depending on the originating government. For some
ICP such as pension funds, yield is an important requirement after safety. Pen-
3422 sion funds need yield to be able to cover their future promises to their investors.
Because of this, pension funds prefer long-term government bonds which have a
3424 better yield (Pozsar et al., 2011; Di Iasio & Pozsar, 2015; Aronoff, 2016; Di Iasio &
Pozsar, 2017). However, the problem is that considering the size of ICP there are
3426 not nearly enough government instruments to cater the ICP glut for safe, in most
cases short-term, instruments (Pozsar et al., 2011).

3428 An example of how ICP can influence economy is the Dollar surplus the Chinese
central bank has. To stimulate economic growth China has pegged their currency,
3430 the Yuan, to the US dollar at a fixed rate (Aronoff, 2016). Chinese exporters who
receive dollars as payment exchange them for Yuan at the central bank for the fixed
3432 rated to pay labour and other domestic costs. By doing this it can keep the Yuan
weak, export is stimulated and consequently industry grows. However the Chinese
3434 central bank is left with a substantial reserve of foreign currency, US dollars. Like
any other ICP it prefers safety first, liquidity second and yield third. In this case
3436 it is best served to buy long-term government bonds (Aronoff, 2016). Preferably
it buys US debt as it is the most secure investment with a yield and buys this
3438 on large scale (Aronoff, 2016). This strategy is shared amongst many other ICP
that exist. The effect is twofold, it crowds out any other potential buyers and the

3440 high demand depresses bond yields ([Aronoff, 2016](#)). Both effects are disastrous for
ICP such as pension funds, who are struggling to meet their future obligations to
3442 their investors as is. This also explains the period of growth of securitised products
market. Seemingly safe investments with good returns. Which ended in the crisis.
3444 To be very clear, this is not an accusation of financial warfare by China. In a
landscape where no other alternative strategy is available it becomes hard to play
3446 the blame game. To summarize, ICP need safe and liquid investment vehicles.
Which in most cases are short-term and in other cases long-term when yield plays
3448 a role (such as pension funds). Bank deposits and the supply of government bonds
are insufficient to cater the immense size of ICP. Now put one and one together and
3450 it becomes clear how and why ICP money flowed into the real-estate market and its
derivative products. Herein lays the root of the Financial Crisis. ICPs had to find
3452 an alternative solution to cater to their needs. The only option left for ICPs is the
private market ([Pozsar et al., 2011](#); [Di Iasio & Pozsar, 2015, 2017](#)).

3454 The growth of ICP and their secular growth prompt another question. How is it
that such institutional savings can show such growth rates? Although this might
3456 seem to be a very complex question in actuality it is rather simple. There are only
two ways to grow a saving:

- 3458 1. By printing money
2. By accruing money

3460 Since no one can print money willy-nilly for them self without incurring the wrath
of law enforcement, the only way left for savings to grow is accruing it over time
3462 from other sources. Money for all intents and purposes is finite at any given moment
and its growth is tightly regulated. If ICP grow faster than the (global) inflation
3464 rate then it is taking this wealth from some-where/one else. So who is losing in this
game. [Palma \(2009\)](#) shows one of the reasons, for the US. The stark realization
3466 [Palma \(2009\)](#) presents is that the bottom 90% is the big loser here.

Fact is that the income of the bottom 90% have been stagnant between the 70s
3468 and 2000s all the while the top 1% income has been growing. This inequality trend
has not broken yet. In the United states between 2009 and 2015 the bottom 90%
3470 income grew with 3.9% while top 1% income grew 7.7% in the ([Statistics / Internal
Revenue Service, n.d.](#)). Note that the 3.5% growth has not been adjusted to the
3472 growth of the population growth of the 90%. Higher income levels have a lower
marginal propensity to consume. Subsequently the liquidity left is invested on the
3474 financial markets or is kept in a form of store of value (like certain ICPs).

Palma 2009 also shows that corporate savings have been declining, especial as of
3476 1977. Which is rather curious because at the same time corporate capitalisation
rockets versus replacement cost of tangible assets with a Tobins Q of 2.5 in 2007
3478 ([Palma, 2009](#)). All the while the size of the financial market in the US grows versus
GDP while private investment stagnates in the same measure ([Palma, 2009](#)). And
3480 in the midst of this ICPs are still growing fast.

