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(How) do patients choose a healthcare provider?

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(How) do patients choose a healthcare provider?

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**(How) do patients choose a healthcare
provider?**

(Hoe) kiezen patiënten een zorgaanbieder?

Proefschrift

ter verkrijging van de graad van doctor aan Tilburg University
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1

Introduction

Background

Towards a demand-driven healthcare system

In several Western countries, such as the Netherlands and the UK, patient choice of healthcare providers has become an important policy theme over recent decades.^(1,2) Previously, patients were regarded as passive recipients of care. At present, however, patients are empowered to be in control of their own care and to coordinate the delivery of healthcare in accordance with their needs and preferences.⁽³⁾ One important change, for instance, is that patients are being given more freedom and opportunity to choose the healthcare provider they prefer. Various measures have been taken to that end, such as the publication of comparative information about the quality and cost of providers.⁽⁴⁾

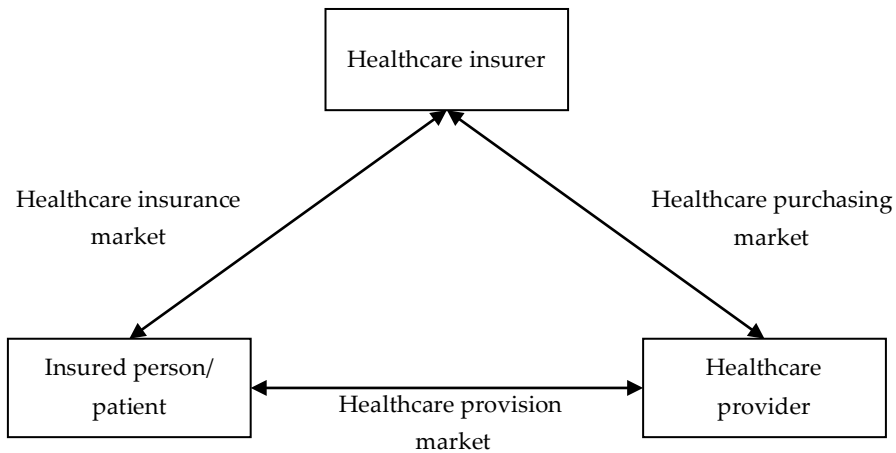
There are two main reasons why patient choice of providers is such an important topic on the policy agenda. Firstly, it is an important goal in itself. Empowering patients by giving them the opportunity to choose a provider freely that fits their needs and preferences lets patients organize their own care; this is assumed to lead to a better patient experience.⁽⁵⁾ Secondly, patient choice of providers has an instrumental goal. Critical patients can act as a counterbalancing force against providers, because they encourage providers to compete with each other by adjusting the care they deliver. Ultimately, policy makers argue that this will lead to more responsive, efficient, equally accessible and higher quality care.^(2,6) This thesis tests the assumptions of policy makers regarding patient choice of healthcare providers against the reality. It provides insights into patients' healthcare provider selection processes and investigates if a relationship exists between these processes and subjective quality of care.

The healthcare system in the Netherlands

In the Netherlands, patients have always had a free choice of healthcare provider, although choice was not actively supported in practice. Comparative quality and price information about providers was scarce and the referring doctor usually decided where to send the patient; this was most likely to be the nearest provider or the one they had connections with.^(1,2) In the 1970s, the Dutch government set itself the aim of explicitly developing policy on patients and legislation for patients' rights. Over the years, various patient rights have been formulated in different laws, such as the right for information and the right to choose a provider.⁽⁷⁾ However, it took until 2006

before the healthcare system was reformed and patient choice of providers became a key element for generating competition between care providers.⁽⁸⁾ The reform was mainly supported by two acts: the Health Insurance Act (Zvw) and the Act on Market Regulation in Healthcare (Wmg). Three interdependent regulated markets have been introduced in healthcare in which providers, insurers and patients were assigned new roles (Figure 1).⁽⁹⁾ The government defines the rules to create and sustain a free and fair healthcare market.

Figure 1 The three regulated markets in the Dutch healthcare system



In the healthcare provision market, well-informed and critical patients are supposed to choose actively which healthcare providers they prefer. As will be explained below, this is assumed to encourage providers to compete for patients, ultimately leading to more efficient care at a higher level of quality. Patient choice is enabled through several measures, such as providing comparative information about individual providers with respect to access, cost and quality of care.

The second market is the healthcare purchasing market. Here, healthcare providers who offer a high value-for-money ratio are contracted by insurers. This also encourages providers to compete, this time for insurers, again leading to more efficient care of higher quality. Insurers are expected to be prudent buyers of healthcare on behalf of the people insured with them, because existing market imperfections mean that patients will not be able to make completely rational choices of providers.⁽³⁾ There are various indicators

that insurers can use in this purchasing process; information about price and quality of care (including patient experiences) are the most important of these, considering the goal of competition between providers.

On the healthcare insurance market, critical and well-informed members of the public are obliged to buy individual health insurance from a private insurance company. The benefits of this basic health insurance are specified by law. It covers care by GPs and consultants, as well as medicines and hospital care.⁽¹⁰⁾ For each “basic insurance product”, insurers are obliged to accept every applicant and to charge the same price to everyone. Premium subsidies make basic health insurance affordable for everyone and a risk-equalization system compensates insurers for insured parties with predictably high medical expenses.⁽⁸⁾ In addition to the basic health insurance, people may choose to buy supplementary insurance covering care that is not included in the basic health insurance. People have to make a choice annually between private health insurers and their insurance products. Insurers compete on the basis of premiums, service, and the quality of care offered by the providers they contracted on the healthcare purchasing market.⁽¹⁰⁾ Since people are expected to base the selection of a health insurance company on the price of the insurance and the quality of care that is offered through the insurer, market forces are expected to encourage insurers to compete for the favour of the insured parties, ultimately resulting in an increase in quality of care for a good price. If people’s current health insurer does not offer high quality of care and/or has a high premium, patients can leave that insurer and opt for one who, in their view, provides a better offer.

Theoretical framework

Choice in policy theory

The assumption that critical patients make providers (and insurers) compete with one another, leading to more efficient and better care, is based on two theories: the theory of managed competition developed by Enthoven⁽¹¹⁾ and Hirschman’s organizational theory.⁽¹²⁾ The theory of managed competition is drawn from neoclassical economic theory.⁽¹¹⁾ Applied to healthcare, neoclassical economic theory assumes that critical patients in a competitive healthcare market make rational choices among competing providers under perfectly informed conditions.^(3,6,13,14) In this thesis, this way of choosing is

called “active choice of healthcare providers”. It means that patients use comparative information about all available alternative providers to deliberately choose the one that will maximize their benefit. Providers, who are aiming to maximize profits, compete to obtain and retain patients as their clients by adjusting the care they deliver to suit patients’ needs and wishes, because the money follows the patients.^(3,6,13,14) Those who provide the best and least costly care are rewarded by patients choosing to receive care there, while those who provide less than optimum care are punished by patients going elsewhere.⁽⁶⁾ In the end, competition between providers should lead to a sustainable, responsive and efficient healthcare system with equally accessible, high-quality care.^(2,6) The expectation that patients “punish” a provider by going elsewhere if they are not content with the care delivered there is based on the organizational theory developed by Hirschman.⁽¹⁵⁾ According to this theory, patients can “vote with their feet” by choosing another healthcare provider if they are not content with their current one (exit). However, although the exit of some patients is an essential way of giving a provider feedback that triggers an effort to improve, the remaining passive patients provide it with the funds needed for the improvement.⁽¹²⁾

Although neoclassical economic theory assumes perfect markets, in healthcare - as in many domains - perfect markets do not exist. For instance, there is often little or no usable comparative information about the costs and quality of providers. Consequently, patients are normally not able to make completely rational choices.^(3,16) To solve this issue, competition in healthcare is “managed”.⁽³⁾ The central idea of managed competition is that a “sponsor” such as a country’s government, acting on behalf of the patients, establishes rules to create and sustain a free and fair healthcare market.⁽¹¹⁾ For instance, the sponsor provides comparative information about the costs and quality of the care delivered by healthcare providers.

To induce competition between healthcare providers, a significant proportion of the patients need to be critical about the quality and costs of providers. Policy makers assume that a variety of societal changes mean that today’s patients are indeed critical healthcare consumers who want the opportunity to choose. This relates to patient choice as a goal on its own right. Relevant changes in society are e.g. that welfare and education levels are rising, people are being given opportunities to choose and freedom of choice in areas other than healthcare and (because of the Internet) information about many issues including healthcare is easily accessible.

Consequently, policy makers argue, patients are developing into better informed, critical consumers with distinct preferences about the care they receive. They ask for freedom of choice and the opportunity to choose in order to organize their care and let it fit their needs and preferences. Reforming the healthcare system into a demand-driven system with more choice opportunities for patients is the response to these developments.⁽¹⁷⁾

Choice in practice

It is generally assumed that the opportunity to choose enhances our lives.^(18,19) Studies do indeed indicate that there is a positive association between having free choice and satisfaction. For example, freedom of choice in general is positively associated with life satisfaction,⁽²⁰⁾ freedom of choice for the type of healthcare provider is positively associated with patients' care experience⁽⁵⁾ and freedom of choice of treatment is positively associated with quality of life.⁽²¹⁾ However, Amyx, Mowen and Hamm found no difference in satisfaction between patients who had a choice of physician and those who did not.⁽²²⁾ Findings about how important patients think a free choice of provider is are mixed. For instance, although Anell⁽²³⁾ found that two thirds of the patients wanted to choose their primary care physician and hospital, a study by Johnson, Schnatz, Kelsey and Ohannessian indicates that only half of patients with no choice of obstetrician/gynaecologist would have liked to have had a choice.⁽²⁴⁾

Although patient choice is a prominent policy issue and having a free choice is valued by at least some patients, research indicates that patients often visit the default or standard provider, rather than actively choosing a healthcare provider. They will, for instance, visit the nearest provider, the one they always go to or the one their GP referred them to.^(1,16,25-28) The default effect exists not only for health-related behaviour, but also for a wide range of domains such as retirement saving and organ donation choices. It means that people do not take action or (in the patient choice context) do not make an active choice of a provider, simply taking the standard option without having thought about it deliberately.⁽¹⁶⁾

Several concepts and theories described in the literature might explain the fact that patients often go to the default provider. One such theory is the organizational theory of Hirschman, which assumes that patients who are not satisfied with the performance of a healthcare provider can either leave (exit) or stay and attempt to improve the services by giving voice to their dissatisfaction (voice). Whether or not to stay largely depends on the degree

of loyalty of the patients to the specific provider (loyalty).⁽¹²⁾ Patients only make an active choice of provider when they have no history with a specific care provider and are confronted with an open choice between a number of possible care providers, or are not that loyal to their current one. In that situation, patients can “vote with their feet” by choosing a healthcare provider that they prefer. However, satisfied or loyal patients are likely to stay with their current provider.

Annemarie Mol provides other explanations for the fact that patients often visit the default provider. She makes a distinction between the “logic of caring” and the “logic of choosing”.⁽²⁹⁾ Logic is described as a “meaningful coherent cluster of ways of thinking and doing”. The logic of choosing is consistent with the workings of free markets, where autonomous people make their own choices between certain specific, clearly defined products. It does not fit well into the day-to-day reality of healthcare. Instead, the logic of caring describes the ways of thinking and doing in healthcare, where it is not about choosing, but about caring. Consequently, patients are not bothered about the choice of a provider. Instead, they tend to focus their time and energy on their health problem, while relying on the expertise of their doctors to treat them in the best possible way. The patient and physician work together as a team to optimize the patient’s health. Besides, care is not a product but a process that patients follow from their first request for care until the end of their treatment. This is called the “healthcare path”. The result of this process is often unknown. Consistently with the logic of caring, it can be expected that patients do not normally have the opportunity to choose a provider themselves. For instance, patients’ healthcare paths often do not allow choices because going to a provider for treatment is not an isolated incident. Instead, visits to providers form a sequence of interconnected events (e.g. going to the GP, receiving a diagnosis and treatment at a hospital) without any clear opportunity to make a choice, particularly not one that is independent of any care previously received. Consequently, being loyal or trusting the GP to choose a provider might be the norm rather than the exception.

When patients do have the opportunity or reason to choose a healthcare provider themselves, many of them might not do so in the way expected by policy makers. In addition to the fact that not everyone wants to have unlimited choice, as pointed out by Barry Schwartz,⁽³⁰⁾ people do not make completely rational choices. One reason why decision making systematically deviates from full rationality could be that market imperfections exist in

healthcare, for instance the scarcity of usable information to guide the choice of providers.⁽³⁾ In addition, people may not have enough cognitive abilities to make rational choices. Decision making is therefore subject to biases and heuristics to simplify the choice problem. For instance, patients focus on only a subset of the available information or providers, opt for the first alternative that is satisfactory, and are loss averse (meaning that they are biased in favour of the reference situation, for instance the current hospital).^(15,16,31,32) Consequently, taking the default option seems to be the most logical course of action.

Differences between patients

Although patients often visit the default provider, there are differences between patients in the choices they make. The literature indicates that the choices that patients make depend on various factors. For instance, although greater distance from a patient's home address and not being the closest hospital have a negative influence on the probability that they will go to that hospital, this influence is not equal for all patients.⁽³³⁾ Older patients visit the nearest hospital more often than their younger counterparts,⁽³⁴⁾ patients are more inclined to bypass the nearest hospital when it is a teaching hospital than when it is a general one⁽³⁴⁾ or when they live in an area where there is greater accessibility to local alternatives,⁽³⁵⁾ and patients with bad or mixed past experiences of this hospital are far more likely to choose an alternative one than those with good past experiences.⁽³⁶⁾ The determinants of patient choice can be divided into several categories, for instance into patient, hospital and healthcare system characteristics and factors relating to the interaction between the supply side and the patients (interaction factors). In the context of this thesis, age is a patient characteristic, type of hospital is a hospital characteristic, the availability of alternative choice options is a healthcare system characteristic and previous care experiences is an example of an interaction factor.

Goal and relevance

Patients are given a pivotal role in today's healthcare system in several Western countries. Letting them choose a healthcare provider freely is considered a goal in itself. They are also expected to choose a provider actively. Various measures such as the publication of comparative quality

information are taken to help this. However, whether patients do indeed make an active choice of provider could not be investigated properly before implementing the healthcare system reforms. A great deal still needs to be learned about the subject. Most research that is currently available on patient choice focuses on health plan or treatment choices rather than provider choices⁽³⁷⁾ and investigates hypothetical as opposed to real choice situations. Additionally, researchers often assume that patients really “choose” a provider rather than just visit one without much consideration. They investigate, for instance, which hospital characteristics patients find important without realizing that patients might not even want or have the opportunity to make a choice.

As already said, evidence that does exist on patients’ choice of healthcare providers indicates that patients do not choose in the way policy makers assumed. Instead, they tend to go to the default provider. It is not exactly known why patients’ choice behaviour does not correspond with the image of the autonomous healthcare consumer that policy makers had in mind when giving patients a key role in promoting competition between healthcare providers, nor is it known in what situations patients do make an active choice of provider. Additionally, little is known about how different patient groups then come to the decision to visit a particular provider or – to phrase it more passively - end up at that provider, and the factors that determine their choice of treatment place. Finally, it has not been proven yet that active choice of providers really leads to better care. Policy makers and care providers will only be able to think of a strategy to help and if necessary encourage patients to make active provider choices when patient choice and its effects are fully understood. This thesis is therefore investigating these aspects.

The thesis may help policy makers match policies regarding patient choice better to the practice. It shows policy makers whether their current expectations of patients in terms of choosing a provider and the effects of policy on patient choice are realistic. If not, they can adjust their expectations and could for instance focus governmental measures on different patient groups, instead of aiming them at all patients, ignoring differences between them. Alternatively, this thesis may help GPs and consultants to understand if and how they could adjust daily practice in order to encourage and enable patients to choose a provider actively. Although this thesis focuses on the Dutch healthcare system, its conclusions are also relevant for other countries that have recently reformed their healthcare system to make it more

demand-driven, such as Denmark, Sweden and the UK, and for countries that are thinking about such reforms.

This thesis also has scientific value. It adds to the existing body of knowledge about patient choice and regulated competition in healthcare. Additionally, by showing that the logic of caring is another (and probably more applicable) way to think about healthcare than the logic of choosing, it might alter the focus and design of studies on patient choice. Before studying the importance of hospital characteristics, for instance, studies should first determine the degree to which patients are willing and able to make active choices of providers.

Central question, structure and content

The central question, which has been examined in the context of the new Dutch healthcare system, is:

How do patients choose a particular healthcare provider, which factors determine patients' processes of making a choice and could patient choice (both the opportunity to choose and active choice) bring about the intended effects?

In order to answer the central question, six specific research questions were formulated. The remainder of this thesis consists of three parts. One or more of the research questions are discussed in each part. The outline of each part of the thesis is summarized below.

Part 1

To be able to investigate why patients' choice behaviour does not correspond with the image of an autonomous healthcare consumer that policy makers had in mind when reforming the healthcare system, it is important to get insight into what was expected of patients when choosing a provider. Additionally, in order to be able to formulate hypotheses about what determines patient choice and to avoid conducting research that has already been done, a picture had to be obtained of what is already known about the determinants of patient choice. The main research questions of the first part of the thesis are therefore:

What assumptions did policy makers have about patients' choice of healthcare providers when the new Dutch healthcare system was developed?

What is already known about whether and how patients choose a specific healthcare provider and the provider characteristics they base their choice on?

In Chapter 2, we aim to get a better understanding of the concept of “patients’ choice of healthcare providers” as postulated in the supporting documentation for the healthcare system reform. For this purpose, the policy assumptions underlying the promotion of patient choice were modelled through documentary analysis and interviews with key figures.

Chapter 3 investigates what is already known about patient choice using a scoping review, which is a kind of literature review. We used a scoping review rather than a systematic review because we had defined a broad research question; no prior synthesis has been undertaken on the topic; the studies about the topic have employed a range of data collection and analysis techniques; and we did not select studies because of their quality.⁽³⁸⁾

Part 2

Because research indicates that patients normally do not make active, deliberate choices of healthcare providers, the second part of the thesis investigates how patients either choose or “end up at” a particular hospital and which factors influence their processes when making a choice. We have focused on the choice of a hospital. The following research question is answered first in this part of the thesis:

How do patients either choose or “end up at” a particular hospital and which factors determine patients’ processes when choosing a hospital?

Chapter 4 reports the results of individual interviews with patients at different hospitals about how they chose a hospital. It shows that there are several patient groups that differ in the way they chose a hospital and the degree to which this choice process was active. Different patient, hospital and healthcare system characteristics influenced patients’ choices. Consistently with existing research^(6,35), we found that the proximity of providers, the availability of alternative choice options and the advice given by the general practitioner (GP) are among the key determinants of patients’ decision to go to a particular provider. Chapters 5 and 6 therefore

investigated the influence of these factors in more detail on whether patients make an active choice or not. This answers the following research questions:

To what degree does the availability of a realistic alternative in terms of its absolute proximity from a patient's home address determine the intention to make an active choice?

and

At the point of referral, what is the role of the patient in choosing a healthcare provider and to what extent do GPs help patients make an active choice of a healthcare provider?

Chapter 5 investigates whether patients in the Netherlands would search for information to help them choose a hospital and what impact the distance to the nearest alternative hospital has on whether they would undertake a search or not. The distance to patients' nearest alternative hospital determines whether they have alternatives to their nearest provider. In the Netherlands, while patient choice is encouraged, choice options in the patients' vicinity are limited due to concentration and selective contracting of healthcare^(39,40). As some patients see proximity as more important than others⁽⁴¹⁾, these measures might have different consequences for different patients in terms of their intention to make an active choice. We therefore assessed whether the effect of the distance to the nearest alternative provider on information seeking varies for different patients. We focused on the choice of hospital because quality information and opportunities to choose are available in this sector. This study was based on data obtained from questionnaires and a database that contains the distances between all four-digit postcodes in the Netherlands.

In Chapter 6, observations of GP-patient consultations were used for investigating the degree to which GPs influence the decision on the place of treatment at the point of referral and the extent to which they help patients to make an active choice of a healthcare provider. Additionally, we studied whether patients' healthcare paths influence the role that patients play in the referral decision.

Part 3

From the policy on patient choice, it could be expected that patient choice of providers is associated with a higher quality of care. Because little is known about the effects of patient choice on the quality of healthcare, we investigated the relationship between patient choice and the perceived quality of care. Again, we focus on the choice of a hospital. The following research question is answered:

Is there a relationship between patients' healthcare provider selection processes and the subjective quality of care?

Chapter 7 describes the results of a questionnaire. The study provides insights into the relationship between patients' healthcare provider selection processes (the four patient groups we found in Chapter 4) and the subjective quality of the care that patients received at the hospital they went to during the past year. In line with the assumptions underlying policy on patient choice, it is expected that specific patient groups will perceive having received higher quality care than others. As active patients are assumed to select the best hospital, patients who exhibit this behaviour are assumed to receive higher quality care than other patient groups, in particular than patients who visited the default without giving it any thought. Concerning patient choice as a goal in its own right, having the opportunity to choose a provider is considered an important benefit for patients. Even if they do not actively choose the highest quality provider, they still value the option of being able to go to their preferred hospital. Patients with no opportunity to choose could therefore be expected to perceive worse care experiences than the other patient groups.

Summary and discussion

In Chapter 8, we summarize and discuss the answers to the research questions and provide an overview of the key lessons that can be drawn. In addition, implications for practice and further research are formulated.

The various chapters of this thesis were written as separate articles for different international journals¹. They can therefore be read independently. A disadvantage of this approach, however, is that there is some degree of overlap between the chapters, particularly with respect to the description of patient choice and its goals.

¹ Chapters 2 and 3 have been published in BMC Health Services Research. Chapter 4 has been published in Health Expectations. Chapter 5 has been published in the Journal of Health Services Research & Policy. Chapter 6 has been published in BMC Family Practice. Chapter 7 has been submitted for publication in an international journal.