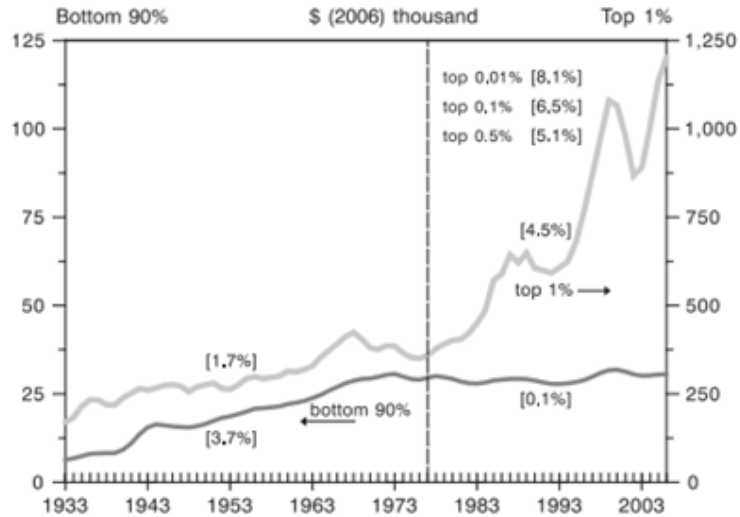


Fig. 6. Average income of the bottom 90% and of the top 1% in the USA, 1933–2006. Percentages are average annual real rates of growth between 1933–78 and 1978–06. Includes capital gains. Three-year moving averages.

Figure B.3: (Palma, 2009, p. 71)

These are quite concerning findings globally but also for the Dutch economy. Insurer solvency might seem small in the grand scheme of things, still it adds another 1% Dutch gdp equivalent. As has been shown, small leakages pile up and can come with serious consequences. Other countries with similar systems might be contributing to the issue and/or might be more affected. Furthermore it also poses a real question on how far the scarcity argument can be stretched in light of these cash pools, their purpose and method of accumulation. These are all topics in need of further investigation. Clarity in how these pools exactly form, their sources, mechanisms (such as technological progress and decreased profit share with labour) and just as importantly clarity on why can be useful understanding the extent and justification of certain notions of scarcity.

3492

Appendix C

Thesis Proposal

3494

C.1 Introduction

3496

It is the mark of an educated mind to be able to entertain a thought without accepting it.

-Aristotle

3498

The Netherlands is a wealthy country and prides itself for having a top notch health care system. However, rising health care costs are threatening the accessibility, quality and freedom of choice in health care. Since 1968 cost cutting/controlling measures have become an ever increasing topic of importance in health care funding policy (Vonk, 2013; K. P. Companje et al., 2009; R. M. Bertens & Vonk, 2020; R. Bertens & Palamar, 2021), but to date the various policy changes seem to not be able to resolve the cost issue (Okma & Crivelli, 2013; R. M. Bertens & Vonk, 2020; R. Bertens & Palamar, 2021).

3506

Since 1941, Dutch society has transitioned through various funding modalities with an ever-increasing emphasis on cost reduction as the leading principle, but with very limited success. The current system, which is very similar to Managed Care, was introduced in 2006¹ with the explicit goal of reducing the cost of health care, seems not to have succeeded in reducing (the growth of) health care costs. Moreover, its emphasis on control (managed care) seems to negatively affect freedom of choice in health care while its effects on the quality of health care remain uncertain.

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Is the (over-)emphasis on cost reduction *cum* control in health care related to the failure to consider the (deeper) goals of the human being? According to philosopher Alasdair MacIntyre, the conception of human life as having a goal set by human nature has been rejected since the Enlightenment. This has important implications for how we organise society, including health care, because it is hard to organise something effectively when one does not have a clear image of the goal one is trying to achieve.