References

1. Dixon A, Robertson R, Bal R: The experience of implementing choice at point of referral: a comparison of the Netherlands and England. *Health Econ Policy Law* 2010, 5:295–317.
2. Vrangbaek K, Robertson R, Winblad U, van de Bovenkamp H, Dixon A. Choice policies in Northern European health systems. *Health Economics, Policy and Law* 2012;7:47-71.
3. van der Kraan WGM, van der Grinten TED: The development of Demand-driven care as a new governance concept. Paper presented at NIG Annual Work Conference 2004 Rotterdam. Rotterdam: Erasmus Universiteit Rotterdam; 19 October 2004.
4. Lako CJ, Rosenau P: Demand-driven care and hospital choice. Dutch health policy toward demand-driven care: results from a survey into hospital choice. *Health Care Anal* 2009, 17:20–35.
5. Kroneman MW, Maarse H.; van der Zee J: Direct access in primary care and patient satisfaction: a European study. *Health Policy* 2006;76(1):72-9.
6. Birk HO, Henriksen LO: Which factors decided general practitioners' choice of hospital on behalf of their patients in an area with free choice of public hospital? A questionnaire study. *BMC Health Serv Res* 2012;12(126):1-10.
7. Ubachs R: In eigen hand. Een institutioneel onderzoek naar het overheidshandelen inzake patiëntenbeleid 1945-1997. Den Haag: Ministerie van VWS; 2001.
8. Varkevisser M: Patient choice, competition and antitrust enforcement in Dutch hospital markets. Rotterdam: Erasmus Universiteit Rotterdam; 2009.
9. Damman OC, Hendriks M, Rademakers J, Spreeuwenberg P, Delnoij D, Groenewegen P: Consumers' interpretation and use of comparative information on the quality of healthcare: the effect of presentation approaches. Public reporting about healthcare users' experiences. Utrecht: NIVEL; 2010. p. 109-28.
10. Enthoven A, van de Ven W: Going Dutch - Managed-Competition Health Insurance in the Netherlands. *N Engl J Med* 2007;357(24):2421-3.
11. Enthoven AC: The history and principles of managed competition. *Health Aff (Millwood)* 1993;12(Suppl 1):24-48.
12. Hirschman AO: Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States. Cambridge, MA: Harvard University Press; 1970.

13. Hunt SD, Duhan DF: Competition in the third millennium. Efficiency or effectiveness? *Journal of Business Research* 2002;55(2):97-102.
14. Bromiley Ph, James-Wade Sh: Putting Rational Blinders Behind Us: Behavioural Understandings of Finance and Strategic Management. *Long Range Planning* 2003;36(1):37-48.
15. Damman OC: Public reporting about healthcare users' experiences: the Consumer Quality Index. Utrecht: NIVEL; 2010.
16. Kooreman P, Prast H: What does behavioral economics mean for policy? Challenges to savings and health policies in the Netherlands. *The Economist* 2010, 158:101-22.
17. Ministerie van VWS: Vraag aan bod: hoofdlijnen van vernieuwing van het zorgstelsel. Den Haag: Ministerie van VWS; 2001.
18. Dowding K, John P: The value of choice in public policy. *Public Administration* 2009; 87:219-33.
19. Fujiwara J, Usui N, Park SQ, Williams T, Iijima T, Taira M, Tsutsui K, Tobler PN. Value of freedom to choose encoded by the human brain. *J Neurophysiol* 2013;110:1915-29.
20. Bottero M: Does Freedom of Choice cause Satisfaction? *Humana.Mente* 2009;10:111-22.
21. Szabo E, Moody H, Hamilton T, Ang C, Kovithavongs C, Kjellstrand C: Choice of treatment improves quality of life. A study on patients undergoing dialysis. *Arch Intern Med* 1997;157(12):1352-5.
22. Amyx D, Mowen JC, Hamm R: Patient satisfaction: a matter of choice. *Journal of Services Marketing* 2000;14(7):557-73.
23. Anell A, Rosén P, Hjortsberg C. Choice and participation in health services: a survey of preference among Swedish residents. *Health Policy* 1997;40:157-68.
24. Johnson A, Schnatz P, Kelsey A, Ohannessian C: Do women prefer care from female or male obstetrician-gynecologists? A study of patient gender preference. *BMC Med Educ* 2005;105:369-79.
25. Burge P, Devlin N, Appleby J, Rohr C, Grant J: Do patients always prefer quicker treatment? A discrete choice analysis of patients' stated preferences in the London Patient Choice Project. *Appl Health Econ Health Policy* 2004, 3:183-94.
26. Hildon Z, Allwood D, Black N: Patients' and clinicians' views of comparing the performance of providers of surgery: a qualitative study. *Health Expect* 2012 [Epub ahead of print]. DOI: 10.1111/hex.12037
27. Victoor A, Delnoij DMJ, Friele RD, Rademakers JDJM: Determinants of patient choice of healthcare providers: a scoping review. *BMC Health Serv Res* 2012;12(272):1-16.

28. Dealey C. The factors that influence patients' choice of hospital and treatment. *Br J Nurs* 2005;14(10):576-9.
29. Mol A: De logica van het zorgen. Actieve patiënten en de grenzen van het kiezen. Amsterdam: Van Genneep; 2006.
30. Schwartz B: The tyranny of choice. *Sci Am* 2004;290(4):70-5.
31. Kahneman D: *Thinking, Fast and Slow*. London: Penguin Books; 2011.
32. Ariely D: *Predictably Irrational*. New York: HarperCollinsPublishers; 2009.
33. Varkevisser M, van der Geest SA, Schut FT: Assessing hospital competition when prices don't matter to patients: the use of time-elasticities. *Int J Health Care Finance Econ* 2010;10:43-60.
34. Varkevisser M, van der Geest S: Why do patients bypass the nearest hospital? An empirical analysis for orthopaedic care and neurosurgery in the Netherlands. *Eur J Health Econ* 2007;8:287-95.
35. Tai WT, Porell FW, Adams EK: Hospital choice of rural Medicare beneficiaries: patient, hospital attributes, and the patient-physician relationship. *Health Serv Res* 2004;39(6 Pt 1):1903-22.
36. Robertson R, Burge P: The impact of patient choice of provider on equity: Analysis of a patient survey. *J Health Serv Res Policy* 2011;16(Suppl 1):22-8.
37. Fotaki M, Roland M, Boyd A, McDonald R, Scheaff R, Smith L: What benefits will choice bring to patients? Literature review and assessment of implications. *J Health Serv Res Policy* 2008, 13:178-84.
38. Crooks V, Kingsbury P, Snyder J, Johnston R: What is known about the patient's experience of medical tourism? A scoping review. *BMC Health Serv Res* 2010;10(266):1-12.
39. Boonen LHHM. *Consumer channeling in health care: (im)possible?* Rotterdam: Erasmus Universiteit Rotterdam; 2009.
40. Glanville J, Duffy S, Mahon J, Cardow T, Brazier H, Album V. *Impact of hospital treatment volumes on patient outcomes*. York, UK: York Health Economics Consortium, University of York; 2010.
41. Exworthy M, Peckham S: *Access, Choice and Travel: Implications for Health Policy*. *Social Policy & Administration* 2010;40(3):267-87.

2

Free choice of healthcare providers in the Netherlands is both a goal in itself and a precondition:

modelling the policy assumptions underlying the promotion of patient choice through documentary analysis and interviews

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Abstract

Background

In the Netherlands in 2006, a health insurance system reform took place in which regulated competition between insurers and providers is key. In this context, the government placed greater emphasis on patients being able to choose health insurers and providers as a precondition for competition. Patient choice became an instrument instead of solely a goal in itself. In the current study, we investigated the concept of 'patient choice' of healthcare providers, as postulated in the supporting documentation for this reform, because we wanted to try to understand the assumptions policy makers had regarding patient choice of healthcare providers.

Methods

We searched policy documents for assumptions made by policy makers about patient choice of healthcare providers that underlie the health insurance system reform. Additionally, we held interviews with people who were involved in or closely followed the reform.

Results

Our study shows that the government paid much more attention to the instrumental goal of patient choice. Patients are assumed to be able to choose a provider rationally if a number of conditions are satisfied, e.g. the availability of enough comparative information. To help ensure those conditions were met, the Dutch government and other parties implemented a variety of supporting instruments.

Conclusions

Various instruments have been put in place to ensure that patients can act as consumers on the healthcare market. Much less attention has been paid to the willingness and ability of patients to choose, i.e. choice as a value. There was also relatively little attention paid to the consequences on equity of outcomes if some patient groups are less inclined or able to choose actively.

Background

In most northwest European countries, such as the Netherlands, Scandinavia and the UK, actively choosing a healthcare provider was traditionally not common. In the Netherlands for instance, although patients have always had free choice of doctor, in practice general practitioners long had fixed patient lists (linked to capitation payments) and visits to a medical specialist were (and still are) only possible after referral by a GP. However, initiatives have been taken recently in all these countries to extend patients' ability to choose their provider, to encourage them to make an active choice and to support them in the process of making their choice [1-7].

There are two main reasons why patient choice is promoted [8]. Firstly, choice of provider gained importance as something that patients value. Because today's patients are more demanding, they want a more active role in their own healthcare [9-11]. National governments have responded to this development with legislation for patient rights that strengthens their role or, in other words, empowers them. Giving patients the right and possibility to choose is one aspect of patient empowerment [8,9,11]. It gives patients a strong instrument to influence their healthcare [11,12].

Secondly, engaging patients in their own healthcare is also seen as the best way to ensure sustainability of health systems, to promote quality improvement and to shorten waiting times [2,8,11]. This is the instrumental use of patient choice. Patients were expected to 'vote with their feet' [13] by choosing only those healthcare providers that offer the best care, based on the comparative information available on quality and costs. This selection prompts providers to compete for patients by improving the care they deliver, because, when the care they deliver is not optimal, patients may 'punish' them by going elsewhere (exit) [8,12,14-16].

In the Netherlands, encouraging patient choice also has multiple goals [8]. In the 1970s, the Dutch government set itself the aims of explicitly developing policy on patients and legislation for patients' rights as part of the emancipatory developments in large parts of Europe and the USA to empower various groups within society, e.g. women, homosexuals, and also patients. This political tendency meant that choice of provider gained importance as something patients valued [8,17]. During the late 1980s, the instrumental use of patient choice gained importance. This occurred as part of a government plan to reform the Dutch health insurance system into a system in which regulated competition between healthcare providers and

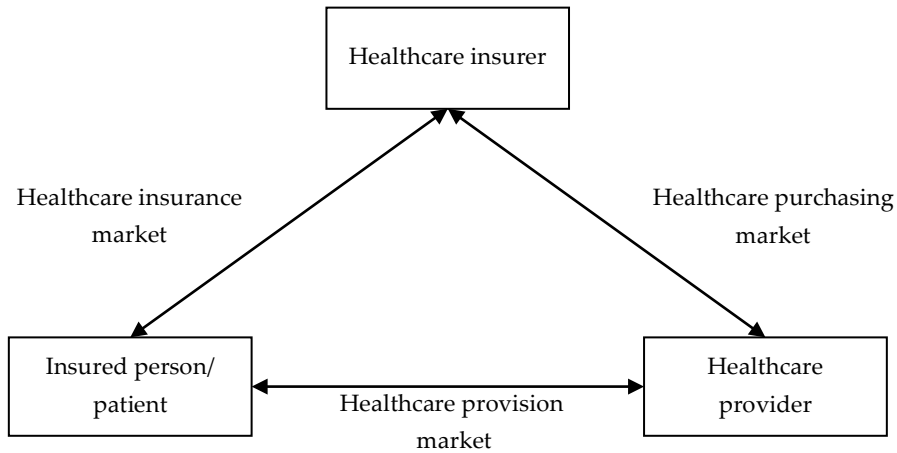
insurers is key: it was assumed to be a way to guarantee the efficiency, quality and accessibility of healthcare [2,8,18,19]. All these developments together resulted in plans for a healthcare system in which patient choice is important, both in its own right and as a precondition for competition between providers.

Regulated competition was implemented in the Netherlands in 2006 and resembles the 'managed competition' model described by Enthoven [20]. The change was mainly supported by two acts: the Health Insurance Act (Zvw) and the Act on Market Regulation in Healthcare (Wmg). Before the change, patients, healthcare providers and insurers were in a triangular relationship and the Dutch government regulated the supply and costs of healthcare and the relationships between the three parties. People were insured through two very different health insurance schemes, i.e. a social health insurance scheme (ZFW) and an alternative private health insurance scheme (PHI) (Table 1) [21,22]. The changes introduced three interdependent markets in healthcare in which the three different parties (i.e. providers, insurers and consumers) were assigned new roles (Figure 1) [23]. The first market is the healthcare provision market, where well-informed patients were assigned the responsibility to 'vote with their feet' by selecting the healthcare providers they preferred [23-25]. The second market is the healthcare purchasing market, where healthcare providers offering a high value-for-money ratio are contracted by insurers. The third market is the healthcare insurance market. In this market, well-informed consumers have to choose between health insurers and insurance products [19,23]. Only a single health insurance scheme exists for the whole population, but people can make several choices, e.g. between benefits in kind and benefits in cash (Table 1). The principle of 'voting with your feet' also applies in this market. Patients are assumed to choose selectively between health insurers based on e.g. the range of providers contracted and the insurers' quality of service. This is assumed to encourage insurers to compete for consumers by contracting care providers that offer good value for money. Instead of regulating the supply of healthcare, the government creates a level playing field in which market forces can play a role [19].

Table 1 Key elements of the health insurance schemes in the old insurance system compared with the new insurance system

	Old system		New system
	Social health insurance (ZFW)	Alternative private health insurance (PHI)	Private social health insurance
Insured people	People under a certain income ceiling (two-thirds of the population)	People above a certain income ceiling (one-third of the population)	The whole population
Mandatory/voluntary	Mandatory primary healthcare package and voluntary additional healthcare package	Voluntary	Mandatory primary healthcare package and voluntary additional healthcare package
Premium rating	Income-dependent (85%) and community rating (15%)	Dependent on the risk profile of the person requesting the insurance	Income-dependent (50%) and community rating (50%)
Benefits in kind/benefits in cash	Benefits in kind	Benefits in cash	Insurers are allowed to offer both
Voluntary policy excess	No	Yes	Yes
Insurer choice	Those insured could change insurer and additional insurance product yearly, but in practice choice options were limited	Those insured could change insurer and insurance product yearly	Those insured can change insurer and additional insurance product yearly
Provider choice	Free choice among contracted providers	Free choice among all providers, but may receive only partial reimbursement	Free choice among all providers, but may receive only partial reimbursement

Figure 1 The healthcare market.



Research focus

It is interesting to investigate whether promoting patient choice of healthcare providers has had its desired effects. The first step is to make explicit what the underlying assumptions are about how patient choice is meant to work and what impact it is expected to have. These assumptions need to be understood first, because they determine the indicators needed to evaluate the effectiveness of the policy. In the current study, we will model the assumptions underlying the health insurance system changes, focusing on the role of patients' choice of providers. In this process, we will answer the following questions:

- What did policy makers aim to accomplish by promoting patient choice of providers?
- What determinants were assumed to influence patient choice of providers?
- How did policy makers assume more patient choice could be promoted?
- What possible side-effects of the promotion of patient choice were discussed?

Although there are several scientific papers that describe the assumptions underlying the promotion of patient choice in various countries, e.g. [8,14-16,26], as far as we know, only a few aimed to model policy assumptions by

analysing policy documents in combination with interviews with key figures, e.g. [26]. Even fewer tried to model patient choice in the Netherlands using this method. The current paper therefore expands the body of literature about public policy evaluation, adds to existing knowledge about regulated competition in healthcare, and will enable future research on the validity of this policy.

Method

Modelling the policy assumptions

Various methods are described in the literature for modelling the assumptions underlying public policy and how they are interrelated [27,28]. In general, these methods assume that such a model consists of the following three parts, which correspond to the research questions:

- The problem/goals: which problems does the policy aim to solve?
- Causal assumptions in the form of if-then propositions: if a certain condition is true or a certain component of the policy is implemented, then the following consequence is assumed.
- Final assumptions in the form of if-then propositions: if a certain goal is to be accomplished, then this step has to be taken.

Data collection

In order to model the assumptions of the key policy makers and their interrelations, we followed the ‘policy-scientific approach’ described by Leeuw [28]. Additionally, we modelled the possible side-effects of the promotion of patient choice that were discussed. The method described by Leeuw [28] relies on an analysis of policy documents and interviews with key policy makers. In accordance with this approach, expressions from key policy makers about the concept ‘patient choice’ were first extracted from a variety of documents (Appendix A). All the documents consulted are direct products of the ministry of Health and were published between 2004 and 2007, because the Wmg and Zvw were developed during this period. In all, 62 documents were consulted. Program texts of the instruments mentioned in the documents analysed were consulted to gain a deeper understanding of the goals of these instruments. The sources that we used for the analysis and that we refer to in the text are shown in the References [29-86].

In addition to the analysis of the policy documents, the model that resulted from this analysis was shown to seven people who were either involved in the development of the current health insurance system or whose professional position enabled them to follow this development closely (Appendix A). All were asked whether our model (i.e. Figure 2 and Table 2) was plausible and whether we had missed out any assumptions.

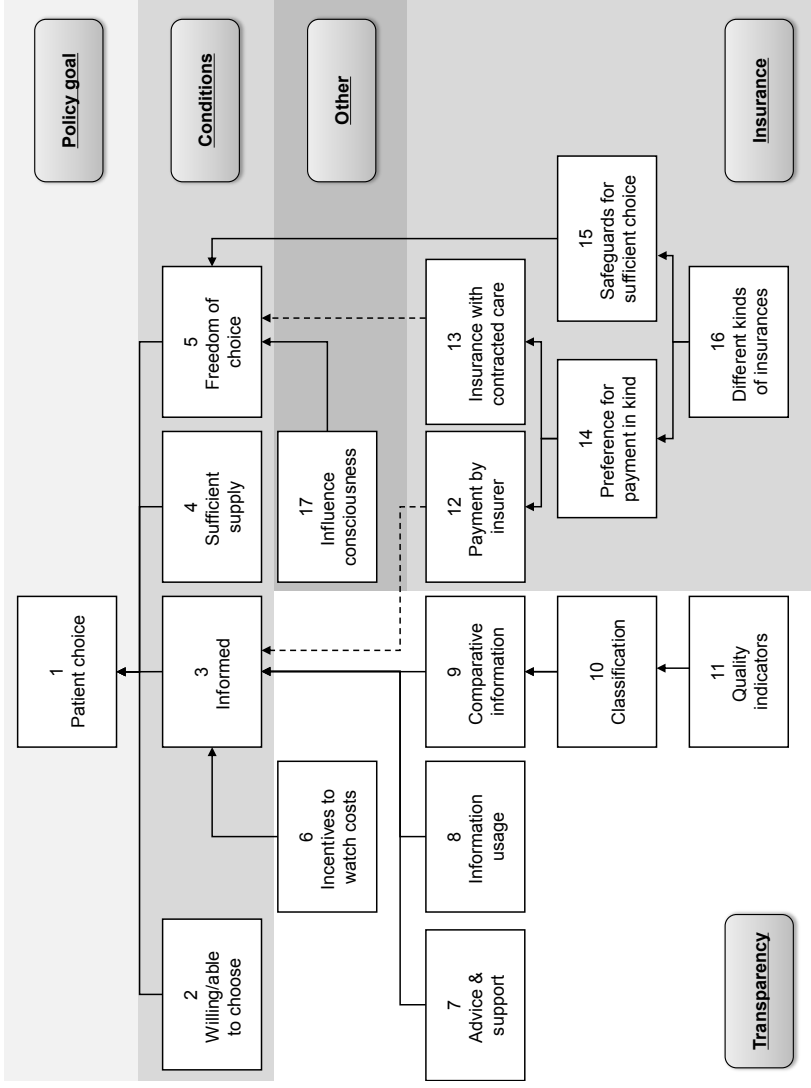
Analysis

The problems, goals, causal and final assumptions and side-effects were extracted from the assembled expressions. All assumptions were reformulated in the form of propositions and these propositions were used to construct a model. Assumptions and instruments that overlapped were combined and side issues were excluded. All the authors together discussed the resulting model. Disagreements were discussed until consensus was reached. The interviews were transcribed and sent to the interviewees for correction and approval. Where necessary, adjustments were made to our model with the information from the approved documents.

Ethical considerations

Our research complied with the Helsinki Declaration where applicable. According to the Dutch 'Medical Research involving human subjects Act', our study did not require ethical approval from a medical ethics committee [87]. Verbal informed consent was obtained from all interviewees, who were informed of their right to withdraw from the study at any time they wished without penalty. All the interviews were voice recorded with the permission of the interviewees, and the resulting recordings and transcripts were kept confidential. Additionally, we asked the interviewees to correct and approve the transcripts so that we could use them for our study. Only those transcripts that were approved were used in our study. We removed all personal identification information in this paper.

Figure 2 Reconstruction of the causal propositions



Legend Figure 2

Policy Goal

1. **Patient choice** Patients are critical towards costs, quality and other aspects like waiting times, and make rational choices of providers, based on these factors.

Conditions

2. **Willing/able to choose** Patients are willing to choose and are willing and able to travel and switch provider. This willingness to switch is influenced by satisfaction with the current provider.
3. **Informed** Patients are aware of cost and quality differences allowing them to compare all aspects instead of focusing on price alone.
4. **Sufficient supply** There are sufficient providers to choose between
5. **Freedom of choice** Patients are free to choose the provider they prefer. They are also aware of this freedom.

Transparency

6. **Incentives to watch costs** Patients receive cheques, have to make copayments, and excess payments and have no-risk benefits to confront them with costs of care.
7. **Advice & support** Patients that have no access to the information or are not able to make choices receive advice and support
8. **Information usage** Patients want information, know where they can find it and there is not too much information/choice. Therefore, they can and are willing to use the information.
9. **Comparative information** Information on the comparative performance, the identity, costs and other aspects of the respective parties is disclosed and published through public media.
10. **Classification** The quality of particular aspects of health providers is monitored and measured to provide valid and reliable comparative information.
11. **Quality indicators** Standard quality measures exist in order to measure a variety of quality aspects and information about experiences of patients with providers

Insurance

12. **Payment by insurer** With insurances that offer payment in kind, the insurer directly pays the provider.
13. **Insurance with contracted care** Payment in kind policies but also some reimbursement policies may restrict the choice of providers. Choosing alternative providers results in a penalty.
14. **Preference for payment in kind** Patients prefer payment in kind because of price and security. Insurers prefer payment in kind because of quality assurance and fear of loosing clients.
15. **Safeguards for sufficient choice** With payment in kind, insurers are obliged to contract enough providers and patients can choose for non-contracted providers. A reimbursement policy typically gives consumers free choice.
16. **Different kinds of insurances** There are three kinds of insurances: payment in kind, reimbursement and preferred provider policies. Insurers and consumers may choose insurance kind.

Other

17. **Influence consciousness** A media campaign makes patients aware of the choice possibilities in health care.

—▶ = positive influence

- - -▶ = negative influence

Table 2 Reconstruction of the final propositions

Legal instruments	Condition	Communicative instruments	Condition	Financial instruments	Condition
Insurers may choose the policy forms they offer [45]	F	Media campaign from the government about the new health insurance system [37,42-44]	F	Financial incentives (e.g. co-payments) [37,39,40,43,49,56,63]	I
Patients have the right to choose from the available policy forms [45]	F	Developing quality/performance indicators [30,31,41,43,44,57,58,70,71]	I	Subsidies from government [44,72-75]	I
With a payment-in-kind policy, providers are obliged to deliver care as agreed within a reasonable time and at a reasonable distance [76]	F	Developing comparative information, e.g. for kiesbeter.nl or the Healthcare Inspectorate (IGZ) [31,49,57,77-79]	I		
With a payment-in-kind policy or a preferred provider policy, patients have the right to receive compensation when they choose a non-contracted provider in the Netherlands and in Europe [50]	F	Comparative information, e.g. kiesbeter.nl, physical desks, telephone, papers, healthcare providers, insurers and user organizations (peer contact and information provision) [30,37,38,41-43,46,53,54,57,59,70,80,81]	I		

Table 2 Reconstruction of the final propositions (*continued*)

Legal instruments	Condition	Communicative instruments	Condition	Financial instruments	Condition
With a reimbursement policy or a personal budget, patients are allowed to choose their preferred provider freely without intervention from the insurer [42]	F	Advice and support for people who are unable to choose independently (e.g. by MEE) [56,74,82]	I		
Providers are obliged to publish comparative information [53]	I				
Providers are obliged to make the information understandable, effective and correct [54]	I				
The information providers provide may not be misleading and must comply with the legislation [55]	I				

W = willing/able to choose; F = freedom of choice; I = informed.

Results

The political and policy problems/goals

The Dutch government reformed the health insurance system and promoted patient choice. If patient choice is part of the solution, what then were the problems in the 'old' Dutch health insurance system? The explanatory memorandums accompanying the two laws that supported the system change – the Zvw [29] and the Wmg [30] – mention a variety of problems in the 'old' Dutch health insurance system.

Promoting patient choice was expected to solve two important political problems. Firstly, the Dutch healthcare system was centralised or state-oriented, i.e. the Dutch government regulated the supply of healthcare instead of entrusting it to the patients and healthcare insurers and providers. Consequently, there were no opportunities or reasons for the three different parties to affect each other's practices and results. Healthcare was therefore unresponsive to patients, innovation and flexibility were curtailed, there was no incentive for providers to improve their quality and efficiency, etcetera. Secondly, the asymmetrical, paternalistic patient-doctor relationship urged patients to leave decisions about their care to their doctors.

The first problem above was expected to be solved by the introduction of 'regulated competition' in healthcare, which was intended to replace the governmental regulation of supply. Patient choice was promoted as one element of regulated competition. The promotion of patient choice can therefore be considered as an instrument to achieve the goal of 'regulated competition in healthcare'. Regulated competition, in turn, was considered to be an instrument for achieving higher-level goals, e.g. more efficient (including cost control) and more accessible healthcare of higher quality. The fact that patient choice was also promoted to solve the second problem shows that it was considered as a goal in itself as well, i.e. it was assumed to strengthen the autonomy of patients. The interviewees also stressed the fact that the concept of 'patient choice' is both an instrument to improve the quality, efficiency and accessibility of care on a macro level and a goal in its own right, in other words a goal in itself. Enabling choice of providers makes it easier for patients to match care to their preferences [33-36].

Although patient choice of providers was part of the solution to the political problems, several policy problems were encountered while trying to promote it, e.g.:

- patients do not have enough choice options;
- patients do not have the freedom to make choices between providers and insurers;
- patients are insufficiently aware of their rights;
- there is no standardised method to measure the quality of the healthcare providers and providers may fail to provide this information;
- there is no level playing field in which insurers, providers and patients can play their roles.

To solve the policy problems and, in the end, to encourage patient choice and introduce regulated competition, the Zvw and - as the cornerstone of regulated competition - the Wmg were developed [30-32].

The causal propositions

How can patient choice help to introduce competition and, in the end, achieve the higher-level goals (e.g. more efficient and more accessible healthcare of higher quality)? There are a number of assumptions about patient choice as a mechanism for quality improvement and cost containment. For instance, the government assumes that patients are willing to fit their care to their needs and are critical about certain characteristics of healthcare providers, such as the costs, quality and waiting times. Based on information about these characteristics, patients choose a provider rationally. When dissatisfied, they 'vote with their feet' by switching to a provider that fits their preferences better. This behaviour tells providers about patients' levels of satisfaction with them and (because they want to obtain or keep patients as their clients) prompts them to match the care on offer to the wishes of patients [29-31,37-41].

Figure 2 shows the causal propositions that are part of the model and how they are interrelated. The interviews did not result in major changes, since the model was deemed plausible. However, the interviewees did not agree with each other on whether patients were assumed to pay attention to the costs of healthcare providers (Box 3) and whether patients' cost awareness was heightened partly in order to make them focus on the costs of providers when choosing between them (Box 6). We will discuss this apparent ambiguity below.

To briefly summarise Figure 2, the policy goal we are concerned about is patient choice (Box 1). Various conditions are assumed to lead to patient

choice (Boxes 2–5). A range of factors and instruments influence whether the conditions are satisfied (Boxes 6–16). Some have to do with the transparency of healthcare and lead to well-informed patients (Boxes 6–11). Others have to do with the healthcare insurer and/or insurance (Boxes 12 to 16). The majority of these factors influence the degree to which patients are free to choose a healthcare provider. The last box (17) represents the media campaign set up by government to make people aware of the possibilities of choice in healthcare [37,42-44].

The final propositions

The Dutch government made various final assumptions. Patient choice is a goal in itself, but is also needed to introduce competition and to help achieve other public goals, e.g. ‘improving and safeguarding the quality, efficiency and accessibility of healthcare’ and ‘controlling the development of costs in healthcare’ [30,32]. In order to enable patients to choose a provider critically and actively, the four conditions should be satisfied (Boxes 2 to 5 in Figure 2). Figure 2 and Table 2 show the instruments that needed to be implemented in order to fulfil the conditions [29]. We divided the instruments into legal, communicative and financial instruments, which is a widely recognised division in the literature [27]. We did not investigate the ‘sufficient supply’ condition any further in this paper, because we intended to focus on instruments directed at the patient, but it is assumed to be an essential condition for choice and the government implemented several instruments to satisfy this condition [29]. It should also be noted that while the government deemed patient choice a goal in itself, they mainly focused on patient choice within the context of regulated competition. Although patient choice already was a goal in itself, all the instruments for patient choice were only implemented when patient choice became a part of regulated competition. Maybe because policy makers focused mainly on patient choice as an instrument, they did not implement any instruments to satisfy the condition of being ‘willing and able to choose’. They assumed that patients were indeed willing to make active choices in order to receive high-quality care [37]. Again, we checked the plausibility of our model with the interviewees. This did not result in any major changes.

Almost all the instruments affecting the ‘freedom of choice’ condition have to do with the healthcare insurer and/or insurance. Insurers are free to offer any policy form and patients are free to choose between the available policy forms [45]. The most important difference in policy forms is between

those based on direct payment (payment in kind) and those based on restitution. The former guarantee the insured person access to healthcare providers from a list of providers contracted by the health insurer. The latter guarantee the insured person reimbursement of costs incurred. In practice, this implies a free choice of provider, but those insured may receive only partial reimbursement of the healthcare costs they incur [23-25]. Patients' freedom of choice is thus determined by the type of policy they have [29,37,40-42,46-48]. Even so, under the payment-in-kind scheme, the insured persons are legally allowed to choose non-contracted providers (but they may potentially receive only partial reimbursement of costs) and, in the case of a payment-in-kind policy, insurers have to contract enough providers because they are obliged to deliver care within a reasonable time and at a reasonable distance [29,37,40-43,46,48-52]. A media campaign was set up by government to make the public aware of the possibilities of choice in healthcare [37,42-44].

The instruments affecting whether patients are informed all have to do with 'transparency', which refers to the availability of comparative information about the costs and performance in terms of effectiveness, safety and patients' experiences with healthcare providers [23,30,31]. Providers are obliged to publish understandable, effective and correct comparative information about quality and costs that is not misleading and does not undermine health legislation [30,38,41,46,53-55]. Because patients have different information preferences and a number of parties have developed various quality or performance indicators and comparative information, a plethora of information for patients has been produced [31,35]. Patients can consult the information, e.g. on websites of user organisations, providers and insurers and in newspapers. Additionally, to provide a single general portal that patients can consult, the government financed the creation of the well-promoted website 'kiesbeter.nl' ('choose better'). People without Internet access were assumed to request information by phone or at physical desks or to request help from healthcare providers, insurers and user organisations [30,31,37-39,41-44,46,48,56-62]. Besides making comparative information available, people's cost awareness was assumed to be heightened and they were made partly responsible for the costs they incur through financial incentives, e.g. they receive cheques, have to make co-payments and pay policy excesses and have no-risk benefits. This way, their critical attitude towards the costs of healthcare would be influenced

positively and, consequently, they would be motivated to demand care only when they really need it [29,37,39,40,43,49,63,64].

Side-effects of the policy

Several side-effects of the policy on the promotion of patient choice of healthcare providers are mentioned in the policy documents. For instance, policy makers assumed that not every patient has Internet access or is able to search the Internet, assess the various alternative providers and make an informed decision. This may lead to inequalities in the accessibility of the comparative information as well as in patients' ability to choose. Because many patients eventually will not choose, the competitive pressure will be diminished [37,65,66]. All these side-effects are listed in Table 3.

Ambiguous aspects

Although the interviewees perceived our model as plausible, they did not agree on issues concerning the context of our model, e.g. the definition of patient choice and its relative importance in the new health insurance system. We therefore reached the conclusion that some aspects of the policy are ambiguous. Firstly, patient choice as postulated in the policy documents refers to individual patients matching their care to their needs by actively choosing providers [37]. However, according to some interviewees, the concept of 'patient choice' refers to the indirect or collective influence of patients on providers as well: they merely make healthcare providers aware of the fact that patients are not dependent on them anymore, even though not all patients eventually choose [34,67]. However, in both views, patients who (may) change provider in order to improve the care they receive are expected to improve healthcare at the macro level [34,68].

Concerning the use of patient choice as an instrument or precondition, the policy documents were unclear about whether patients were expected to take costs into account when choosing a healthcare provider. The interviewees also did not agree on this matter. We kept costs in our model, but with the idea that (with payment-in-kind policies and preferred provider policies) patients may be expected only to be aware of the costs of healthcare (to prevent excessive care use) and to place the responsibility of keeping an eye on the costs of the individual providers on the insurer.

Finally, the 'freedom of choice' condition is ambiguous. When insurers only contract a limited number of healthcare providers, patients' preferred alternatives may not be available anymore. Therefore, in our reconstruction,

payment in kind policies or preferred provider policies have a negative influence on the freedom of choice. However, there is no consensus about how the government defines freedom of choice, i.e. as the availability of the preferred alternative or the quality of the available alternatives and clarity about this quality [33-35,68]. In our model, we adopted the first meaning, because it is often stated that a reimbursement policy increases the freedom of choice [36]. Although insurers might be better able to negotiate with insurers than individual patients, the freedom of choice of healthcare providers is assumed to be important for patients.

Table 3 The side-effects of the policy regarding the enhancement of patient choice of healthcare providers that are mentioned in the policy documents

Condition	Risk	Effect
Willingness/ability to travel/choose	Some patients are not willing or able to travel or choose.	There may not be enough competitive pressure [41,51]
Sufficient choice	There is an urgent situation. Healthcare providers and insurers enlarge (especially high quality-providers) or merge. Additionally, the plethora of rules implemented to regulate the market will lead to diminished entrepreneurial activity.	Patients do not have time to search providers [56]. Patients do not have sufficient choice options [41,83] and costs will increase [84,85]. Consequently, there may not be enough competitive pressure [41,51].
Transparency – quality	Patients have too many choice options. The comparative information that is to be developed will be opaque, excessive, incomprehensible, not comparable, scattered and the various healthcare providers often are disparate. Not every patient has Internet access or is able to search the Internet, assess the different options and make an informed decision.	Patients may delay choice [84]. Patients are unable to assess the quality of the providers and consequently cannot be critical about quality, are unwilling to pay for quality and focus on price information instead [41,65,86]. Consequently, there will not be enough competitive pressure [38]. Inequalities exist in the accessibility of the comparative information and ability to choose. Consequently, many patients will not choose and the competitive pressure will be diminished [37,65,66]. Transparency is hindered [86].
	Healthcare providers have to deliver a large amount of data. The bureaucracy of the system leads to possibilities for data to be manipulated.	Providers show strategic behaviour and commit fraud [83].
	Patients choose based solely on information about quality.	The relationship of mutual trust between patient and doctor is being undermined [83].

Table 3 The side-effects of the policy regarding the enhancement of patient choice of healthcare providers that are mentioned in the policy documents (*Continued*)

Condition	Risk	Effect
Transparency - costs	Patients do not get to see their healthcare costs, only have to pay a small premium.	Patients are often unaware of the costs that they incurred, which limits their cost awareness. This might diminish the influence of the financial incentives to avoid excessive care use [40,83,84].
Freedom of choice	Insurers contract a limited number of providers. Only the 'rich' are able to choose a policy which offers them free choice. Insurers do not buy high-cost care in order to fend off high-risk insured parties.	Patients will not have freedom of choice [36,40,41]. Inequalities exist in the freedom of choice patients have [40,85]. Inequalities exist in the choices people have [37].

Discussion

Patient choice of healthcare providers is an important theme, not only in the Netherlands but in the UK and Scandinavia as well [1-7]. To be able to evaluate whether promoting patient choice of healthcare providers has its desired effects, it must be clear exactly which effects are desired. For that reason, we modelled the assumptions underlying the promotion of patient choice of healthcare providers by analysing policy documents and interviewing key figures. We focused our analysis on the Netherlands. However, because much the same assumptions are made by policy makers in the other northern European countries as well [14,15,26], our analysis is also interesting for policy makers and researchers in those countries.

In the current paper, we answered four research questions. The first research question concerned the reasons for promoting patient choice. Patient choice of healthcare providers is one important element in a much broader system in which regulated competition between providers and insurers is key to controlling the development of costs and improving and safeguarding the quality, efficiency and accessibility of healthcare [31,32]. Within the context of regulated competition, patients are expected to behave as rational actors. This line of reasoning originates from the classical economic theory [20,68]. In addition, patient choice was deemed a 'value' or a goal in itself. However, in practice, the Dutch government did not really concern itself with this latter goal [37,88]. Because it was assumed that patients value choice, no instruments were implemented to encourage patients to choose. Even so, literature indicates that a number of patient groups are in reality less inclined or able to choose actively, which may affect the equity of outcomes from patient choice policies [8,12].

The second research question concerned the determinants that were assumed to influence patient choice. It was assumed that satisfying several conditions leads patients to choose a provider rationally. Those conditions are that patients are willing to choose and willing and able to travel and switch provider, that patients are informed, that there are sufficient healthcare providers to choose from and that patients are free to choose their healthcare provider. Regarding the third research question, i.e. how policy makers were to promote patient choice, the Dutch government and other parties implemented a variety of instruments to satisfy the conditions, thus creating a level playing field in which market forces could come into play. This resulted in a health insurance system that relies heavily on laws to

regulate the market [68]. In our analysis, we did not include the supervisors of the healthcare market such as the Dutch Health Care Authority (NZa), because we wanted to focus on instruments directed at the patient. These supervisory bodies were, however, considered essential for markets to develop.

Concerning the fourth research question about the side-effects of the policy, several possible side-effects are documented in the policy documents. If these side-effects exist, diminished competitive pressure and a healthcare provision market that is not really working without governmental intervention may result. It is however striking that no discussion was documented about the role of equality, neither as a possible negative side-effect of patient choice nor as part of the argument for patient choice. In the UK, for instance, fairness/equality was part of the case made for patient choice. In several other countries, such as the Nordic countries, there was some concern about the likelihood that introducing choice would result in adjustment of the healthcare system in favour of certain patient groups (e.g. healthy, more highly educated, young people). Other types of patients would be ignored by the providers [8]. The fact that Dutch policy makers had no concerns about equity is especially interesting because they did expect differences in choice behaviour between different patient groups [31].

Because policy making is not a straightforward process, some aspects of the policy are ambiguous [89]. These ambiguities can have a variety of causes. Secondly, policy on the health insurance system change was not strictly defined; instead, some choices were left open [68]. One example is that the minister of VWS was unwilling to make a choice between insurance policy types and was ready to let 'all the players on the market' decide on the matter [36]. Thirdly, in policy documents, assumptions are made and words are used for concepts that cannot be grasped merely by reading written material about the subject [34]. For example, patient choice is a concept that refers to the indirect influence patients (the demand side) have on healthcare providers, but it is never explicitly defined as such. Fourthly, there might not be one single way to understand the policy; instead, words and assumptions that are used in it might have different meanings for different people. For some policy makers, patient choice refers to individual patients actively choosing a healthcare provider, while for others the concept refers to the threat of competitors that patients might choose. Finally, the development of the policy on health insurance system change has been a political process during which compromises had to be negotiated, for

example regarding which goal of patient choice is the main focus. There are also other countries, in which patient choice has multiple goals, such as Scandinavia and the UK [2,8,10,11]. However, the Netherlands is unique, since patient choice as a goal in its own right conflicts with letting insurers contract providers in selectively. Whereas the latter is essential for the functioning of the new health insurance system and regulated competition [18], the former was also included in the policy as a goal in its own right [69].

Healthcare provision and the insurance market

Although the current study focuses on the choice of providers, the healthcare insurance and provision markets are interrelated. However, the policy makers involved in the development of the current health insurance system tried to make sure that patients will always have a free choice of provider, independently of their insurance products (there may be some financial consequences). This makes it valid to analyse the healthcare provision market separately from the healthcare insurance market in the Dutch situation.

Limitations, strengths and follow-up research

One limitation of this study is that we confined our analysis mainly to policy documents about the Wmg and the Zvw. This meant that we did not incorporate the history of the health insurance system changes. We partially solved this issue by consulting additional literature in order to put our reconstruction into context. Furthermore, we did not have the opportunity to interview the person who was the Minister of Health during the years that the health insurance system acquired its final form. A strong point of this research is, however, that we held interviews both with key figures involved in the health insurance system change and with people who followed this development closely.

Another strength of this paper is that, as far as we know, few scientific papers have been written either in the Netherlands or abroad that aimed to model the policy assumptions underlying the promotion of patient choice by combining policy document analysis with interviews with key figures. The current paper therefore expands the body of literature about public policy evaluation, adds to the existing knowledge about regulated competition in healthcare, and will enable future research on the validity of this policy, e.g. whether patients are indeed willing to choose their provider.

Conclusion

Patient choice of healthcare providers is both a goal in its own right and a fundamental element in a system in which regulated competition between providers is key. Several instruments have been put in place to ensure that patients can act as consumers on the healthcare market: making sure that they are well-informed and that the insurance system poses no barriers. There has been much less attention for the willingness and ability of patients to choose, i.e. choice as a 'value'. Also, the consequences on equity of outcomes if several patient groups are less inclined or capable to choose actively received little attention.

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References

1. Ahgren B, Axelsson R: A decade of integration and collaboration: the development of integrated health care in Sweden 2000–2010. *International Journal of Integrated Care* 2011, 11(Special 10th Anniversary Edition):1–8.
2. Dixon A, Robertson R, Bal R: The experience of implementing choice at point of referral: a comparison of the Netherlands and England. *Health Econ Policy Law* 2010, 5(special Issue 3):295–317.
3. Greener I: Are the assumptions underlying patients choice realistic? A review of the evidence. *Br Med Bull* 2007, 83(1):249–258.
4. Ranerup A, Noren L, Sparud-Lundin C: Decision support systems for choosing a primary health care provider in Sweden. *Patient Educ Couns* 2012, 36(3):342–347.
5. Grytten J, Sorensen RJ: Patient choice and access to primary physician services in Norway. *Health Econ Policy Law* 2009, 4(Pt 1):11–27.
6. Bevan G, Helderman JK, Wilsford D: Changing choices in health care: Implications for equity, efficiency and cost. *Health Econ Policy Law* 2010, 5(Special Issue 03):251–267.
7. Vrangbaek K, Ostergren K, Birk HO, Winblad U: Patient reactions to hospital choice in Norway, Denmark, and Sweden. *Health Econ Policy Law* 2007, 2(Pt 2):125–152.
8. Vrangbaek K, Robertson R, Winblad U, van de Bovenkamp H, Dixon A: Choice policies in Northern European health systems. *Health Econ Policy Law* 2012, 7(1):47–71.
9. Christensen M, Hewitt-Taylor J: Patient empowerment: Does it still occur in the ICU? *Intensive Crit Care Nurs* 2007, 23(3):156–161.
10. Greener I: Who choosing what? The evolution of the use of 'choice' in the NHS, and its importance for New Labour. In *Social policy review: UK and international perspectives*. Edited by Bochel C, Ellison N, Bristol PM: The Policy Press; 2003:49–68.
11. Magnussen J, Vrangbaek K, Saltman RB: *Nordic Health Care Systems. Recent Reforms and Current Policy Challenges*. Maidenhead: Open University Press; 2009.
12. Burge P, Devlin N, Appleby J, Gallo F, Nason E, Ling T: *Understanding Patients' Choices at the Point of Referral*. Cambridge: Rand Europe; 2006.