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3516

3518

¹The process took many incremental policy changes. It can be traced back to the Dekker-committee report of 1987 and subsequent policy changes, with the biggest change being in 2006. Note that the current Dutch system (and future plans) has many aspects of Managed Care but is still different in comparison with that in the United States. The U.S. system can be characterised by a near unfettered health care market, unlike its European counterpart. See footnote 2 for more detail on this.

3520 The aim for this thesis is to investigate whether and to what extent the difficulties
in containing the costs of health care are related to the philosophical foundations
3522 of how health care is currently funded. Furthermore, I will examine whether health
care could remain affordable without negative effects on the quality, accessibility
3524 and freedom of choice by applying a different philosophical foundation (and a cor-
responding alternative mode of funding).

3526 Such a new modality of funding health care will be informed by and based on
Aristotelian ethical philosophy. Without an alternative philosophical perspective it
3528 may prove impossible to arrive at a standpoint from where a goal for health care
can be formulated as well as its funding. The main question this thesis sets out to
3530 answer is thus *whether the Dutch health care system can remain affordable by means
of a new funding modality without negatively affecting (a) freedom of choice in health
3532 care, (b) the quality of health care, and (c) the accessibility of health care.*

The envisioned method is to apply Aristotle's philosophy of *eudaimonia* as pre-
3534 sented in *Nicomachean Ethics* and sections from *Politics* (if need be) to come to
a standpoint from which goals for health care can be determined, and to review
3536 Aristotle's writings to discover the nature and purpose of medical care. Based on
Aristotle's insight into the essential features of health care, it will be possible to
3538 find a corresponding mode of funding. This requires a solid understanding of Aris-
totle's philosophy and determination of key requirements for eudaimonia and how
3540 society is to be organised (in context of funding health care) in order to meet these
requirements. Then by research on the Dutch system of funding health care (and
3542 the history thereof) the aims of current health care policy will be compared with
the aforementioned requirements (for eudaimonia and medical care). Finally, rec-
3544 ommendations will be given for a mode of funding health care that respects these
requirements and is also compatible with Dutch culture.

C.2 Literature Study

Health care in The Netherlands prior to 1941 was mainly funded through decentralized private sickness funds, with only a government safety net as a last resort (for basic care) for the poor and those facing destitution (R. M. Bertens & Vonk, 2020). From 1941 to 1987 the Dutch system evolved into socialized system in which government increasingly took more control to ensure accessibility, quality and especially to dampen increasing costs (R. M. Bertens & Vonk, 2020; R. Bertens & Palamar, 2021). Not being able to keep increasing costs under control the Dutch government started moving towards a wholly new concept of funding health care, namely a (controlled) privatised health care 'market' and a system resembling Managed Care, both of which are based on a recent branch of NCE called *Healthcare Economics*. Note that European Managed Care is somewhat different from its U.S. counterpart.² In the Dekker-commission report of 1987 the belief was that a privatised market would lead to flexibility, efficiency, freedom of choice and cost control. Although privatisation was not a goal in and of itself, the belief was that exposing health care to market forces would be an appropriate remedy for what was seen as a rigid, non-innovative health care system that lacked freedom of choice and suffered overrunning costs (Commissie Structuur en Financiering Gezondheidszorg, 1987). The freedom of choice envisioned was that a patient could freely choose an insurer and an insurance, and freely choose a doctor for the care they needed. In this system the government was to function as a market master to guarantee broad access to health care and quality there of (R. M. Bertens & Vonk, 2020). The Health Insurance Law (Zorgverzekeringswet, Zvw) of 2006 is a recent and perhaps the most significant policy change to the health care system of The Netherlands. With the Zvw, it is mandatory for every citizen to take a *basic* insurance with a private insurer which covers a broad package of health care and can voluntarily be supplemented with additional broader coverage of various types (considered as a luxury). While health care is privatised, the government has broad control over many facets of the field including, but not limited to the coverage of the *basic* insurance, min/max deductibles, standardised care fees and systems for risk compensation (on the part of insurers). The result is a complex system where the market is privatised within publicly set boundary conditions. This system has the hall marks of Managed Care which are, to name a few, reducing/eliminating services that are deemed ineffective or unnecessary, selective contracting, economic incentives and utilisation reviews.