13. Hirschman AO: *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press; 1970.
14. Lako CJ, Rosenau P: Demand-driven care and hospital choice. Dutch health policy toward demand-driven care: results from a survey into hospital choice. *Health Care Anal* 2009, 17(1):20–35.
15. Werner RM, Asch DA: The unintended consequences of publicly reporting quality information. *JAMA* 2005, 293(10):1239–1244.
16. Birk HO, Henriksen LO: Which factors decided general practitioners' choice of hospital on behalf of their patients in an area with free choice of public hospital? A questionnaire study. *BMC Health Serv Res* 2012, 12(126):1–10.
17. Ubachs R: *In eigen hand. Een institutioneel onderzoek naar het overheidshandelen inzake patiëntenbeleid 1945–1997*. Den Haag: Ministerie van VWS; 2001.
18. Commissie Structuur en Financiering Gezondheidszorg: *Bereidheid tot verandering*. Den Haag: SDU; 1987.
19. Enthoven A, van de Ven W: Going dutch - managed-competition health insurance in the Netherlands. *N Engl J Med* 2007, 357(24):2421–2423.
20. Enthoven AC: The history and principles of managed competition. *Health Aff (Millwood)* 1993, 12(Suppl 1):24–48.
21. Groß S, Manouguian M, Wasem J: Health insurance reform in the Netherlands. *CESifo DICE Report* 2007, 5(1):63–67.
22. Maarse H: *Markthervorming in de zorg. Een analyse vanuit het perspectief van de keuzevrijheid, solidariteit, toegankelijkheid, kwaliteit en betaalbaarheid*. Maastricht: Maastricht University; 2011.
23. Delnoij DMJ, Rademakers JJDJM, Groenewegen P: The dutch consumer quality index: an example of stakeholder involvement in indicator development. *BMC Health Serv Res* 2010, 10(88):1–12.
24. Friele RD: *Evaluatie Wet marktordening gezondheidszorg*. Den Haag: ZonMw; 2009.
25. van de Ven WPMM, Schut FT, Hermans HEGM, De Jong JD, Van der Maat M, Coppen R, Groenewegen PP, Friele RD: *Evaluatie Zorgverzekeringwet en Wet op de zorgtoeslag*. Den Haag: ZonMw; 2009.

26. Millar R, Powell M, Dixon A: What was the programme theory of new labour's health system reforms? *J Health Serv Res Policy* 2012, 17(Suppl 1):7–15.
27. Hoogerwerf A, Herweijer M: *Overheidsbeleid. Een inleiding in de beleidswetenschap*. Alphen aan den Rijn: Kluwer; 2008.
28. Leeuw FL: Policy theories, knowledge utilization, and evaluation. *Knowledge, Technology & Policy* 1991, 4(3):73–91.
29. Tweede Kamer: Kamerstuk 29763 no. 3. Den Haag: Tweede Kamer; 2004.
30. Tweede Kamer: Kamerstuk 30186 no. 3. Den Haag: Tweede Kamer; 2005.
31. NZa: (In) het belang van de consument: Het consumentenprogramma van de NZa. Utrecht: NZa; 2007.
32. Wet marktordening gezondheidszorg. wetten.overheid.nl/BWBR0020078/geldigheidsdatum_07-07-2006
33. Maastricht University, personal communication, 1 June 2011.
34. NPCF, personal communication, 30 June 2011.
35. VWS, personal communication, 17 June 2011.
36. Tweede Kamer: Handelingen 30186 no. 53.2. Den Haag: Tweede Kamer; 2006.
37. Eerste Kamer: Kamerstuk 29763 no. E. Den Haag: Eerste Kamer; 2005.
38. Eerste Kamer: Kamerstuk 30186 no. D. Den Haag: Eerste Kamer; 2006.
39. Ministerie van VWS: Beleidsagenda 2005. Den Haag: Ministerie van VWS; 2005.
40. Tweede Kamer: Kamerstuk 29763 no. 4. Den Haag: Tweede Kamer; 2004.
41. Tweede Kamer: Kamerstuk 30186 no. 8. Den Haag: Tweede Kamer; 2005.
42. Eerste Kamer: Kamerstuk 29763 no. H. Den Haag: Eerste Kamer; 2005.
43. Tweede Kamer: Kamerstuk 29763 no. 26. Den Haag: Tweede Kamer; 2004.
44. Ministerie van VWS: Beleidsagenda 2006. Den Haag: Ministerie van VWS; 2006.
45. Art. 3, lid 2 Zorgverzekeringswet. wetten.overheid.nl/BWBR0018450/geldigheidsdatum_01-02-2006
46. Tweede Kamer: Kamerstuk 30186 no. 38. Den Haag: Tweede Kamer; 2006.
47. Eerste Kamer: Kamerstuk 29763 no. D. Den Haag: Eerste Kamer; 2005.

48. Tweede Kamer: Kamerstuk 29763 no. 7. Den Haag: Tweede Kamer; 2004.
49. Tweede Kamer: Handelingen 29763 no. 27. Den Haag: Tweede Kamer; 2005.
50. Art. 13, lid 1 Zorgverzekerswet.
wetten.overheid.nl/BWBR0018450/geldigheidsdatum_01-02-2006
51. Tweede Kamer: Kamerstuk 30186 no. 11. Den Haag: Tweede Kamer; 2006.
52. Tweede Kamer: Handelingen 30186 no. 53.1. Den Haag: Tweede Kamer; 2006.
53. Art. 38, lid 4 Wet marktordening gezondheidszorg.
wetten.overheid.nl/BWBR0020078/geldigheidsdatum_07-07-2006
54. Art. 38 lid 7 Wet marktordening gezondheidszorg.
wetten.overheid.nl/BWBR0020078/geldigheidsdatum_07-07-2006
55. Art. 39 lid 1 Wet marktordening gezondheidszorg.
wetten.overheid.nl/BWBR0020078/geldigheidsdatum_07-07-2006
56. Tweede Kamer: Kamerstuk 27807 no. 25. Den Haag: Tweede Kamer; 2004.
57. Tweede Kamer: Handelingen 30186 no. 36.1. Den Haag: Tweede Kamer; 2006.
58. Zekere Zorg; Zekere Zorg. www.zekerezorg.nl
59. Consumentenbond: Verpleging-, verzorging- en thuiszorgvergelijker.
www.consumentenbond.nl/test/voeding-gezondheid/gezondheid/Thuiszorg-verpleeghuis-verzorgingshuis/extra/verpleeghuizen-vergelijken
60. IGZ: Basisset kwaliteitsindicatoren. www.igz.nl/onderwerpen/handhavinginstrumenten/gefaseerd-toezicht/kwaliteitsindicatoren/basissets/index.aspx
61. Orthopedie Geldrop: AD Ziekenhuis Top 100.
www.orthopediegeldrop.nl/documents/upload/top%20100.pdf
62. Tweede Kamer: Kamerstuk 30186 no. 26. Den Haag: Tweede Kamer; 2006.
63. Ministerie van VWS: Beleidsagenda 2004. Den Haag: Ministerie van VWS; 2004.
64. Tweede Kamer: Handelingen 28994 no. 80. Den Haag: Tweede Kamer; 2004.
65. Tweede Kamer: Kamerstuk 30186 no. 7. Den Haag: Tweede Kamer; 2005.

66. Tweede Kamer: Handelingen 30186 no. 60. Den Haag: Tweede Kamer; 2006.
67. RVZ, personal communication, 15 June 2011.
68. iBMG, personal communication, 21 June 2011a.
69. Eerste Kamer: Handelingen 28994 no. 7. Den Haag: Eerste Kamer; 2004.
70. Tweede Kamer: Handelingen 30186 no. 35. Den Haag: Tweede Kamer; 2006.
71. Art. 19 Wet marktordening gezondheidszorg. wetten.overheid.nl/BWBR0020078/geldigheidsdatum_07-07-2006
72. Centrum Klantervaring Zorg: Ontstaan. www.centrumklantervaringzorg.nl/wat-is-het-ckz/ontstaan.html
73. Grit K, van de Bovenkamp H, Bal R: De positie van de zorggebruiker in een veranderend stelsel. Een quick scan van aandachtspunten en wetenschappelijke inzichten. Rotterdam: instituut Beleid & Management Gezondheidszorg; 2008.
74. Van de Bovenkamp H, Grit K, Bal R: Zaakwaarnemers van de patiënt: Naar een overzicht van activiteiten ter versterking van de positie van PGO- organisaties. Rotterdam: instituut Beleid & Management Gezondheidszorg; 2008.
75. ZonMw: Projecten. www.zonmw.nl/nl/projecten
76. Art. 11 lid 1 Zorgverzekeringswet. wetten.overheid.nl/BWBR0018450/geldigheidsdatum_01-02-2006.
77. Centrum Klantervaring Zorg: Centrum Klantervaring Zorg. centrumklantervaringzorg.nl
78. Stichting Benchmark GGZ: Onze werkwijze. www.sbggz.nl/Onze_werkwijze.aspx
79. Zichtbare Zorg: Programma Zichtbare Zorg. www.zichtbarezorg.nl/page/Programma-Zichtbare-Zorg
80. Nederlands Patiënten Consumenten Federatie: Zorgkaart Nederland. www.zorgkaartnederland.nl
81. RIVM: Kiesbeter.nl. www.kiesbeter.nl/zorgverleners
82. Tweede Kamer: Kamerstuk 27807 no. 22. Den Haag: Tweede Kamer; 2004.
83. Eerste Kamer: Handelingen 30186 no. 35. Den Haag: Eerste Kamer; 2006.
84. Eerste Kamer: Kamerstuk 30186 no. C. Den Haag: Eerste Kamer; 2006.

85. Tweede Kamer: Handelingen 29763 no. 35.1. Den Haag: Tweede Kamer; 2004.
86. Tweede Kamer: Handelingen 30186 no. 56. Den Haag: Tweede Kamer; 2006.
87. Wet medisch-wetenschappelijk onderzoek met mensen. wetten.overheid.nl/BWBR0009408/geldigheidsdatum_17-09-2012
88. Externe Evaluatiecommissie Kiezen in Zorg: Rapport externe evaluatie ZonMw-programma Kiezen in Zorg (2004–2008). Den Haag: ZonMw; 2008.
89. Howlett M, Ramesh M: Studying public policy. Policy cycles and policy subsystems. 2nd edition. Toronto: Oxford University Press; 2003.

Appendix A. Data collection

Document search

The database 'overheid.nl' was searched for policy documents from the Dutch House of Representatives and the Dutch Senate concerning the Zvw, Wmg and policy on patients/consumers. This database contains all policy documents, policy letters and minutes of meetings of the Dutch House of Representatives and the Dutch Senate. The three searches consisted of the search strings 'zorgverzekeringwet', 'marktordening gezondheidszorg' and 'patiënten/consumentenbeleid'. The searches were restricted to meeting minutes and official papers from the years 2004 to 2006, because the Wmg and Zvw were developed during this period. The 344 documents we initially found were reviewed on title to determine whether they concerned patient choice for healthcare providers. 58 documents met this criterion. Additionally, we analysed the political agendas of the Dutch Ministry of Health from the years 2004, 2005 and 2006 and a document from the Dutch Health Care Authority (NZA).

Interviews

Seven people occupying the following functions during the years in which the system acquired its final form were interviewed: two policy makers working for the Ministry of Health involved in the reform of the Dutch healthcare system, a professor of the policy and organisation of mental healthcare in the Netherlands working for the institute of Health Policy & Management (iBMG) who advised the Dutch government about the new healthcare system, a professor of healthcare policy analysis at Maastricht University; the president of the Federation of Patients and Consumer Organisations in the Netherlands (NPCF), the president of the association of Dutch health insurers (Zorgverzekeraars Nederland (ZN)) and the chairman of the Council for Public Health and Health Care (RVZ).

3

Determinants of patient choice of healthcare providers: a scoping review

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Abstract

Background

In several northwest European countries, a demand-driven healthcare system has been implemented that stresses the importance of patient healthcare provider choice. In this study, we are conducting a scoping review aiming to map out what is known about the determinants of patient choice of a wide range of healthcare providers. As far as we know, not many studies are currently available that attempt to draw a general picture of how patients choose a healthcare provider and of the status of research on this subject. This study is therefore a valuable contribution to the growing amount of literature about patient choice.

Methods

We carried out a specific type of literature review known as a scoping review. Scoping reviews try to examine the breadth of knowledge that is available about a particular topic and therefore do not make selections or apply quality constraints. Firstly, we defined our research questions and searched the literature in Embase, Medline and PubMed. Secondly, we selected the literature, and finally we analysed and summarized the information.

Results

Our review shows that patients' choices are determined by a complex interplay between patient and provider characteristics. A variety of patient characteristics determines whether patients make choices, are willing and able to choose, and how they choose. Patients take account of a variety of structural, process and outcome characteristics of providers, differing in the relative importance they attach to these characteristics.

Conclusions

There is no such thing as the typical patient: different patients make different choices in different situations. Comparative information seems to have a relatively limited influence on the choices made by many patients and patients base their decisions on a variety of provider characteristics instead of solely on outcome characteristics. The assumptions made in health policy about patient choice may therefore be an oversimplification of

reality. Several knowledge gaps were identified that need follow-up research.

Background

In most European countries, patients were not encouraged to actively choose their healthcare provider. Patient choice has only recently gained importance in a number of northwest European countries, such as the Netherlands and the UK [1,2]. Important reasons for promoting patient choice were to reduce waiting times and to encourage competition between providers. Competition was expected to make care more responsive to patients and, among other things, improve efficiency (including cost decreases), quality and (in the UK) equity of health-care [2-4]. In the Netherlands in 2006 for example, a demand-driven healthcare system was implemented to enhance competition between providers as a means of helping to achieve these goals. Another goal of emphasizing patient choice was to protect and promote the position of patients in healthcare [5]. It should be noted that some studies have shown that consumer-directed healthcare does not control costs better than other healthcare systems [6] and that its effects on quality are mixed [7]. This is, however, beyond the scope of this study.

The principle through which patient choice is assumed to bring about competition between healthcare providers is 'voting with your feet' [8]. This means that patients who are looking for high-quality care while minimizing costs will directly compare the prices and quality of different providers against each other and actively choose the provider that best fits their preferences and needs. In this context, 'actively' means that patients invest effort in acquiring information and making a conscious decision based on that information. If the money follows the patients, this selection process will encourage providers to compete for patients by improving their quality and decreasing their costs [9-12], which eventually helps ensure the quality, efficiency and equity of healthcare [11,13,14]. This line of reasoning applies not only to northwest European countries [2,3,5,15-17] but also to the USA, where patient choice was already an important element in the healthcare system [18].

For patients to be able to actively choose the best provider, they need to be informed about the quality of providers. Quality indicators were therefore developed. A quality indicator is a measurable aspect of care that gives an indication of the quality of care [19] and may concern the structure, process or outcomes of care delivered by a provider [20,21]. Structure indicators concern the organization of healthcare, whereas process indicators

relate to the care delivery process and outcome indicators indicate the effect of the care delivered. Because patients have different information preferences, comparative information for all indicators is developed to enable patients to select the information that is relevant for them and to choose a provider based on that information [5,20].

Although patients are given a large amount of comparative information and are expected to choose the best provider based on this information plus information about prices, it is however questionable whether patients are indeed willing and capable to act as assumed. Questions arise such as whether patients do indeed actively choose their providers, whether they use the information provided, and whether a country's health insurance system gives them enough opportunity and freedom to choose.

Research focus

Although patient choice of healthcare providers is gaining importance in northwest European countries, it is not certain whether patients do behave as assumed. It is therefore high time that information is gathered on what is already known about this subject. In the current study, we are conducting a scoping review with the goals of describing the findings and range of research concerning patient choice of a wide range of healthcare providers in more detail (no studies were excluded based on the provider type) and of identifying knowledge gaps in the existing literature. We have not made selections or applied any quality constraints [22]. To our knowledge, not many studies exist that share this goal. This study is therefore contributing to the growing amount of literature on this subject. The three research questions we aim to answer are: (1) Do patients actively choose their healthcare providers? (2) How do patients choose their preferred healthcare provider? and (3) Which provider characteristics do they base their choice on?

Methods

Scoping review

We conducted a scoping review. A scoping review is a kind of literature review that is used when: a) a narrow review question cannot be defined; b) studies have employed a range of data collection and analysis techniques; c)

no prior synthesis has been undertaken on the topic; and d) the reviewers are not going to assess the quality of the studies reviewed [23].

Search strategy and selection of the literature

The search was conducted on 17 August 2011 by one of the authors (AV). The databases used were Embase, Medline and PubMed. The keywords (i.e. patient, consumer, choice, provider, hospital, physician, doctor and their plurals) were determined after an initial broad search of the literature and consultations with a librarian and an expert on literature reviews. We decided to use a narrowly defined search string because otherwise the numerous irrelevant studies concerning choice of a health plan or treatment would outweigh the studies concerning patients' choice of a provider. Only studies written in English were included, which can be justified by the observation that almost all references cited by the studies identified in the initial broad search were in English. This suggests that the most important sources are available in English. We only included studies from Western countries because the health insurance systems of other countries differ too much. For example, access to healthcare may be limited or healthcare services may not be well developed [24]. As healthcare systems have changed a great deal over past decades, we only included scientific papers from 1995 and later. The inclusion and exclusion criteria and the search string are shown in Table 1. This table also shows that post-hoc exclusion criteria were developed after a first review round and then applied in a second round. The development of such 'post hoc' criteria is central to the scoping review process as it is unlikely that researchers will be able to identify parameters for exclusion at the outset [23]. The selection method and search flow are represented in Figure 1.

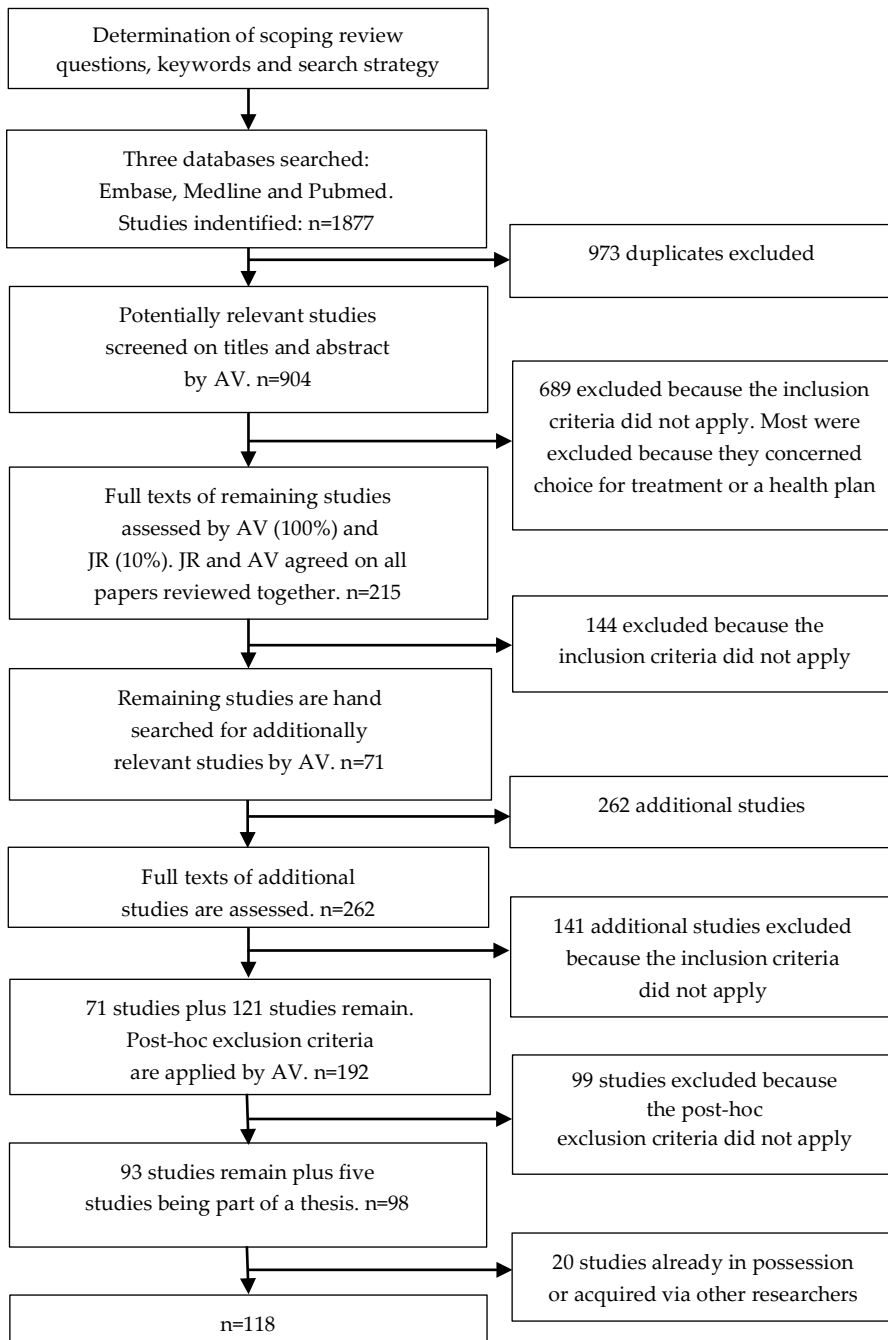
Table 1 Inclusion and exclusion criteria and search string

Inclusion criteria	<ul style="list-style-type: none"> - written in English - concerns factors influencing patient choice or general choice theories regarding choices in health care - factors focused on are studied from a patient perspective or are determined by means of patient registration data analysis - does not solely concern the organization of a country's health insurance system - reports empirical research (is not a commentary) - is a scientific paper
Post-hoc exclusion criteria	<ul style="list-style-type: none"> - reports - studies before 1995 - studies from non-Western countries
Search string in PubMed	<p>("patient choice"[TIAB] OR "patients choice"[TIAB] OR "patients' choice"[TIAB] OR "consumer choice"[TIAB] OR "consumers choice"[TIAB]) AND (provider[TIAB] OR providers[TIAB] OR hospital[TIAB] OR hospitals[TIAB] OR physician[TIAB] OR physicians [TIAB] OR doctor[TIAB] OR doctors[TIAB])</p>

Data extraction

A spreadsheet was created to chart the information that contributed to answering the research questions. Details of publication information, the choice situation, the study sample, the country in which the study took place and the kind of provider for which the preferences were assessed were recorded along with this information. This process was carried out by one of the authors (AV). The information extracted that helped answer the research questions was discussed with the other authors during team meetings in order to work towards an overall perspective on the factors emerging from the literature. Disagreements were discussed until a consensus was reached.

Figure 1 Search strategy and results



Results

Search flow

As shown in Figure 1, a total of 1877 publications were identified from the databases, of which 973 were duplicates. At the end of the selection process, 118 studies remained for further analysis (Figure 1). In Table 2, an overview of the characteristics of these studies is given.

Study characteristics

Study sample and choice situation

Most studies (n = 70) used only patients as participants, e.g. [25-30]. Other studies looked at the general (adult) population, or a specific subclass of the population such as those in work or with insurance, the elderly or people of a specific ethnicity or gender.

For the choice situation, the majority of studies (n = 49), e.g. [31-36], used discrete choice experiments or questionnaires asking participants about potential choices and preferences, while somewhat fewer studies investigated patient choice in real choice situations (n = 43), e.g. [27,28,37-40]. Only a few studies combined the analysis of real choice situations with experiments or questionnaires (n = 11) [30,41-50].

Countries

The majority of studies into patient choice took place in the USA (n = 51), e.g. [18,25,27,29,51,52], followed by the Netherlands (n = 29), e.g. [30,31,46,53-55], and the UK (n = 19), e.g. [26,35,38,56-58]. Countries with less research on the subject are Canada, France, Australia, Finland, Sweden, Norway, Belgium and Germany. There are two areas that studies from the USA examined relatively more often than those from Europe: revealed preference research (based on analysis of registration data) about the use of comparative information, and research into the influence of health plans on patients' choices.

Table 2 Characteristics of the included studies (n = 118)

First author, year, country	Health care provider ¹	Respondents ²	Primary method	Choice situation ³	Type of provider characteristics influencing choice ⁴
Ahmad, 2002, Canada [110]	Family physician	O	Questionnaire	Hypothetical	S, P
Albada, 2009, Netherlands [36]	Hospital/ centre for ambulatory hospital care	P	DCE questionnaire	Hypothetical	S, P
Anell, 1997, Sweden [84]	Primary care physician, hospital & hospital specialist	O	Questionnaire	Hypothetical	S, P
Arora, 2004, USA [68]	GP	O	Experiment	Hypothetical	S
Bernard, 2006, USA [37]	GP	P	Questionnaire	Real	S, P
Boonen, 2009 ch.3, Netherlands [53]	Pharmacy	P	Patient registration data	Real	S
Boonen, 2009 ch.4, Netherlands [109]	Pharmacy	O	DCE questionnaire	Hypothetical	S
Boonen, 2009 ch.5, Netherlands [125]	GP	O	DCE questionnaire	Hypothetical	S
Boonen, 2009 ch.6, Netherlands [114]	GP/ Pharmacy	O	DCE questionnaire	Hypothetical	S
Bornstein, 2000, USA [75]	GP	P	Questionnaire	Hypothetical	S, P
Bouche, 2008, France [123]	Hospital	P	Patient registration data, questionnaire	Real	S
Bundorf, 2009, USA [103]	Fertility clinic	P	Patient registration data	Real	O

Table 2 Characteristics of the included studies (n = 118) (Continued)

Burge, 2004, UK [82]	Hospital	P	DCE questionnaire	Hypothetical	S
Chandler, 2000, USA [25]	Obstetrician-Gynaecologist	P	Questionnaire	Hypothetical	S, P
Cheraghi-Sohi, 2008, UK [26]	GP	P	DCE questionnaire	Hypothetical	S, P
Chernew, 1998, USA [27]	Hospital	P	Patient registration data	Real	S, O
Combier, 2004, France [28]	Maternity hospital	P	Interview	Real	S
Cooper, 1996, USA [69]	Individual Physician	P	Interview, patient registration data	Real	S
Cutler, 2004, USA [29]	Hospital	P	Patient registration data	Real	O
Damman, 2009, Netherlands [31]	Hospital	O	Semi-structured cognitive interviews	Hypothetical	O
Damman, 2010, Netherlands [106]	NA	O	DCE questionnaire	Hypothetical	NA
Damman, 2011, Netherlands [119]	Hospital	O	DCE questionnaire	Hypothetical	S, P
Dawson, 2004, UK [56]	Hospital	P	Patient registration data	Real	P
Dawson, 2007 UK [57]	Hospital	P	Patient registration data	Real	P
De Boer, 2011, Netherlands [129]	General	P	Questionnaire	Hypothetical	P
De Groot, 2011, Netherlands [41]	Hospital	P	DCE questionnaire	Combination	S, P
Dealy, 2005, UK [117]	Hospital	NA	Literature review	NA (review)	S
Dijis-Elsinga, 2010, Netherlands [30]	Hospital	P	Questionnaire	Combination	S, P

Table 2 Characteristics of the included studies (n = 118) (Continued)

Dixon, 2010, UK, Netherlands [2]	Hospital	NA	Analysis of secondary literature and primary data	NA	S, P, O
Exworthy, 2006, UK [59]	General	NA	Literature review	NA (review)	S, P, O
Faber, 2009, Netherlands [60]	General	NA	Literature review	NA (review)	*
Fasolo, 2010, UK [92]	Hospital	O	Focus group, questionnaire	Hypothetical	S, P, O
Finlayson, 1999, USA [51]	Hospital	P	DCE interview	Hypothetical	S, O
Foster, 2010, Australia [91]	NA	NA	Literature review	NA	NA
Fotaki, 2008, UK [16]	Hospital & GP	NA	Literature review	NA (review)	S, P
Fung, 2005, USA [18]	Primary care physician	P	DCE questionnaire	Hypothetical	P, O
Fung, 2008, USA [105]	General	P	Literature review	Real	O
Geraedts, 2007, Germany [74]	Hospital	P	Interview	Hypothetical	S, P, O
Gooding, 1995, USA [107]	Hospital	O	Questionnaire	Hypothetical	NA
Groenewoud, 2008 ch.2, Netherlands [99]	General	O	Literature review, document interviews, document analysis	NA (review)	S, P
Groenewoud, 2008 ch.3, Netherlands [54]	General	NA	Literature review	NA (review)	S
Groenewoud, 2008 ch.4, Netherlands [98]	General	P	Grounded theory approach	Real	S, P, O
Groenewoud, 2008 ch.5, Netherlands [32]	General	P	Q-methodology, questionnaire	Hypothetical	S, P, O
Groenewoud, 2008 ch.6, Netherlands [113]	General	P	DCE questionnaire	Hypothetical	S, P, O

Table 2 Characteristics of the included studies (n = 118) (Continued)

			P, O			S, P, O
Groenewoud, 2008 ch.7, Netherlands [61]	General		P, O		Hypothetical	S, P, O
Grytten, 2009, Norway [3]	GP		P	Concept mapping Interview or questionnaire, patient registration data	Real	S
Guile, 2007, USA [52]	Obstetrician-Gynaecologist		P	Interview	Hypothetical	S, P
Harris, 2003, USA [42]	Individual physician		P	Questionnaire	Combination	NA
Haynes, 2003, UK [38]	GP practice		P	Patient registration data	Real	S
Hibbard, 1997, USA [89]	Health plan report cards		NA	Literature review	NA (review)	NA
Hibbard, 2003, USA [93]	General		NA	Literature review	NA (review)	NA
Hibbard, 2010, USA [100]	General		O	Questionnaire	Hypothetical	NA
Hirth, 2000, USA [139]	Nursing home		P	Patient registration data	Real	NA
Hirth, 2003, USA [65]	Nursing home		P	Patient registration data	Real	S, O
Hodgkin, 1996 USA [140]	Hospital		P	Patient registration data	Real	S
Hoerger, 1995, USA [86]	Prenatal care physician		P	Interview, patient registration data	Real	S
Howell, 2002, USA [77]	Obstetrician		P	Interview, patient registration data	Real	S, P
Humphreys, 1997, Australia [127]	GP		O	DCE questionnaire or interview, patient registration data	Hypothetical	S, P
Johnson, 2005, USA [43]	Obstetrician-Gynaecologist		P	Questionnaire	Combination	S, P

Table 2 Characteristics of the included studies (n = 118) (Continued)

	Thirteen different health professions (individuals).	O	Questionnaire	Hypothetical	S, P
Kerssens, 1997, Netherlands [55]	Hospital	NA	Literature review	NA (review)	*
Ketelaar, 2011, Netherlands [141]	Dentist	O	DCE questionnaire	Hypothetical	S, P
Kiiskinen, 2010, Finland [83]	General	NA	Literature review	NA (review)	S, P, O
Kolstad, 2009, USA [62]	NA	NA	Literature review	Hypothetical	NA
Kooreman, 2010, Netherlands [88]	Individual doctor	P, O	Questionnaire	Combination	S
Laamanen, 2010, Finland [44]	Hospital	P	Questionnaire	Real	S, P
Lako, 2009, Netherlands [79]	General	O	Interview	Hypothetical	NA
Lambrew, 2005, USA [85]	General	NA	Literature review	NA (review)	NA
Lubalin, 1999, USA [63]	General	P	Questionnaire	Combination	S, P, O
Lux, 2011, Germany [45]	General	P, O	Focus group	Hypothetical	S, P, O
Magee, 2003, UK [64]	Hospital	P	Questionnaire	Combination	S, P
Marang-van de Mheen, 2010, Netherlands [46]	Hospital	P	DCE questionnaire	Hypothetical	S, P, O
Marang-van de Mheen, 2010, Netherlands [33]	Hospital	P	DCE questionnaire	Hypothetical	S, P, O
Mavis, 2005, USA [126]	GP, ob-gyn & surgeon	P	Questionnaire	Hypothetical	S, P
McGlone, 2002, USA [76]	GP	P	Questionnaire	Real	S, P
Merle, 2009, France [67]	Hospital	P, O	Questionnaire or interview	Hypothetical	S, O
Moodie, 2008, UK [142]	Surgeon performing a cataract surgery.	P	Questionnaire	Hypothetical	S, P
Morrison, 2003, Australia [34]	GP	O	Questionnaire	Hypothetical	S, P

Table 2 Characteristics of the included studies (n = 118) (Continued)

	Hospital	P	Cognitive interview, focus group	Hypothetical	NA
Moser, 2010, Netherlands [90]	Hospital	P	Cognitive interview, focus group	Hypothetical	NA
Mukamel, 1998, USA [104]	Hospital & Surgeon	P	Patient registration data	Real	O
Mukamel, 2001, USA [102]	NA (review)	NA	Literature review	Real	S
Newton, 2007, Australia [115]	Medical facility/ GP	O	Questionnaire	Hypothetical	S, P
Nguyen, 2006, Finland [39]	Dentist	P	Questionnaire, patient registration data	Real	S
Orr, 1998, UK [66]	Excimer laser treatment centre	P	Questionnaire	Real	S, P
Peters, 2007, USA [96]	Hospital	O	DCE questionnaire	Hypothetical	NA
Peters, 2009, USA [95]	Hospital/ health plan	O	DCE questionnaire	Hypothetical	NA
Petry, 2004, USA [143]	Health Care Practitioner (institution and individual)	P	Questionnaire	Real	S
Plunkett, 2002, USA [70]	Obstetrician/ Gynaecologist	P	Interview	Real	S, P
Propper, 2007, UK [144]	Hospital	P	Patient registration data	Real	S
Rademakers, 2011, Netherlands [80]	General	P	Secondary analysis on questionnaire and interview data	Real	S, P
Redelmeier, 1995, USA [94]	NA	O	DCE questionnaire	Hypothetical	NA
Reyna, 2009, USA [97]	NA	NA	Literature review	NA (review)	NA
Ringard, 2011, Norway [130]	Hospital	P	Patient registration data, questionnaire	Real	P
Robertson, 2008, UK [128]	GP	P	Questionnaire	Real	S, P

Table 2 Characteristics of the included studies (n = 118) (Continued)

Robertson, 2011, UK [47]	Hospital	P	DCE questionnaire	Combination	S, O
Roh, 2005, USA [121]	Hospital	P		Real	S
Roh, 2008, USA [120]	Hospital	P	Patient registration data	Real	S
Rosenthal, 2009, USA [73]	Individual physician	P	Patient registration data	Real	S
Ryan, 2000, UK [35]	Hospital	O	DCE questionnaire	Hypothetical	S, P
Safran, 2001, USA [116]	Individual physician	P	Longitudinal: questionnaire, patient registration data	Real	S, P
Saha, 2000, USA [145]	General	P	Interview	Real	S
Scanlon, 2008, USA [40]	Hospital	P	Patient registration data, questionnaire	Real	S, O
Schauffler, 2001, USA [101]	Hospital	NA	Literature review	NA (review)	O
Schnatz, 2007, USA [78]	Obstetrician/Gynaecologist	P	Interview	Hypothetical	S, P, O
Schneider, 1998, USA [48]	Hospital	P	Interview	Combination	S
Schwartz, 1999, USA [134]	NA	O	DCE questionnaire	Hypothetical	NA
Schwartz, 2005, USA [49]	Hospital	P	Interview	Combination	S, O
Shah, 2010, UK [112]	Hospital	P	Questionnaire	Hypothetical	S, P
Siciliani, 2007, UK [58]	Hospital	P	Patient registration data	Real	P
Sinaiko, 2011, USA [108]	Physician	O	DCE questionnaire	Hypothetical	O

Table 2 Characteristics of the included studies (n = 118) (Continued)

	Hospital	P	Patient registration data, questionnaire	Real	S
Tai, 2004, USA [111]	Hospital	P	Patient registration data, questionnaire	Real	S
Van Empel, 2011, Netherlands, Belgium [50]	Fertility clinic	P, O	DCE questionnaire	Combination	S, P, O
Varadarajulu, 2002, USA [71]	Endoscopist	P	Questionnaire	Hypothetical	S, P
Varkevisser, 2007, Netherlands [118]	Hospital	P	Patient registration data	Real	S, P
Varkevisser, 2009, Netherlands [81]	Hospital	P	Patient registration data	Real	S, O
Varkevisser, 2010, Netherlands [122]	Hospital	P	Patient registration data	Real	S, P
Vonberg, 2008, Germany [124]	Hospital	O	Interview	Hypothetical	S, P, O
Zuckerman, 2002, USA [72]	Obstetrician/Gynaecologist	O	Questionnaire	Hypothetical	S

¹NA = not applicable; ²P = patients; O = other; NA = not applicable; ³Real = patients in a real choice situation; Hypothetical = no real choice situation; Combination = both a real and a hypothetical choice situation; NA = not applicable; ⁴S = structure indicator(s); P = process indicator(s); O = outcome indicator(s); NA = not applicable; * = no provider characteristics found that influence choices.

Kind of provider

Many studies do not focus on a particular kind of healthcare provider, but focus on several types of healthcare provider or do not specify what they are focusing on (n = 25), e.g. [59-64]. Of the studies that do focus on a particular kind of provider, choice of healthcare institutions (n = 54), e.g. [27,29,31,65-67], has been investigated more often than choice of individual providers (n = 31), e.g. [68-73]. Most studies that investigated the choice of an institution were investigating the choice of a hospital (n = 46), e.g. [27,29,31,51,57,74]. Of the studies investigating the choice of an individual provider, most concerned the choice of a GP, family physician or primary care doctor (n = 12), e.g. [3,18,37,68,75,76], followed by the choice of an obstetrician or gynaecologist (n = 7), e.g. [43,52,70,72,77,78].

First research question: do patients actively choose their healthcare providers?

Research shows that few patients actively choose their healthcare provider [16,30,41,47-49,64]. For example, Schwartz (2005) found that only ten per cent of patients seriously considered an alternative to their local hospital when undergoing surgery [49]. Generally, patients rely on their GP to choose for them [2,41,49,67,70,79,80] or go to the nearest provider [27,59,81]. Furthermore, patients rely on their previous healthcare experiences when deciding where to receive care [25,46,47,49]. This seems to apply to both Europe and the USA (for those patients who can choose). However, certain patient groups (such as more highly educated and younger patients [59,79,80,82,83], patients with higher incomes [59,82,83] and patients without an existing (satisfactory) relationship with a provider [42,47]) make an active choice more often.

According to several studies, a substantial fraction of the patients does not consider choice to be very important [16,43,64,84,85]. Consequently, these patients are less likely to make an active choice. Even so, they find choosing a GP or hospital more important than choosing a hospital specialist [84]. The importance patients attach to choice differs between patient groups. For example, according to one study, older patients, female patients, those who live further away from a hospital, less highly educated patients and those with a bad experience with their local hospital are more favourably inclined towards the free choice of hospital [47]. A second reason for patients not to choose actively is that the degree of choice they experience or their ability to exercise their choice is limited. For example,

patients' perceived degree of choice or ability to choose was found to be influenced positively by family income [16,85,86], general state of health [85] and willingness and ability to travel [16], and negatively by restrictions imposed by health insurers [85,86], age and female gender [16]. Additionally, some studies found that some patient groups are more likely to be offered a choice of provider by their GP than other patient groups, e.g. Caucasians [2], healthier patients and patients who need an operation or hospital admission [47].

Second research question: how do patients choose their preferred healthcare provider?

Patients' decision-making processes

Policy makers assume that patients selectively choose high-quality providers based on weighing up the information about the different providers: in other words, that they make a rational choice [87]. For patients to be able to choose as this assumes, they need complete information, unrestricted cognitive abilities, consistent preferences, willpower and the ability to foresee their needs [88]. However, several studies suggest that these conditions are rarely satisfied [88-90] and most patients are consequently unable to make a completely rational choice [38,63,88,91-93]. This results in choices based on only some of the provider characteristics and/or irrelevant factors such as their current mood [31,63,88-91] and often to no choice at all [88,93,94]. According to several studies, the degree to which patients are capable of processing the information rationally is influenced by their health literacy (the degree to which they have the capacity to obtain, process and understand the basic health information needed to make appropriate health decisions) and their numeracy (the ability to apply numbers as needed to manage your health) [60,92,95-97]. For example, low numeracy leads to people being influenced more often by factors that are irrelevant to the choice problem.

Furthermore, a patient's activation level (i.e. the extent to which patients seek and use healthcare information and actively choose between providers) also influences patients' choice processes, according to several studies. Some patients actively search for providers, while others rely on their GP for advice [42,62,64,76,86,98]. How active patients are depends on their characteristics [42,47,76,86,98]. For example, patients who do not have a strong tie or have an unsatisfactory tie to individual physicians [42,47] are more active consumers. Patients who make more active choices may make

use of systematic reasoning using all available information or may make a more intuitive choice using only subsets of the information [31,90,92]. Low numeracy leads to less use of systematic reasoning [92]. However, only a few patients systematically process all information, according to Damman [31].

Use of information sources

Research shows that patients use various information sources in their decision-making processes. Comparative information is one example of an information source. Findings on whether patients see the relevance of comparative information are mixed (i.e. mutual inconsistency between the studies). One reason for patients finding this information irrelevant is that they expect a high standard everywhere and are unwilling to 'shop around' [16,49]. Often, patients who do find this information relevant eventually do not use it, which suggests that there is a difference between what patients say and what they actually do [16,31,64]. This difference is confirmed by research that directly compared revealed preferences against stated preferences [30,45,46,48,49]. Patients use more comparative information in future choices and in advice to others than they used in previous choices. Reasons for not using it are that they encounter barriers to its use, e.g. the short time frame in which to select a provider and geographical barriers [62], unavailability of the right information [31,74,76,84,90,99], distrust of the information [49], information overload [31,60,100] and an insufficiently clear presentation of the information [30,31,60,92,100,101]. So, although patients indicate that they find comparative information important, research suggests that relatively few patients make use of comparative information, are aware of its existence or understand it [16,31,48,62,64,102]. This applies in both Europe and the USA. Patients appear to use comparative information only in certain circumstances, such as when there is a single outcome of major importance and the data can be easily understood, or in the absence of a meaningful and trusting doctor-patient relationship [16,60]. Patients with low health literacy in particular find insufficiently clear presentation formats more of a problem [60,95,96]. Nevertheless, according to a few revealed preference studies from the USA, the release of comparative information does result in small changes in providers' market shares [29,62,103-105]. However, this effect may be caused by factors other than patients who are actively choosing, for example GP referrals. Finally, research indicates that explicitly giving or making patients aware of comparative information

[52,62,78] and improving the presentation format [63,92,95,97,100,106] increases its use.

Research shows that patients use other information sources more often than comparative information. A patient's own previous care experience, for example, is the most important information source for many patients [42,45,62,107,108]. A positive experience with a particular provider positively influences the future choice for that provider [25,30,44,45,47,109]. Patients' general care experiences also influence their choices. For example, two studies found that positive experience with female physicians positively influences patient preference for a female physician [72,110] and that patients who had bypassed their closest rural hospital once are more likely to bypass it again [111]. Social influence (e.g. a provider's general reputation, the influence of someone's referring physician or the recommendations of friends and acquaintances) is a third important information source [46,59,66,67,76,112]. However, different studies find different effects of this information source. Only the influence of a referring physician has a consistent strong positive effect.

Which of these information sources are used differs between patients [28,42,45,86,108,113]. For example, older [28,42] and less highly educated patients [113] are more likely to follow the advice of their physician. Older, less highly educated, less literate [60,84,92,106] patients and those already in the healthcare system [62] generally use less comparative information.

Third research question: which provider characteristics do patients base their choice of healthcare provider on?

Because the nature of this research question is suitable for quantitative analysis, we quantitatively analysed the studies that investigated the influence of provider characteristics on patients' choices. In 101 studies, the influence of provider characteristics on patients' choices was investigated. The structure-process-outcome model of quality care [21] is used in this review in order to summarize the characteristics influencing this theme. The factors studied most often are those related to structure (n = 86), followed by process (n = 60) and outcome (n = 43). Because of the relatively large amount of literature on structure, we have paid more attention to this factor. The importance that patients attach to the different factors differs between patients, depending on their socio-demographic (n = 44) and disease (n = 31) characteristics and their knowledge, attitudes and beliefs (n = 12). When we discuss the specific provider characteristics below, we will only go into

detail about the influences that have been investigated relatively often. Given the large number of sources included in this review, for the sake of manageability we will cite no more than six at a time.