The aim for this thesis is to investigate to what extent the policy measures have reduced the costs of health care without compromising freedom of choice in health care. The starting point of purpose is thus deemed superior to the end point of utility maximisation. The main question for this thesis is whether the cost problem

² Managed Care is, as it alludes, a system to manage how health care is provided. It is a product of Healthcare Economics, which breaks down the provision of health care and its funding according to NCE principles. Health care is thus *just* another industry in a free market system and Health Care economics is the study of this market. The U.S. is one of such countries where where Managed Care is applied. Citizens are themselves responsible for the funding of health care in a privatised health care market. (The U.S. does have government provided insurance programs such as Medicare and Medicaid to insure low income households, the disabled, veterans, civil servants and senior citizens. They currently cover roughly half the population) In European countries, such as The Netherlands, the provisioning of health care is a state responsibility and universal. Meaning that not only economic factors/theory but also political factors play a role in decision-making concerning health care funding (and factors of provisioning such as coverage).

3584 in health care could be solved by starting at the beginning; that is, not the cost end
(the outcome), but the goal and nature of health care (the philosophical starting
3586 point).

Health care, including the funding of health care, requires commitment. However,
3588 Utilitarianism, the philosophy underlying conventional (Neoclassical) economics,
"appears to provide no place for genuinely unconditional commitments" (MacIntyre,
3590 interview in Voorhoeven (2009), p. 116):

"Take, for example, the commitment of a parent to a child of the form:
3592 'however things turn out, I will be there for you.' Such a parent is com-
mitted to caring for his or her child, even if the child is gravely retarded
3594 or delinquent. This parent accepts that this child is her or his respon-
sibility, whatever the consequences of assuming that responsibility. It
3596 is essential for a child's development that the parental attitude should
take this form, for only in a relationship structured by this commitment
3598 does the child enjoy the security and recognition it needs to develop.
And this type of commitment there are quite a number of others is not
3600 compatible with a utilitarian calculation of the overall expected balance
of good over bad consequences of devoting oneself to caring for the child"
3602 (MacIntyre in Voorhoeven (2009), p. 117)

MacIntyre *"... concludes that it is only by trying anew to formulate an end*
3604 *for human life in the Aristotelian tradition that we can hope to arrive at a stand-*
point from which we can rationally evaluate claims about what is morally required"
3606 (Voorhoeve 2009, p. 114115). If this is not done, and the Utilitarian tradition is
upheld in the form of Neoclassical Economics and Managed Care, it will inevitably
3608 result in the degradation of any value not in line with consequential-ism, in partic-
ular to the degradation of commitment to the goal of health care, and of freedom of
3610 choice in health care.

If every human being values and strives for good health and society has committed
3612 itself to assisting/providing this in an affordable way while also safeguarding (the
values of) quality, broad access and freedom of choice; this begs the question which
3614 mode of funding health care would safeguard the quality, accessibility and freedom
of choice in health care? It is at this point where economics and policy come in
3616 play. The Netherlands (like other countries) struggles with undeniably growing cost
of health care. The solution is sought in a cooperation between the state and the
3618 'free market' that is called 'Managed care'. The question for this thesis regards the
impact of this alliance on costs and on freedom of choice in health care. If costs do
3620 not fall while freedom is reduced, there is reason to look for an alternative way of
organising and funding health care.