Structure

Seven factors can be distinguished for the structure aspect, namely the availability of providers, the accessibility of the providers, the type and size of the providers, the availability/experience/quality of the staff, the organization of healthcare, the cost of treatment and socio-demographic factors of the individual doctors.

Availability (n = 29): it was commonly reported that the availability of providers influences choice (n = 18). Some patients have only a few providers to choose from and for some patients the number of providers they can actually choose from is limited because of, for example, language difficulties [2,3,16,48,65,102]. Whether or not a given provider is available for patients depends on their insurance plan, especially for patients in the USA. If patients have to make co-payments or do without certain benefits when receiving care from a particular provider, they are less likely to choose that provider (n = 10) [40,53,69,73,86,108]. This incentivizing by insurers does not affect all patients' decisions equally. Examples of observed effects are that being female [53] or having a lower income [73,109] positively affect, and that already having a provider [114] or being in poor health [73] negatively affect responsiveness to insurer incentivizing.

Accessibility (n = 55): the issue most discussed is distance or convenient location (n = 50). Generally, patients are averse to travel time and prefer a provider that is close by and not abroad (n = 44) [30,66,67,82,111,115]. Another important issue is that patients prefer a provider that is accessible by their own transport or public transport (n = 11) [28,30,38,64,112,116]. Other issues are parking (n = 4) [2,30,46,112] and transport that is organized or paid for (n = 4) [16,59,82,117]. Studies found a positive relationship between age and the importance of distance, easy access by transport and parking facilities (n = 12) [30,38,51,82,111,118]. Furthermore, being more highly educated (n = 8) [30,47,51,82,111,119] and being willing to travel (n = 3) [47,59,64] negatively influence the importance attached to distance. The specific disease influences the importance attached to distance (n = 6) [30,59,81,119-121], e.g. distance is more important for patients who need cataract surgery than for patients who need hip or knee surgery [119].

Type and size of the institution (n = 37): the issue most discussed was

provider ownership/affiliation (n = 17). It was generally found that this aspect influences choice (n = 15) [44,65,74,120-122]. For example, research indicates that patients prefer an individual provider that is affiliated to an (academic) hospital [62,70]. Besides, American patients prefer private, non-profit providers over public and commercial ones [27,65,120,121], whereas patients from the UK prefer public hospitals [66]. However, findings are mixed on whether patients prefer a university medical centre [45,81,118,122]. Two studies found that patients prefer a university medical hospital [45,81], while two others found that they do not [118,122]. Two other important issues are the range and quality of facilities (n = 22) [30,61,74,111,120,121] and the provider size (n = 11) [27,30,75,111,121,122]. Patients generally prefer clean hospitals with complex, high-quality services. Findings on preferred provider size are mixed. For example, Bouche found that patients were more likely to choose low-volume hospitals [123], while the number of beds does not influence choice of hospital according to Roh [120]. Bornstein found that patients prefer GP practices with several doctors [75]. Comparison of the studies reviewed could not let us show why findings are mixed, as there are so many differences between them. Examples of differences are the kind of healthcare provider that studies focused on and the methods used to acquire patients' preferences.

Staff (n = 35): a large number of studies found that the medical qualification/expertise of providers is an important determinant of choice (n = 27) [52,77,78,86,109,112]. Patients prefer providers with a quality certificate and qualified physicians. Furthermore, patients prefer experienced providers (n = 10) [30,33,43,52,70,113]. Yet other factors that patients prefer are that the provider's specialization/interest fits their care needs (n = 6) [37,59,64,70,75,119] and the availability of sufficient staff per patient (n = 3) [62,113,124].

Organization of healthcare (n = 27): some of the factors that positively influence the preference for a provider are related to the organization of healthcare [45,53,59,61,75,98]:

- 1) whether you can be treated at a convenient time or place or by the doctor of choice (n = 15) [36,53,75,86,119];
- 2) actions to improve service quality and efficiency (n = 12) [76,83,113,115,125,126]. Aspects in this category are regularly inviting patients for checkups, making house calls, providing bulk billing services, having practice assistants available, spending

enough time on personal care, and complaint handling;

- 3) whether a provider is accessible by phone and Internet (n = 5) [66,86,109,127,128].

Costs (n = 12): the evidence about the influence of cost on choice is mixed [26,28,69,75,86,113]. Differences may be caused by whether the care provided by a certain provider is insured or not, as the cost of treatment generally only influences choice when patients also have to make payments themselves. For example, Combier (2004) found that women do not take costs into account when choosing a maternity hospital because they do not have any out-of-pocket expenses [28], whereas research by Kiiskinen (2010) indicates that patients do take out-of-pocket costs into account when choosing a dentist [83].

Socio-demographic factors (n = 18): the two most extensively studied factors are gender (mostly whether the direct care provider has the same gender as the patient) (n = 16) and age (n = 7) of the provider [37,43,52,75,76,84]. It is generally found that a physician's demographic parameters do influence choice, but that other factors are usually perceived to be more important [25,37,43,70,76]. This is confirmed by the finding that explicitly giving or making patients aware of comparative information reduces the influence that variables such as the age and gender of the individual providers have on choice [52,62,78]. The characteristics that patients attribute to women, such as positive social skills, positively influence their preferences for women [25,55,110].

Process

Five factors can be distinguished for the process aspect, namely interpersonal factors, availability of information, continuity of treatment, waiting time and the quality of treatment.

Interpersonal factors (n = 40): the issue most discussed was the physician's communication style (n = 36). Most studies found that this factor influences choice (n = 36) [45,62,66,78,92,115]. Generally, patients prefer a provider with a friendly and understanding communication style who listens to the patient and with whom the patient has a good relationship or feels a personal click. Other factors that are found to influence choice positively are whether the patient is involved in decision making about care (n = 12) [26,34,37,62,76,99] and a friendly provider atmosphere (n = 7) [30,32,33,46,62,76]. Age positively influences the importance attached to

interpersonal characteristics according to several studies (n = 6) [26,30,34,76,119,126], while education negatively influences the importance of interpersonal characteristics (n = 6) [26,30,33,34,76,126]. Research into the influence of disease characteristics shows that patients with more complex or severe diseases attach more importance to interpersonal characteristics [26,50,113,129] and that the specific disease influences the importance the patient attaches to interpersonal characteristics [30,80,98,129].

Information provision (n = 10): most studies found that whether and how information is provided is a determinant of choice (n = 7) [30,36,59,61,99,119]. Continuously giving relevant information during and before treatment has a positive influence on choice.

Continuity (n = 10): being able to keep seeing the same doctor has a positive influence on the choice of provider [26,34,36,99,116,127].

Waiting time (n = 30): most studies found a negative influence of the time spent on waiting lists and time in the waiting room (n = 27) [26,30,35,46,59,130]. However, the specific disease influences the importance a patient attaches to waiting time (n = 4) [30,33,80,119].

Quality of treatment (n = 12): this factor has to do with the quality of the medical treatment (n = 8). All studies found at least some positive influence of this factor on choice [26,30,41,61,99,119]. Examples are whether medical treatment is high quality and whether care is delivered as agreed, the number of cancelled operations and whether patients have a clear care plan. Additionally, three studies show that the rules or activities implemented in order to deliver good care are an important issue, e.g. the clinical standards used, whether care is interdisciplinary, and the protocols and procedures a provider has implemented [45,61,66].

Outcome

Although many studies (n = 30) found that outcome indicators such as mortality or pressure sore rates had a strong or moderate influence on choice [18,27,50,64,98,102], about half that number (n = 15) found that the influence was weak or that there was no influence at all [16,46,48,54,64,102]. Generally, other characteristics are found to be more important than outcome, such as GP referral and distance [16,30,41,46,64,67]. Differences in the importance attached to outcome indicators are partly explained by the differences between the characteristics that patients say are important and the ones they act upon in a real choice situation. These differences have often been uncovered by research that directly compared revealed preferences against

stated preferences [62]. For example, patients indicate that they are willing to use more quality information items, including outcome indicators, in future choices than they actually used in previous choices [30,46,48,49]. Additionally, outcome indicators influence the advice they would give to friends, whereas they did not have a strong influence on their own previous choices [45,49]. It is however difficult to indicate whether this phenomenon accounts for all the inconsistencies in the findings between the studies reviewed, as there are also many other differences between them. Several studies (n = 10) found a positive relationship between the level of education and the importance attached to outcome characteristics [28,33,67,113,119,124]. Patients with more complex or severe diseases attach less importance to outcome characteristics (n = 2) [29,113] and the specific disease influences the importance that the patient attaches to outcome characteristics (n = 7) [30,33,45,46,98,119].

Discussion

Choice of a healthcare provider does not seem to be as straightforward a process as is sometimes assumed in health policy, i.e. that patients look for high-quality care while minimizing cost and 'vote with their feet' by choosing the provider that best fits their needs and preferences [2,11,13,18,131,132]. As this review shows, whether and how patients choose a provider and their eventual choices are determined by the interplay between patient and provider characteristics. This review has answered three questions.

The first research question concerns whether patients actively choose their healthcare providers. Research indicates that patients do not generally choose actively [47,49]. Reasons are that a substantial proportion of patients do not find choice very important [16,64,84,85], that the degree of choice for some patients is limited [2,16,47,85,86] and that the available information is not enough or unsuitable to base decisions on [30,31,60,92,100,101]. Especially because of the last two factors mentioned, there is a difference between the characteristics that patients state as being important and the characteristics they act upon in a real choice situation. The second research question is about how patients choose. Policy makers assume that patients, as they aim for high-quality care while minimizing costs, will actively choose the best provider. However, research shows that most patients are

unable and/or unwilling to make a completely rational choice. This is supported both by research in healthcare (e.g. health plans, treatments, and health-related behaviour) and in other areas (e.g. personal finance, which school to attend) [133-137]. Instead, choices are based on only some of the provider characteristics [31,63,88-91] and patients choose a provider that is good enough, or make no active choice at all [88,93,94]. Furthermore, their degree of activation [42,62,64,76,86,98], the information sources they use and how systematically they compare the information about the characteristics of the various providers also differ [31]. Apparently, most patients do not look for the highest quality, as only a few go systematically through all the comparative information [31]. Instead, they only take information into account that confirms their expectations, they often stay with their current provider [25,90] and they rely on others' experiences [108] or their GP's advice [98,117]. Finally, in the investigations for the third research question, namely the provider characteristics that patients base their choices on, it transpires that patients base their choices on a variety of structural, process and outcome quality indicators. In fact, structure and – in particular – process indicators are more important than outcome indicators [50,80]. The importance attached to the different characteristics differs between the various patient groups.

Because the USA has a longer history than countries in Europe [64] of competition in various areas and of publishing information on the quality of care among different providers, it might be expected that American patients would make more active choices for high-quality providers. However, in practice, the choices made by both European and American patients are determined by a complex interplay between a variety of patient and provider characteristics and different patients make different choices - generally passive ones - in different situations. Nevertheless, differences between the choice processes and choices of American and European patients do exist, often resulting from the distinct healthcare systems of the two continents. For example, in the USA, insurers traditionally have an important role as prudent buyers of care on behalf of their members and research suggests that they partly determine the specific providers that are available to patients [86].

Differences between studies

Scoping reviews analyse studies that use a range of data collection techniques. Different techniques may lead to different results. For example,

it is to be expected that results from stated preference research differ from those from revealed preference studies. For outcome indicators, for example, most studies investigating hypothetical choices found that outcome indicators influence patients' choices. However, most studies investigating real choices found that outcome indicators have a limited influence on patients' choices. This difference is confirmed by research that directly compared revealed preferences against stated preferences [30,45,46,48,49]. Exceptions are results from studies analysing patient registration data. Most studies found that more patients are admitted to providers that perform better (on outcome indicators) and fewer to providers performing less well. However, this effect may be caused by factors other than patients choosing actively, for example by GP referrals.

It is also to be expected that the characteristics patients consider to be important will differ for individual providers and institutions. Fung (2008), for example, found that public reporting of performance data did not affect selection of hospitals, while it did affect selection of individual providers [105]. Interpersonal indicators are also found to influence choice of an individual provider more often than choice of an institution. These differences can, however, partly be explained by the research methods used in the specific studies. Studies investigating the choice of individual providers study the importance of interpersonal indicators more often. For example, Newton (2007) found that patients focus on interpersonal factors when choosing a GP but not when choosing a medical clinic facility. Patients' perceived importance of interpersonal indicators was, however, not investigated when choosing a medical clinic facility [115]. This underlines the difficulty of indicating the exact causes of the differences found between the studies under review, as there are numerous differences in their data collection and analysis techniques.

Knowledge gaps

We identified several knowledge gaps. Firstly, despite the fact that there is an increasing amount of literature from behavioural economics and psychology, the behavioural economics of provider choice have received relatively little attention compared to the literature, which assumes that patients choose their providers more or less rationally. Although policy makers assume that patients' information processing proceeds rationally, the results of several studies suggest that patients are often not capable of making rational choices [136]. This also indicates the relevance of the context

in which the relationships occur that were found by the studies. Many studies do not explicitly address the issue that their findings may depend on the specific decision-making context, e.g. that they focus on a hospital or GP, that they asked for patients' preferences or the attributes they based their decision on, whether patients were ill or not, etcetera. We recommend that researchers should specify the influence of the research context on the research findings and explain any discrepancies between their findings and the findings of other studies, given the differences in context. A final gap in the current state of knowledge is that relatively few studies analysed choice in a real choice situation, instead using an experimental design. More research should be conducted into the provider characteristics that patients take into account in real choice situations, especially because preferences are not static but depend on the decision context. As this review shows, there is a difference between the factors that patients say they find important and the ones they actually base their decisions on. However, we are aware of the difficulty of setting up such a study.

Strengths, limitations and follow-up research

A strong point of this review is that it has a broad scope and attempts to draw a picture of how patients choose healthcare providers and what determines their choice. We have tried to point out the factors that are important determinants of patient choice according to the existing literature, without making selections or excluding any studies because of their lower quality. Additionally, the search and inclusion process, which included developing a search strategy in consultation with a librarian and literature review expert and having two reviewers for a proportion of the entire source texts, is a strong point.

One limitation of this review is that its scope may not be broad enough because only scientific papers were included. Additionally, because of our narrow search string, we may have missed some relevant papers on the subject. However, the papers that we read in a later stage of the review did not add any significant new insights. Furthermore, the range of data collection and analysis techniques used in the studies under review makes them hard to compare and makes the mixed results hard to interpret. The results of any particular reviewed study may have been influenced by the exact kind of provider and provider characteristic studied and the method used for obtaining the data. For example, Groenewoud (2008) found that GP recommendations do not influence choices much, whereas Plunkett (2002)

found that they do. The latter analysed real choice situations and the former asked for patients' preferences regarding certain provider characteristics [32,70]. However, other aspects also differed between the two studies, so we could not clarify this mixed result.

A related issue is that a scoping review cannot present absolute truths, because no exhaustive search has been done and we did not conduct a quality assessment of reviewed sources. The results should therefore be interpreted with some caution. Nevertheless, due to the large number of studies included, we believe that the current review provides a thorough survey of the available literature on the factors that influence patient choice and the range of research conducted into the subject.

Conclusion

Patients' choices are determined by a complex interplay between a variety of patient and provider characteristics. There is no such thing as the typical patient: different patients make different choices in different situations. Patients often attach greater importance to their own previous healthcare experiences or to GP recommendations than to comparative information. Additionally, patients base their decisions not only on outcome indicators but on a variety of provider characteristics. It can thus be argued that the choice process is much more complex than is often assumed. This is true for both Europe and the USA. Most patients are unable and/or unwilling to make a completely rational choice [134-137]. A number of gaps in current knowledge were identified.

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References

1. Ranerup A, Noren L, Sparud-Lundin C: Decision support systems for choosing a primary health care provider in Sweden. *Patient Educ Couns* 2011.
2. Dixon A, Robertson R, Bal R: The experience of implementing choice at point of referral: a comparison of the Netherlands and England. *Health Econ Policy Law* 2010, 5:295–317.
3. Grytten J, Sorensen RJ: Patient choice and access to primary physician services in Norway. *Health Economics, Policy and Law* 2009, 4:11–27.
4. Vrangbaek K, Robertson R, Winblad U, van de Bovenkamp H, Dixon A: Choice policies in Northern European health systems. *Health Econ Policy Law* 2012, 7:47–71.
5. Victor A, Friele R, Delnoij D, Rademakers J: Free choice of healthcare providers in the Netherlands is both a goal in itself and a precondition: modelling the policy assumptions underlying the promotion of patient choice through documentary analysis and interviews. *BMC Health Serv Res* in press.
6. Parente ST, Feldman R, Christianson JB: Evaluation of the effect of a consumer-driven health plan on medical care expenditures and utilization. *BMC Health Serv Res* 2004, 39:1189–1210.
7. Buntin MB, Damberg C, Haviland A, Kapur K, Lurie N, McDevitt R, et al: Consumer-directed health care: early evidence about effects on cost and quality. *Health Aff* 2006, 25:530.
8. Hirschman AO: *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press; 1970.
9. Burge P, Devlin N, Appleby J, Gallo F, Nason E, Ling T: *Understanding Patients' Choices at the Point of Referral*. Cambridge: Rand Europe; 2006.
10. Ministerie van VWS: *Beleidsagenda 2005*. Den Haag: ministerie van VWS; 2005.
11. NZa: *het belang van de consument: Het consumentenprogramma van de NZa*. Utrecht: NZa; 2007.
12. Tweede Kamer: 30186 nr. 8. Den Haag: Tweede Kamer; 2005.
13. Tweede Kamer: 30186 nr. 3. Den Haag: Tweede Kamer; 2005.
14. Tweede Kamer: 30186 nr. 2. Den Haag: Tweede Kamer; 2005.
15. Dixon A, Robertson R, Appleby J, Burge P, Devlin N, Magee H: *Patient choice: how patients choose and how providers respond*. London: The King's Fund; 2010.
16. Fotaki M, Roland M, Boyd A, McDonald R, Scheaff R, Smith L: What benefits will choice bring to patients? Literature review and assessment of implications. *J Health Serv Res Policy* 2008, 13:178–184.

17. Duggal A: Policy summary: NHS and Public Health Outcomes Frameworks. ukpolicymatters.thelancet.com/?p=895
18. Fung C, Elliott M, Hays R, Kahn K, Kanouse D, McGlynn E, et al: Patients' preferences for technical versus interpersonal quality when selecting a primary care physician. *Health Serv Res* 2005, 40:957–977.
19. Colsen P, Casparie A: Indicatorregistratie. Een model ten behoeve van integrale kwaliteitszorg in een ziekenhuis. *Medisch Contact* 1995, 50:297–299.
20. Claessen SJJ, Francke AL, Brandt HE, Pasmaan HRW, van der Putten MJA, Deliens L: Ontwikkeling en toetsing van een set kwaliteitsindicatoren voor de palliatieve zorg. *Nederlands Tijdschrift voor Palliatieve Zorg* 2010, 10:3–10.
21. Donabedian A: Evaluating the quality of medical care, 1966. *Milbank Q* 2005, 83:691–729.
22. Arksey H, O'Malley L: Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology* 2005, 8:19–32.
23. Crooks V, Kingsbury P, Snyder J, Johnston R: What is known about the patient's experience of medical tourism? A scoping review. *BMC Health Serv Res* 2010, 10:266.
24. Burnett A, Fassil J: Meeting health needs of refugee and asylum seekers in the UK. London: Directorate of Health and Social Care Department of Health; 2000.
25. Chandler P, Chandler C, Dabbs M: Provider gender preference in obstetrics and gynecology: a military population. *Mil Med* 2000, 165:938–940.
26. Cheraghi-Sohi S, Hole A, Mead N, McDonald R, Whalley D, Bower P, et al: What patients want from primary care consultations: a discrete choice experiment to identify patients' priorities. *Annals of Family Medicine* 2008, 6:107–115.
27. Chernew M, Scanlon D, Hayward R: Insurance type and choice of hospital for Coronary artery bypass graft surgery. *Health Serv Res* 1998, 33:447–466.
28. Combier E, Zeitlin J, de Courcel N, Vasseur S, Lalouf A, Amat-Roze J, et al: Choosing where to deliver: decision criteria among women with low-risk pregnancies in France. *Soc Sci Med* 2004, 58:2279–2289.
29. Cutler D, Huckman R, Landrum M: The role of information in medical markets: an analysis of publicly reported outcomes in cardiac surgery. *Am Econ Rev* 2004, 94:342–346.
30. Dijs-Elsinga J, Otten W, Versluijs M, Smeets H, Kievit J, Vree R, et al: Choosing a hospital for surgery: the importance of information on quality of care. *Med Decis Making* 2010, 30:544.

31. Damman O, Hendriks M, Rademakers J, Delnoij D, Groenewegen P: How do health care consumers process and evaluate comparative health care information? A qualitative study using cognitive interviews. *BMC Public Health* 2009, 9:423.
32. Groenewoud AS: "Quot Capita, tot Sensus?" An Investigation of the Choice Processes of Patients seeking for a Health Care Provider, using Q- Methodology. In *It's your Choice! A study of search and selection processes, and the use of performance indicators in different patient groups*. Rotterdam: Erasmus Universiteit Rotterdam; 2008:187-216. PhD thesis.
33. Marang-van de Mheen P, Dijs-Elsinga J, Otten W, Versluijs M, Smeets H, Vree R, et al: The relative importance of quality of care information when choosing a hospital for surgical treatment: a hospital choice experiment. *Med Decis Making* 2010, Epub ahead of print.
34. Morrison M, Murphy T, Nalder C: Consumer preference for general practitioner services. *Health Mark Q* 2003, 20:2-19.
35. Ryan M, McIntosh E, Dean T, Old P: Trade-offs between location and Isle of Wight. *J Public Health (Oxf)* 2000, 22:202-210.
36. Albada A, Triemstra M: Patients' priorities for ambulatory hospital care centres. A survey and discrete choice experiment among elderly and chronically ill patients of a Dutch hospital. *Health Expect* 2009, 12:92-105.
37. Bernard ME, Sadikman JC, Sadikman CL: Factors influencing patients' choice of primary medical doctors. *Minn med* 2006, 89:46-50.
38. Haynes R, Lovett A, Sünnerberg G: Potential accessibility, travel time and consumer choice: geographical variations in general medical practice registrations in Eastern England. *Environment and Planning A* 2003, 35:1733-1750.
39. Nguyen L, Häkkinen U: Choices and utilization in dental care: public vs private dental sectors, and the impact of a two-channel financed health care system. *Health Econ* 2006, 7:99-106.
40. Scanlon D, Lindrooth R, Christianson J: Steering patients to safer hospitals? The effect of a Tiered Hospital Network on hospital admissions. *Health Serv Res* 2008, 43:1849-1868.
41. de Groot I, Otten W, Smeets H, Marang-van de Mheen P: Is the impact of hospital performance data greater in patients who have compared hospitals? *BMC Health Serv Res* 2011, 11:214-224.
42. Harris KM: How do patients choose physicians? Evidence from a national survey of enrollees in employment-related health plans. *BMC Health serv res* 2003, 38:711-732.
43. Johnson A, Schnatz P, Kelsey A, Ohannessian C: Do women prefer care from female or male obstetrician-gynecologists? A study of patient gender preference. *BMC Med Educ* 2005, 105:369-379.