3622 C.3 Research Questions

3624 The research questions centre around five themes. The first research question regards
3626 the goals of health care and is philosophical in nature in from the point of view of
3628 Aristotle's ethics. The second centres around the analysis of the theory of Managed
3630 Care. There is a theoretical and philosophical basis to which this theory relates
3632 and is based on. Managed Care also makes certain promises based on its theory
3634 such as cost reduction through a *health care market*. A review of its history and as
3636 theory is required to understand and contrast theory and reality. The third question
3638 regards the accounting of the Dutch health care. Literature on its history will be
3640 gathered to create a general picture on costs, accessibility and freedom of health
3642 care until 2006 for a general overview. The health care system from that point
3644 on to date is the subject of analysis for this thesis. From 2006 and onward the
3646 health care system operates under the same fundamental principles, therefore the
focus will be on its current state. Any significant changes will still be included, such
as the change from AWBZ (General Law Extraordinary Care Costs Act) to WLZ
(Long-Term Care Act). Literature and descriptive statistical data will be used to
analyse and compare the Dutch health care system with what has been learned from
the previous research questions. The fourth research question is themed around a
solution for funding health care that would safeguard freedom of choice in health
care and fit Dutch values while avoiding further increases in the costs of health
care. Aristotle's philosophy is taken as a guiding principle in this quest. These four
themes and their research questions should sufficiently cover the entire spectrum of
knowledge required for a problem-solution analysis of a socioeconomic issue on a
Msc. thesis level. The following questions will be investigated in this thesis; the
results will be described in four main "main matter" chapters:

3648 RQ1 What is the purpose and nature of health care, and how does it relate to
Aristotle's concept of eudaimonia?

3650 RQ1.1 Which goal(s)/commitment(s) could be derived from the Aristotelian
concept of eudaimonia for health care systems?

3652 RQ1.2 What are/is the requisite(s) that is/are required to achieve goal(s) found
in RQ 1.1?

RQ1.3 What role does the theme of freedom play?

3654 RQ2 What defines Managed Care?

RQ2.1 What is the history of Managed Care?

3656 RQ2.2 On what philosophy is it based?

RQ2.3 What are its operating principles?

3658 RQ2.4 What are its goal(s)?

RQ2.5 How does it function?

3660 RQ2.6 What is its mode of funding health care?

RQ2.7 What is the role of freedom in Managed Care?

3662 RQ3 How has the Dutch health care system fared with the introduction of Managed
Care principles?

- 3664 RQ3.1 What is the history of the Dutch health care system?
 RQ3.2 How does the current Dutch health care system operate?
- 3666 RQ3.3 What are its goal(s)?
 RQ3.4 What is its mode of funding health care?
- 3668 RQ3.5 How does the Dutch health care system compare to Managed Care?
 RQ3.6 How have the costs of health care evolved, and is there a relationship
 3670 with the nature of the Dutch health care system?
- RQ3.7 How has freedom of health care evolved, and is there a relationship with
 3672 the nature of the Dutch health care system?
- RQ3.8 What is the revealed definition of freedom in the Dutch health care sys-
 3674 tem?
- RQ3.9 How does technological progress affect the cost of health care?
- 3676 RQ4 What would define an Aristotelian health care system tailored to Dutch values?
 What would be the role of freedom of choice in health care, and which mode
 3678 of funding would safeguard this freedom?
- RQ4.1 How do the problems associated with Managed Care compare to the
 3680 insights into the nature and purpose of health care, and into the require-
 3682 ments of good health care distilled from the Nicomachean Ethics (at the
 end of Chapter 1)?
- RQ4.2 What would the relations between the various people/parties involved in
 3684 a health care system be in an Aristotelian health care system?

C.4 Approach and Chapter Overview

3686 The preliminary literature research shows that there seem to be serious issues with
 the status quo of health care funding in The Netherlands. I will investigate whether
 3688 issues in health care funding can be linked to the conventional economic principles
 underlying the current health care system, and whether turning to Aristotelian
 3690 philosophy could aid in finding a modality for funding health care that can result in
 viable improvements/solutions for the problem at hand. Engaging this issue requires
 3692 the handling of the aforementioned themes. Aristotle's philosophy is the foundation
 this thesis will build on (where it applies).

3694 The thesis is planned to be structured as follows: The Proposal will be the
 introduction to the thesis. After that the chapters will follow. Their structure will
 3696 resemble the structure of the research questions, in principle. In practice there might
 be deviations. The chapter structure will be as follows:

From ~~the~~ matter Executive Summary

Introduction The Proposal

3700 Ch. 1 From Aristotle to health care systems

Ch. 2 Managed Care

3702 Ch. 3 The Dutch health care system: foundation and systemic issues

Ch. 4 Solutions

3704 Ch. 5 Conclusion and Discussion of limitations of research and suggestions for further research.

3706 This chapter structure is provisional and subject to change as the thesis progresses. It will be the guideline unless there is substantial reason to alter them. For
3708 chapter 1 Aristotle's philosophical work will be analysed, limited to Nicomachean Ethics and Politics. Where the balance between the two lies is yet to be determined and a natural process. The chapter will be based solely on his work, and his work alone. No interpretive/explanatory literature will be used. Neither will
3710 literature/theories explicitly applying Aristotle's ethics. The reason for this to limit the various possibilities of externally biasing interpretation/analysis. Several translations will be also investigated to limit translator's bias, though preferably one translation will be used, accompanied with a justification. Chapter 2 will be a historical analysis of managed care, its (theoretical and practical) principles and what it manifests when applied as faithfully as possible. The former will first take in depth
3712 review of Managed Care's history and the latter will be a general overview, because detail will be left for the Dutch health care system. If at any point more literature study is needed on health care as a system and/or historical analysis is not enough, then it will be included in this chapter (Ch. 2). The third chapter is dedicated to a historical review of Dutch health care spanning from 1800's to at the least 2006. If a further chronicling is necessary, that will also be done. Though it is not expected
3714 because the period from 2006 to date seems to be a further continuation/refinement rather than systemic change. How the second part will look is yet to be determined by what can be gleaned of the knowledge gained. Though, it will involve a wide overview of the present health care system, economic and other systemic issues. The theme centres around freedom and funding. In Chapter 4 I propose a mode of funding that safeguards the nature and purpose of health care (according to Aristotle)
3716 while avoiding further cost increases. The fifth chapter summarises the results and discusses the limitations of my research, and gives suggestions for further research.

3732 C.5 Research Method

This thesis will be a desk research and mainly a thought piece. Literature research
3734 is primary in the first two chapters and fourth chapter. The third chapter also involves (descriptive) empirical data. The methodology can be best described as using reasoning with theoretical philosophy in conjunction with real life data (empirical data, sociological data, policy data and economics) to come to practical solutions
3736 for current day problems.

C.6 Relevance

3740 C.6.1 Scientific

The scientific relevance of this thesis comes from the attempt to reconnect *everyday*
3742 economics with Aristotelian philosophy. This doesn't mean that economics has

become devoid of philosophy. Rather, it largely has become a mono-culture of a very
3744 limited and specific type of thinking (Utilitarianism). This makes it susceptible to
being blind to its faults, stunts creative alternative thinking and above all makes it
3746 the victim of dogmatic thinking. As many scholars will agree, dogma is the bane of
freedom of thought and science. By looking at consequences of the current modality
3748 and what the possibility is when philosophy is leveraged will provide researchers an
example of how the field of philosophy can be utilised in *everyday* economics. Although
3750 the thesis will not contain any new empirical analysis and is reliant on the results
of others, it however does compare empirical data and outcomes with Aristotelian
3752 philosophy. The result is a value judgement based on the absolute scale of ideals
rather than only the relativistic scale of positivist science can provide (by measuring
3754 subjective variables).

C.6.2 Social

3756 The social relevance of this thesis is quite intrinsic to its nature. The flourishing
of man is central to this thesis, investigating how this flourishing can/should be
3758 supported by economics. Eudaimonia is dependent on goods and services which
are part of the economy, but also on good health care. Without access to good
3760 health care and freedom of choice in health care members of society are losing their
capabilities to flourish and have a good life. Health care is one of those fields that
3762 plays a vital societal role, and the question how its funding affects the availability
and freedom of health care are of utmost social importance.

3764 C.6.3 Management of Technology

At face value one is fair in questioning the relevance of this thesis in relation to MOT.
3766 However a look in the curriculum reveals that all facets of this thesis relate in one way
or another with many courses in the MOT program. The aforementioned themes
3768 directly relate to the Economics and Finance specialisation and the Social values
course. Furthermore the MOT program underlines the value of multidisciplinary;
3770 and considerations of social impact are present in almost all courses. This thesis is
set out to combine economics and philosophy to research health care and even the
3772 role of technology, not only to answer a specific question but to provide a broadening
of vision.

C.7 Timeline