44. Laamanen R, Simonsen-Rehn N, Suominen S, Brommels M: Does patients' choice of health centre doctor depend on the organization? A comparative study of four municipalities with different forms of service provision in Finland. *Scand J Public Health* 2010, 38:715–723.
45. Lux MP, Fasching PA, Schrauder M, Lohberg C, Thiel F, Bani MR, et al: The era of centers: the influence of establishing specialized centers on patients' choice of hospital. *Arch Gynecol Obstet* 2011, 283:559–568.
46. Marang-van de Mheen PJ, Dijs-Elsinga J, Otten W, Versluijs M, Smeets HJ, van der Made WJ, et al: The importance of experienced adverse outcomes on patients' future choice of a hospital for surgery. *Qual Saf Health Care* 2010, 19:1–6.
47. Robertson R, Burge P: The impact of patient choice of provider on equity: analysis of a patient survey. *J Health Serv Res Policy* 2011, 16:22–28.
48. Schneider EC, Epstein AM: Use of public performance reports: a survey of patients undergoing cardiac surgery. *JAMA* 1998, 279:1638–1642.
49. Schwartz L, Woloshin S, Birkmeyer J: How do elderly patients decide where to go for major surgery? Telephone interview survey. *BMJ* 2005, 331:821–827.
50. van Empel I, Dancet E, Koolman X, Nelen W, Stolk E, Sermeus W, et al: Physicians underestimate the importance of patient-centredness to patients: a discrete choice experiment in fertility care. *Hum Reprod* 2011, 26:584–593.
51. Finlayson S, Birkmeyer J, Tosteson A, Nease R: Patient preferences for location of care, implications for regionalization. *Med Care* 1999, 37:204–209.
52. Guile M, Schnatz P, O'Sullivan D: Relative importance of gender in patients' selection of obstetrics and gynecology provider. *Conn Med* 2007, 71:325–332.
53. Boonen LHHM, Schut F, Koolman X: Consumer channeling by health insurers: natural experiments with preferred providers in the Dutch pharmacy market. In *Consumer channeling in health care: (im)possible? Consumentensturing in de zorg: (on)mogelijk?* Rotterdam: Erasmus Universiteit Rotterdam; 2009:37–64. PhD thesis.
54. Groenewoud AS: Patients suffering from Long Lasting Diseases; a Review of the Evidence on Revealed Decisions and Choices. In *It's your Choice! A study of search and selection processes, and the use of performance indicators in different patient groups.* Rotterdam: Erasmus Universiteit Rotterdam; 2008:73–138. PhD thesis.
55. Kerssens J, Bensing J, Andela M: Patient preference for genders of health professionals. *Soc Sci Med* 1997, 44:21531–1540.

56. Dawson D, Jacobs R, Martin S, Smith P: Is patient choice an effective mechanism to reduce waiting times? *Applied Health Econ Health Policy* 2004, 3:195–203.
57. Dawson D, Gravelle H, Jacobs R, Martin S, Smith PC: The effects of expanding patient choice of provider on waiting times: evidence from a policy experiment. *Health Econ* 2007, 16:113–128.
58. Siciliani L, Martin S: An empirical analysis of the impact of choice on waiting times. *Health Econ* 2007, 16:763–779.
59. Exworthy M, Peckham S: Access, choice and travel: implications for health policy. *Social Policy & Administration* 2010, 40:267–287
60. Faber M, Bosch M, Wollersheim H, Leatherman S, Grol R: Public reporting in health care: how do consumers use quality-of-care information? A systematic review. *Med care* 2009, 47:1–8.
61. Groenewoud AS: Building quality report cards for geriatric care in the Netherlands: using concept mapping to identify the appropriate 'Building blocks' from the consumer's perspective. In *It's your Choice! A study of search and selection processes, and the use of performance indicators in different patient groups*. Rotterdam: Erasmus Universiteit Rotterdam; 2008:245–270. PhD thesis.
62. Kolstad JT, Chernew ME: Quality and consumer decision making in the market for health insurance and health care services. *Med Care Res Rev* 2009, 66:28S–52S.
63. Lubalin JS, Harris-Kojetin LD: What do consumers want and need to know in making health care choices? *Med Care Res Rev* 1999, 56(Suppl 1):67–12.
64. Magee H, Davis LJ, Coulter A: Public views on healthcare performance indicators and patient choice. *J R Soc Med* 2003, 96:338–342.
65. Hirth RA, Banaszak-Holl JC, Fries BE, Turenne MN: Does quality influence consumer choice of nursing homes? Evidence from nursing home to nursing home transfers. *Inquiry* 2003, 40:343–361.
66. Orr D, Sidiki SS, McGhee CN: Factors that influence patient choice of an excimer laser treatment center. *J Cataract Refract Surg* 1998, 24:335–340.
67. Merle V, Germain JM, Tivolacci MP, Brocard C, Chefson C, Cyvoct C, et al: Influence of infection control report cards on patients' choice of hospital: pilot survey. *J Hosp Infect* 2009, 71:263–268.
68. Arora R, Singer J, Arora A: Influence of key variables on the patients' choice of a physician. *Qual Manag Health Care* 2004, 13:166–173.
69. Cooper PF, Nichols LM, Taylor AK: Patient choice of physician: do health insurance and physician characteristics matter? *Inquiry* 1996, 33:237–246.

70. Plunkett B, Kohli P, Milad M: The importance of physician gender in the selection of an obstetrician or a gynecologist. *Am J Obstet Gynecol* 2002, 186:926–928.
71. Varadarajulu S, Petruff C, Ramsey W: Patient preferences for gender of endoscopists. *Gastrointest Endosc* 2002, 56:170–173.
72. Zuckerman M, Navizedeh N, Feldman J, McCalla S, Minkoff H: Determinants of women's choice of obstetrician/gynecologist. *J Womens Health (Larchmt)* 2002, 11:175–180.
73. Rosenthal M, Li Z, Milstein A: Do patients continue to see physicians who are removed from a PPO network? *Am J Manag Care* 2009, 15:713–719.
74. Geraedts M, Schwartze D, Molzahn T: Hospital quality reports in Germany: patient and physician opinion on the reported quality indicators. *BMC Health Serv Res* 2007, 7:157–162.
75. Bornstein BH, Marcus D, Cassidy W: Choosing a doctor: an exploratory study of factors influencing patients' choice of a primary care doctor. *J Eval Clin Pract* 2000, 6:255–262.
76. McGlone TA, Butler ES, McGlone VL: Factors influencing consumers' selection of a primary care physician. *Health Mark Q* 2002, 19:21–37.
77. Howell E, Gardiner B, Concato J: Do women prefer female obstetricians? *Obstetrics & Gynecology* 2002, 99:1031–1035.
78. Schnatz PF, Murphy JL, O'Sullivan DM, Sorosky JI: Patient choice: comparing criteria for selecting an obstetrician-gynecologist based on image, gender, and professional attributes. *Am J Obstet Gynecol* 2007, 197:548–154.
79. Lako CJ, Rosenau P: Demand-driven care and hospital choice. Dutch health policy toward demand-driven care: results from a survey into hospital choice. *Health Care Anal* 2009, 17:20–35.
80. Rademakers J, Delnoij D, de Boer D: Structure, process or outcome: which contributes most to patients' overall assessment of healthcare quality? *BMJ Quality and Safety* 2011, 20:326–331.
81. Varkevisser M, van der Geest S, Schut F: Quality competition in regulated hospital markets: consumer information and patient choice for angioplasty. In *Patient choice, competition and antitrust enforcement in Dutch hospital markets*. Rotterdam: Erasmus Universiteit Rotterdam; 2009:117–149.
82. Burge P, Devlin N, Appleby J, Rohr C, Grant J: Do patients always prefer quicker treatment? A discrete choice analysis of patients' stated preferences in the London Patient Choice Project. *Appl Health Econ Health Policy* 2004, 3:183–194.
83. Kiiskinen U, Suominen-Taipale AL, Cairns J: Think twice before you book? Modelling the choice of public vs private dentist in a choice experiment. *Health Econ* 2010, 19:670–682.

84. Anell A, Rosén P, Hjortsberg C: Choice and participation in health services: a survey of preference among Swedish residents. *Health Policy* 1997, 40:157–168.
85. Lambrew JM: "Choice" in health care: what do people really want? *Issue Brief (Commonw Fund)* 2005, 853:1–12.
86. Hoerger T, Howard L: Search behavior and choice of physician in the market for prenatal care. *Med Care* 1995, 33:332–349.
87. Robertson R, Dixon A: Choice at the point of referral: early results of a patient survey. London: The king's fund; 2009.
88. Kooreman P, Prast H: What does behavioral economics mean for policy? Challenges to savings and health policies in the Netherlands. *The Economist* 2010, 158:101–122.
89. Hibbard J, Slovic P, Jewett J: Informing consumer decisions in health care: implications from decision making research. *Milbank Q* 1997, 75:395–414.
90. Moser A, Korstjens I, van der Weijden T, Tange H: Themes affecting healthcare consumers' choice of a hospital for elective surgery when receiving web-based comparative consumer information. *Patient Educ Couns* 2010, 78:365–371.
91. Foster MM, Earl PE, Haines TP, Mitchell GK: Unravelling the concept of consumer preference: implications for health policy and optimal planning in primary care. *Health Policy* 2010, 97:105–112.
92. Fasolo B, Reutskaja E, Dixon A, Boyce T: Helping patients choose: How to improve the design of comparative scorecards of hospital quality. *Patient Educ Couns* 2010, 78:344–349.
93. Hibbard JH, Peters E: Supporting informed consumer health care decisions: data presentation approaches that facilitate the use of information in choice. *Annu Rev Public Health* 2003, 24:413–433.
94. Redelmeier D, Shafir E: Medical decision making in situations that offer multiple alternatives. *JAMA* 1995, 273:302–305.
95. Peters E, Dieckmann NF, Västfjäll D, Mertz C, Slovic P, Hibbard J: Bringing meaning to numbers: the impact of evaluative categories on decisions. *J Exp Psychol Appl* 2009, 15:213–227.
96. Peters E, Dieckmann N, Dixon A, Hibbard J, Mertz C: Less is more in presenting quality information to consumers. *Med Care Res Rev* 2007, 64:169–190.
97. Reyna V, Nelson W, Han P, Dieckmann N: How numeracy influences risk comprehension and medical decision making. *Psychol Bull* 2009, 135:943–973.

98. Groenewoud AS: Patients' decision making processes in the search for and selection of their Health care provider: findings from a grounded theory study. In *It's your Choice! A study of search and selection processes, and the use of performance indicators in different patient groups*. Rotterdam: Erasmus Universiteit Rotterdam; 2008:139-186. PhD thesis.
99. Groenewoud AS: Performance indicators for the choosing health care consumer? In *It's your Choice! A study of search and selection processes, and the use of performance indicators in different patient groups*. Rotterdam: Erasmus Universiteit Rotterdam; 2008:41-72. PhD thesis.
100. Hibbard J, Greene J, Daniel D: What is quality anyway? Performance reports that clearly communicate to consumers the meaning of quality of care. *Med Care Res Rev* 2010, 67:275-293.
101. Schauffler H, Mordavsky J: Consumer reports in health care: do they make a difference? *Annu Rev Public Health* 2001, 22:69-89.
102. Mukamel DB, Mushlin AI: The impact of quality report cards on choice of physicians, hospitals, and HMOs: a midcourse evaluation. *The Joint Commission journal on quality improvement* 2001, 27:20-27.
103. Bundorf M, Chun N, Goda G, Kessler D: Do markets respond to quality information? The case of fertility clinics. *J Health Econ* 2009, 28:718-727.
104. Mukamel D, Mushlin A: Quality of care information makes a difference: an analysis of market share and price changes after publication of the New York state cardiac surgery mortality reports. *Med Care* 1998, 36:945-954.
105. Fung CH, Lim Y, Mattke S, Damberg C, Shekelle PG: Systematic review: the evidence that publishing patient care performance data improves quality of care. *Ann Intern Med* 2008, 148:111-123.
106. Damman O, Hendriks M, Rademakers J, Spreeuwenberg P, Delnoij D, Groenewegen P: Consumers' interpretation and use of comparative information on the quality of healthcare: the effect of presentation approaches. In *Public reporting about healthcare users' experiences*. Edited by. Utrecht: NIVEL; 2010:109-128.
107. Gooding SK: The relative importance of information sources in consumers' choice of hospitals. *Journal of ambulatory care marketing* 1995, 6:99-108.
108. Sinaiko AD: How do quality information and cost affect patient choice of provider in a tiered network setting? Results from a survey. *BMC Health Serv Res* 2011, 46:437-456.

109. Boonen LHHM, Schut F, Donkers B, Koolman X: Which preferred providers are really preferred? Effectiveness of insurers' channeling incentives on pharmacy choice. In *Consumer channeling in health care: (im)possible? Consumentensturing in de zorg: (on)mogelijk?* Rotterdam: Erasmus Universiteit Rotterdam; 2009:65–90. PhD thesis.
110. Ahmad F, Gupta H, Rawlins J, Stewart D: Preferences for gender of family physician among Canadian European-descent and South-Asian immigrant women. *BMC Fam Pract* 2002, 19:146–153.
111. Tai W, Porell F, Adams E: Hospital choice of rural Medicare beneficiaries: patient, hospital attributes, and the patient-physician relationship. *BMC Health Serv Res* 2004, 39:1903–1922.
112. Shah J, Dickinson CL: Establishing which factors patients value when selecting urology outpatient care. *British Journal of Medical and Surgical Urology* 2010, 3:25–29.
113. Groenewoud AS: What influences patients' decisions when choosing a health care provider? Measuring preferences of patients with Knee arthrosis, Chronic depression or Alzheimer's disease, using discrete choice experiments. In *It's your Choice! A study of search and selection processes, and the use of performance indicators in different patient groups*. Rotterdam: Erasmus Universiteit Rotterdam; 2008:217–244. PhD thesis.
114. Boonen LHHM, Schut F, Donkers B: Consumer willingness to switch to preferred providers: are preferences stronger for GPs than for pharmacies? In *Consumer channeling in health care: (im)possible? Consumentensturing in de zorg: (on)mogelijk?* Rotterdam: Erasmus Universiteit Rotterdam; 2009:117–146. PhD thesis.
115. Newton FJ, Ewing MT, Burney S, Vella-Brodrick D: Medical clinic facilities and doctor characteristics: what older rural men value. *Aust J Rural Health* 2007, 15:41–45.
116. Safran D, Montgomery J, Chang H, Murphy J, Rogers W: Switching doctors: predictors of voluntary disenrollment from a primary physician's practice. *J Fam Pract* 2001, 50:130–136.
117. Dealey C: The factors that influence patients' choice of hospital and treatment. *Br J Nurs* 2005, 14:576–579.
118. Varkevisser M, van der Geest S: Why do patients bypass the nearest hospital? An empirical analysis for orthopaedic care and neurosurgery in the Netherlands. *Eur J Health Econ* 2007, 8:287–295.
119. Damman OC, Spreeuwenberg P, Rademakers J, Hendriks M: Creating compact comparative health care information: what are the key quality attributes to present for cataract and total hip or knee replacement surgery? *Med Decis Making* 2011, 32:287–300.
120. Roh CY, Lee KH, Fottler MD: Determinants of hospital choice of rural hospital patients: the impact of networks, service scopes, and market competition. *J Med Syst* 2008, 32:343–353.

121. Roh C, Moon M: Nearby, but not wanted? The bypassing of rural hospitals and policy implications for rural health care systems. *The Policy Studies Journal* 2005, 33:377–394.
122. Varkevisser M, van der Geest SA, Schut FT: Assessing hospital competition when prices don't matter to patients: the use of time-elasticities. *Int J Health Care Finance Econ* 2010, 10:43–60.
123. Bouche G, Migeot V, Mathoulin-Pelissier S, Salamon R, Ingrand P: Breast cancer surgery: do all patients want to go to high-volume hospitals? *Surgery* 2008, 143:699–705.
124. Vonberg R, Sander C, Gastmeier P: Consumer attitudes about health care acquired infections: a German survey on factors considered important in the choice of a hospital. *Am J Med Qual* 2008, 23:56–59.
125. Boonen LHHM, Schut F, Donkers B: Channeling patients to preferred GPs: not a question of how, but of when! In *Consumer channeling in health care: (im)possible? Consumentensturing in de zorg: (on)mogelijk?* Rotterdam: Erasmus Universiteit Rotterdam; 2009:91–116. PhD thesis.
126. Mavis B, Vasilenko P, Schnuth R, Marshall J, Jeffs MC: Female patients' preferences related to interpersonal communications, clinical competence, and gender when selecting a physician. *Acad Med* 2005, 80:1159–1165.
127. Humphreys J, Mathews-Cowey S, Weinand H: Factors in accessibility of general practice in rural Australia. *Med J Aust* 1997, 166:577–580.
128. Robertson RH, Dixon A, Le Grand J: Patient choice in general practice: the implications of patient satisfaction surveys. *J Health Serv Res Policy* 2008, 13:67–72.
129. de Boer D, Delnoij D, Rademakers J: The importance of patient-centered care for various patient groups. *Patient Educ Couns* 2011, Epub ahead of print.
130. Ringard A, Hagen TP: Are waiting times for hospital admissions affected by patients' choices and mobility? *BMC Health Serv Res* 2011, 11:170–178.
131. Tweede Kamer: 27807 nr. 25. Den Haag: Tweede Kamer; 2004.
132. Fotaki M: Patient choice and empowerment-what does it take to make it real? A comparative study of choice in th UK and Sweden under the market-oriented reforms. *Eurohealth* 2010, 11:3–7.
133. Bekkers VJJM, de Kool D, Straten GFM: Educational Governance: Strategie, ontwikkeling en effecten. Themaproject 4: Ouderbetrokkenheid bij schoolbeleid. Rotterdam: Erasmus Universiteit Rotterdam; 2012. Netherlands Institute of Government.
134. Schwartz JA, Chapman GB: Are more options always better? The attraction effect in physicians' decisions about medications. *Med Decis Making* 1999, 19:315–323.

135. Kling JR, Mullainathan S, Shafir E, Vermeulen LC, Wrobel M: Comparison friction: experimental evidence from medicare drug plans. *The Quarterly Journal of Economics* 2012, 127:199–135.
136. Tiemeijer W: *Hoe mensen keuzes maken. De psychologie van het beslissen.* Amsterdam: Amsterdam University Press; 2011.
137. Thaler RH, Sunstein CR: *Nudge: Improving Decisions About Health, Wealth, and Happiness.* USA: Penguin Group; 2009.
138. Chalder M, Montgomery A, Hollinghurst S, Cooke M, Munro J, Lattimer V, Sharp D, Salisbury D: Comparing care at walk-in centres and at accident and emergency departments: an exploration of patient choice, preference and satisfaction. *Emerg Med J* 2007, 24:260–264.
139. Hirth R, Banaszak-Holl J, McCarthy J: Nursing home to nursing home transfers: prevalence, time pattern and resident correlates. *Med Care* 2000, 38:660–669.
140. Hodgkin D: Specialized service offerings and patients' choice of hospital: the case of cardiac catheterization. *J Health Econ* 1996, 15:305–332.
141. Ketelaar NABM, Faber MJ, Flottorp S, Rygh LH, Deane KHO, Eccles MP: Public release of performance data in changing the behaviour of healthcare consumers, professionals or organisations (Review). *Cochrane Database Syst Rev* 2011, 11:1–40.
142. Moodie JJ, Masood I, Tint N, Rubinstein M, Vernon SA: Patients' attitudes towards trainee surgeons performing cataract surgery at a teaching hospital. *Eye* 2008, 22:1183–1186.
143. Petry JJ, Finkel R: Spirituality and choice of health care practitioner. *J Altern Complement Med* 2004, 10:939–945.
144. Propper C, Damiani M, Leckie G, Dixon J: Impact of patients' socioeconomic status on the distance travelled for hospital admission in the English National Health Service. *J Health Serv Res Policy* 2007, 12:153–159.
145. Saha S, Taggart S, Komaromy M, Bindman A: Do patients choose physicians of their own race? *Health Aff (Millwood)* 2000, 19:76–83.

4

Why patients may not exercise their choice when referred for hospital care.

An exploratory study based on interviews with patients

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Abstract

Background

Various north-western European health-care systems encourage patients to make an active choice of health-care provider. This study explores, qualitatively, patients' hospital selection processes and provides insight into the reasons why patients do or do not make active choices.

Methods

Semi-structured individual interviews were conducted with 142 patients in two departments of three Dutch hospitals. Interviews were recorded, transcribed and analysed in accordance with the grounded theory approach.

Results

Three levels of choice activation were identified – passive, semi-active and active. The majority of the patients, however, visited the default hospital without having used quality information or considered alternatives. Various factors relating to patient, provider and health-care system characteristics were identified that influenced patients' level of choice activation. On the whole, the patients interviewed could be classified into five types with regard to how they chose, or 'ended up at' a hospital. These types varied from patients who did not have a choice to patients who made an active choice.

Conclusions

A large variation exists in the way patients choose a hospital. However, most patients tend to visit the default without being concerned about choice. Generally, they do not see any reason to choose another hospital. In addition, barriers exist to making choices. The idea of a patient who actively makes a choice originates from neoclassical microeconomic theory. However, policy makers may try in vain to bring principles originating from this theory into health care. Even so, patients do value the opportunity of attending 'their' own hospital.

Introduction

Background

Patient choice of health-care provider plays a pivotal role in regulated competition within Western countries' health-care systems, for instance, to reduce waiting time and introduce competition between providers.¹⁻³ Patients are viewed as autonomous health-care consumers⁴ supposedly making active, rational choices between different health-care providers based on comparative information. Because actively choosing patients prompt providers to compete, patient choice will ultimately lead to more efficient care of higher quality, as policy makers assume.⁵ This line of reasoning originates from the neoclassical microeconomic theory.⁶ Besides the instrumental goal of patient choice, it is also considered a goal in itself. Enabling patients to freely choose a provider allows them to personalize care and is assumed to lead to better patient experiences.^{2,7}

A great deal of effort has been put into enabling and stimulating patients to choose their providers.⁵ However, the ability of, and opportunity for patients to make active choices is being questioned. For example, behavioural economic research indicates that actual choosing behaviour generally deviates from the full rationality as assumed by neoclassical microeconomic theories.⁸ Besides, the nature of health care makes it difficult, or unrealistic, for patients to make active choices. The choice of a provider does not concern an isolated, one-off activity, but is part of the patient's whole care path.^{9,10} Because of these factors, patients tend to visit what is known as the standard or 'default provider'.¹¹ This is often the provider they have most experience with,¹² the nearest one,^{11,13,14} or the one that their general practitioner (GP) recommended.³ The default effect exists also for other domains than health care, such as retirement saving. It means that patients do not make an active choice of a provider but simply visit the standard option without having thought about it deliberately.⁸

Several factors influence whether patients bypass the default provider. These include the degree to which patients play an active role regarding their health care¹⁵, whether they are aware of the fact that they have the right to choose a provider¹⁶ and whether they are willing to, or have a reason to, make choices¹⁶⁻¹⁸. Another factor is the availability of alternative hospitals.^{19,20} To exercise choice, patients need alternatives to choose between. The medical specialty patients require constitutes another factor. For instance, patients needing surgical care may be more inclined to make

an active choice, because the elective nature of most surgical care allows one to think critically about the options. Chronically ill patients, on the other hand, might prefer the nearest hospital simply because they need continued, local care.²¹ The path of the patient's health care is another factor. For instance, as many patients do not know their diagnosis at the moment of referral and patients' path of health care is a process or cycle of alternating stages of diagnosing, treating and adjusting, there is often no one clear moment at which the choice of a hospital can be made.⁹

Research focus

We aim to investigate why patients' behaviour does not correspond with the image of the autonomous health care consumer policy makers had in mind when giving patients a key role in promoting competition between health-care providers. Our research question is 'How do patients either choose or 'end up at' a particular hospital and which factors influence their process of making a choice?' To answer this question, we held semi-structured interviews with hospital patients, which enable us to focus on the hospital selection process from the patients' perspective instead of on its outcomes. We can untangle the complexity of patient choice of hospitals, obtain detailed information about the feelings, perceptions and opinions of the patients and get insight into the different processes involved in making a choice. We focus on the choice of a hospital, because quality information and the opportunities to choose are available in this sector. Our study is conducted in the Netherlands. Here, patient choice of providers is encouraged; patients generally live in close proximity to several hospitals; GPs serve as gatekeepers for secondary care; and health-care insurance covering a patient's hospital costs is mandatory.^{22,23}

What this paper adds

Much research into patient choice assumes that patients do choose a hospital when they need to visit one. Research has investigated, for example, which hospital characteristics patients find important, or focused on parts of the process of making a choice, such as patients' use of information.¹¹ Our starting point is a belief that patients differ in their intentions and the opportunities available to them to make a choice. By means of in-depth interviews with hospital patients, we investigate how patients select or 'end up at' a hospital, thus arriving at a classification of patients regarding this subject. The paper enables policy makers to modify their assumptions

regarding patient choice. Health care could then be organized in a way that ensures that patients visit the hospital that fits their needs and preferences.

Method

Research sample

The method of sampling was purposive.^{24,25} To grasp many different perspectives, the authors collected data from outpatients who attended a variety of Dutch hospitals (Hospital A, B and C) each differing in several factors (Table 1). In each hospital, patients were interviewed from two hospital departments, that is, general surgery and internal medicine. In Hospital A, pancreatic cancer patients were excluded, as it is the only hospital in the locality that can treat these patients. Patient recruitment stopped when data saturation occurred, that is, when no new information on the themes was forthcoming, and we were able to categorize patients into groups based on our understanding of patients' hospital selection process.^{24,25} It was possible, thus, to collect and analyse data concurrently and adapt questions to the themes emerging.

Table 1 Hospital characteristics

	Hospital A	Hospital B	Hospital C
Hospital type	Teaching hospital	General hospital	General Hospital
Urban/rural	Urban	Rural	Urban
Number of hospital beds	1100	565	584
Number of alternatives ≤10 km around the city where the hospital is located ¹	7	0	2
Neighbouring hospital received negative publicity	Yes	No	No

¹Only Dutch hospitals were considered.

Material

The interviews were semi-structured. Participants were asked, firstly, about their background characteristics. We asked next an openended question: 'Why did you visit this specific hospital?'. The interviewer was, with regard

to this question, allowed to ask questions in an unscripted manner in order to follow up comments made by patients.²⁵ Several topics served as input for further questions: (i) Patients' behaviour when choosing, such as whether they searched for information and why, or why not, (ii) which attributes of the provider influenced their choice, for instance, the size of the hospital, (iii) which features of the health-care system affected their choice, such as the availability of choice, and finally, (iv) which factors relating to the interaction between provider and patient characteristics influenced their choice, for example, patients' health-care paths.

Procedure

Patients were invited to participate while seated in the waiting room. They were given a choice of being interviewed in the waiting room or in a separate room. Written consent was obtained prior to the start of each interview. At the end of the interview, the interviewer checked the accuracy of her interpretation with the participant by summarizing the interview.²⁵ One of the authors (AV) carried out all the interviews. Participants from the first hospital mentioned were the only ones to receive compensation for completing the interviews (sweets and reimbursement of parking costs). This was because the hospital insisted on this. Participants were not informed in advance about this compensation. All interviews were audio recorded.

Data analysis

Firstly, the audio recordings were transcribed verbatim (AV) and loaded onto MAXQDA, a qualitative data analysis program.²⁶ Secondly, the transcripts were read by AV to gain an overview of emerging patterns in the data.²⁵ Thirdly, we developed themes relating to our research question. The development of themes involved open, axial and selective coding, consistent with the grounded theory approach.²⁴ The themes and subthemes that emerged concerned patients' levels of choice activation and the factors that determined the extent to which their choice was active. Finally, we classified the patients into five groups that differ in how they chose a hospital or 'ended up at' a particular hospital. This classification was based on differences and similarities between patients regarding the levels and the factors that influenced these levels. Two authors (AV and JR) met bi-weekly to discuss emerging codes.

Ethical considerations

Our research complied with the Helsinki Declaration. According to the Dutch 'Medical Research involving human subjects Act', our study did not require ethical approval from an ethics committee.²⁷ Written informed consent was obtained from all interviewees and they were ensured anonymity.

Results

Demographics

Interviews were conducted with 142 patients (Table 2). We needed that many interviews, mainly because we aimed at maximum variation to cover the wide range of possible hospital selection processes and wanted to be able to categorize patients into different groups based on these processes. The response rate was 91%. The most important reason for not participating was lack of time. Most patients were aged 40–64, female, native Dutch and had a medium educational level. The mean duration of the interviews was 9.49 min (SD 5.07 min). The duration of the interviews was relatively short, primarily because not much time was needed to acquire all information, but also because patients did not give much thought to the choice of a hospital and therefore found it odd or irritating to talk about the subject extensively. Additionally, some consultations started before the end of the interview.

Table 2 Demographic characteristics of the interviewees (n = 142)

	Hospital A		Hospital B		Hospital C		Total (n = 142) n (%)
	Surgery (n = 19) n (%)	Internal medicine (n = 26) n (%)	Surgery (n = 26) n (%)	Internal medicine (n = 25) n (%)	Surgery (n = 21) n (%)	Internal medicine (n = 25) n (%)	
Age (years)							
Under 40	9 (47.4)	4 (15.4)	2 (7.7)	4 (16.0)	3 (14.3)	1 (4.0)	23 (16.2)
40–64	8 (42.1)	18 (69.2)	13 (50.0)	13 (52.0)	11 (52.4)	12 (57.1)	75 (52.8)
65–74	1 (5.3)	2 (7.7)	5 (19.2)	1 (4.0)	6 (28.6)	12 (57.1)	27 (19.0)
75 and over	1 (5.3)	1 (3.8)	6 (23.1)	6 (24.0)	1 (4.8)	0 (0.0)	15 (10.6)
Missing	0 (0.0)	1 (3.8)	0 (0.0)	1 (4.0)	0 (0.0)	0 (0.0)	0 (0.0)
Gender							
Male	11 (57.9)	16 (61.5)	10 (38.5)	9 (36.0)	11 (52.4)	9 (36.0)	66 (46.5)
Female	8 (42.1)	10 (38.5)	16 (61.5)	16 (64.0)	10 (47.6)	16 (64.0)	76 (53.5)
Missing	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Education level							
Low	3 (15.8)	5 (19.2)	8 (30.8)	8 (32.0)	6 (28.6)	4 (16.0)	34 (23.9)
Medium	12 (63.2)	6 (23.1)	9 (34.6)	14 (56.0)	13 (61.9)	8 (32.0)	62 (43.7)
High	4 (21.1)	14 (53.8)	5 (19.2)	3 (12.0)	2 (9.5)	13 (52.0)	41 (28.9)
Missing	0 (0.0)	1 (0.0)	4 (15.4)	0 (0.0)	0 (0.0)	0 (0.0)	5 (3.5)

Table 2 Demographic characteristics of the interviewees (n = 142) (Continued)

	Hospital A		Hospital B		Hospital C		Total (n = 142) n (%)
	Surgery (n = 19) n (%)	Internal medicine (n = 26) n (%)	Surgery (n = 26) n (%)	Internal medicine (n = 25) n (%)	Surgery (n = 21) n (%)	Internal medicine (n = 25) n (%)	
Ethnicity							
Dutch	9 (47.4)	21 (80.8)	18 (69.2)	19 (76.0)	19 (90.5)	23 (92.0)	109 (76.8)
Western immigrant	3 (15.8)	1 (3.8)	5 (19.2)	6 (24.0)	2 (9.5)	2 (8.0)	19 (13.4)
Non-Western immigrant	7 (36.8)	4 (15.4)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	11 (7.7)
Missing	0 (0.0)	0 (0.0)	3 (11.5)	0 (0.0)	0 (0.0)	0 (0.0)	3 (2.1)
Level of activation							
Passive	13 (68.4)	15 (57.7)	17 (65.4)	22 (88.0)	14 (66.7)	19 (76.0)	100 (70.4)
Semi-active	3 (15.8)	7 (26.9)	5 (19.2)	3 (12.0)	3 (14.3)	2 (8.0)	23 (16.2)
Active	3 (15.8)	3 (11.5)	4 (15.4)	0 (0.0)	4 (19.0)	4 (16.0)	18 (12.7)
Missing	0 (0.0)	1 (3.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (0.7)

Low = primary school or only vocational training; Medium = secondary school or intermediate vocational training; High = tertiary education.

The level of choice activation

We found that patients differed in the extent to which their choice was active. Therefore, we used two objective criteria to assess that level. Whether, before visiting a hospital, patients considered other hospitals and, whether they based their choice on a hospital or consultant's reputation or information regarding its or their quality of care (Fig. 1). We identified three levels from the 142 interviews:

1. Passive. Patients did not consider other hospitals before visiting one *nor* based their choice on information regarding the quality of care offered by the hospital or consultant [$n = 100$ (70%)].
2. Semi-active. These patients considered alternative hospitals *or* based their choice on information regarding the quality of care offered by the hospital or consultant [$n = 23$ (16%)]
3. Active. These patients considered other hospitals before selecting one *and* based their choice on information regarding the quality of care offered by the hospital or consultant [$n = 18$ (13%)].

Figure 1 The levels of choice activation

Did consider other hospitals	Semi-active ($n = 13$ (9%))	Active ($n = 18$ (13%))
Did not consider other hospitals	Passive ($n = 100$ (70%))	Semi-active ($n = 10$ (7%))
	Did not use information	Did use information

We did not analyse one interview further as this patient had only come to the hospital because she had participated in a research project. It should be noted that not all patients who made an active choice actually got to visit their preferred hospital. They did not always have the opportunity to choose the hospital of their preference, for instance, because there were not enough hospitals nearby to choose between and there was no space at the preferred hospital [$n = 7$ (5%)].

Factors influencing the level of choice activation

Various factors led patients to visit the default hospital or stimulated them to make a more active choice. The factors are organized according to the different subthemes that emerged from the interviews:

1. Hospital characteristics: reputation, quality of care and organization.
2. Patient characteristics: attitudes towards making choices.
3. Health-care system characteristics: information on quality of care and choice options.
4. Factors relating to the interaction between the hospital and the patient characteristics: the opportunity to choose, distance to the hospital and previous experiences.

Illustrative quotes and examples of our findings are provided in the text.

Hospital characteristics

Reputation

Passive patients indicated that there was no reason to choose, because the default option was good or had a good reputation. These factors led them to be content with the hospital they visited. Therefore, they were not concerned about choosing, actively, a hospital. One patient, for example, indicated that she was not concerned about choosing a hospital, partly because of the good reputation of her current hospital (*woman, 56 years, internal medicine, Hosp.C, passive*). Alternatively, some patients did not make a choice because of the bad reputation of other hospitals. One patient said: 'You hear in the news that some hospitals are not good and you know that. But I was already familiar here so I thought, then here' (*man, 42 years, surgery, Hosp.A, passive*). Alternatively, patients making active or semi-active choices mentioned that a bad reputation of the default hospital led them to avoid it.

Quality of care

Patients did not see any reason to choose because they either saw no difference in the quality of care offered, thought hospitals will improve to maintain their ranking, or thought that every hospital is able to help them, especially with relatively routine operations. For example: 'It doesn't really matter to me where I go. They are all good' (*woman, 62 years, surgery, Hosp.C, passive*).

Some patients making active or semi-active choices, however, did think that differences in quality exist, valued their health and were therefore keen to receive the best care. 'You only have one body, so it should be well taken care of, so I choose the best' (*woman, 60 years, internal medicine, Hosp.C, active*). Other patients had bad experiences and so adopted a critical attitude towards hospitals and consultants.

Organization

Factors relating to the organization of hospitals also led passive patients to be content with their hospital. Consequently, they were not concerned about choosing, actively, a hospital. For example, their default hospital was a teaching hospital, had all the facilities, had a short waiting time or was small or intimate or located in the Netherlands. One patient explained he visited a hospital because: 'It is the nearest one for me and, basically, all medical facilities are available here too' (*man, 73 years, internal medicine, Hosp.C, passive*).

Patient characteristics

Attitude towards making choices

Passive patients did not attach much importance to actively choosing a hospital. As one replied to the question whether he thought about choosing a hospital: 'No, I wanted to be helped as quickly as possible' (*man, 51 years, internal medicine, Hosp.B, passive*). This implied that he did not want to waste time on searching a hospital. Patients believed that they could always switch hospitals when dissatisfied; they generally did not like changes; they were easily satisfied; they felt that they were empowered enough to insist upon changes; they did not need to acquire information about quality because they worked as a doctor and; they indicated that there was no common tradition of making a choice. Asked why they did not question the referrer's choice of destination, they answered that they had confidence in their referrer.

Health-care system characteristics

Information on quality of care

Passive patients found it difficult to choose. They did not consider themselves experts on the quality of hospitals. One patient declared: 'This is unknown territory, so then you listen to your GP' (*woman, 72 years, internal medicine, Hosp.C, passive*). Patients feared too that searching might uncover incorrect information. However, one patient making an active choice believed it was perfectly possible, because you can find everything on the internet nowadays. She used a search engine to find the hospital that was best able to treat her (*woman, 47 years, internal medicine, Hosp.C, active*).

Choice options

Passive patients also said that there were no alternatives in their locality. This created a problem, especially for patients without a car. One said: 'Transport was a bit of a problem if I had to travel further and I could still cycle to this hospital or possibly take a bus' (*woman, 76 years, surgery, Hosp.B, passive*). A few patients who made an active or semi-active choice, however, indicated that there are enough hospitals in the neighbourhood to choose between (*man, 24 years, internal medicine, Hosp.B, semi-active*).

Interaction factors

The opportunity to choose

The patients' path of health care made it difficult for them to make a choice. Metaphorically speaking, patients often sat in a moving train and it was hard or illogical for them to get off this train. For instance, some patients did not know their diagnosis in advance or thought that they only had a minor problem. Consequently, they could not choose a hospital that was specialized in their condition or thought that choosing a hospital was unnecessary. Once they were diagnosed, it was easier to stay at their current hospital. As one said: 'Then he says just go to the hospital, there might be nothing to worry about and then you are already at a particular hospital' (*woman, 63 years, surgery, Hosp.B, passive*). Furthermore, patients explained that their current problem was addressed while they were already being treated in a particular hospital or stayed at a particular hospital because they were diagnosed there. Other patients needed to visit a specific hospital, for instance because they needed care urgently and it was the nearest one or it was the only hospital that could treat them.

Other factors also made choosing difficult. Passive patients did not have time to travel to a more distant hospital for the best hospital. They could not make a clear decision once in a doctor's surgery, nor thought critically anymore about mistakes that were made in 'their' hospital. Being treated there had now become a habit. Asked if he searched for information about quality, one patient answered: 'No, working hard, that's what I do' (*man, 41 years, surgery, Hosp.A, passive*).

Alternatively, patients making active or semi-active choices indicated that some situations encouraged choice. These include: when patients need an operation; when they have a severe disease; when they have a specific condition for which specialized care is available and; when their life or health-care situation changes, such as when they move house. One man said: 'For serious conditions, I think it is important that it is done well, with the best doctors that are available at that moment' (*man, 65 years, internal medicine, Hosp.C, active*). One factor related to the patients' path of health care was that the default hospital could not provide the care they needed. This did not necessarily lead to making a choice, however, as most patients followed their consultant's referral.

Distance to the hospital

In addition to hospital characteristics, interaction factors such as the distance to the hospital also caused patients to be unconcerned about choosing, actively, a hospital. For example, 'I don't have any reason not to go to this hospital. It's the nearest one for us' (*woman, 63 years, surgery, Hosp.B, passive*).

Previous experiences

Satisfaction or familiarity with the default hospital also caused passive patients to see no reason to make a choice. Factors here include their care history is there; they trust their consultant; they stayed there out of habit; they had bad experiences in other hospitals; they did not have a relationship with another hospital or; they wanted to be hospitalized close to family members. One said: 'I stay with the same doctor, I find that important. I have faith in that doctor' (*man, 73 years, internal medicine, Hosp.C, passive*).

Patients making active or semi-active choices said that desiring a second opinion and having bad experiences with the default hospital prompted them to bypass this hospital. However, as the following quote illustrates, some patients selected an alternative hospital only for a specific specialty: 'That trust has been undermined here. So I don't go to the ophthalmologist

here anymore' (*man, 47 years, surgery, Hosp.C, passive*). Even after a bad experience, some patients stayed with, or went back to, the default hospital once their consultant had apologized.

Classification of the patients

We classified patients into groups that differ regarding how they chose or ended up at a hospital. This classification was based on differences and similarities between patients regarding their level of choice activation and the factors that influenced the extent to which their choice was active.

1. *Patients with no opportunity to choose because of their health-care path [n = 20(14%)].* These patients' care had already begun. Consequently, it felt difficult or illogical to them to make an active choice for another hospital than their current one or the one they were referred to. Others needed to visit a specific hospital, for instance because it was the nearest one and they felt that they needed care urgently. When asked why she visited a particular hospital, one patient answered: 'There was no choice, I had to go to the nearest one, it was crisis, I had to go to this hospital, done. You don't then look further'. After this first visit, she always visited this hospital for her illness because continuity of care was important for her (*women, 56 years, internal medicine, Hosp.C, passive*).
2. *Passive patients [n = 41(29%)].* This type of patient did not attach significance to the choice of a hospital. They did not see any difference in quality between different hospitals nor any reason to switch hospitals. Additionally, they expected their referrer to know best. They automatically visited the hospital they were referred to, which was chosen by a family member, or their nearest hospital, often the only one in the neighbourhood. One patient said: 'Because my GP referred me to this hospital' (*woman, 72 years, internal medicine, Hosp.C, passive*).
3. *Patients choosing the default hospital [n = 42(30%)]:*
 - a. *Loyal patients [n = 24(17%)].* Loyal patients always visited the same hospital, the hospital with their care history, or the same hospital as a family member with the same condition. For instance, 'I find it strange, another hospital' (*woman, 76 years, internal medicine, Hosp.B, passive*). It was really 'their hospital', they were very satisfied with the care they previously received

there and they were convinced that their hospital is good enough to provide the care they needed.

- b. Practical patients [$n = 18(13\%)$]. These patients focused solely on practical issues. They visited the nearest hospital or the hospital where they work, it being easier therefore to pay a quick visit to the doctor. One said: 'Because it is the nearest one for me and, basically, all medical facilities are available here too' (*man, 73 years, internal medicine, Hosp.C, passive*). Patients were convinced that the hospital they visited was good enough and that there is no reason to think about others.
4. *Patients investing some effort* [$n = 20 (14\%)$]. These patients thought about the choice of a hospital or used information about quality, either to confirm the quality of 'their hospital' or to select one without having considered other hospitals. One said: 'They don't have a bad reputation. I did check that' (*woman, 54 years, internal medicine, Hosp.B, semi-active*). Others visited a specific hospital after having considered at least one other hospital, for instance, because it was a teaching hospital.
5. Patients making active choices [$n = 18 (13\%)$]. These patients were aware of the differences in quality between hospitals and the fact that different hospitals specialize in different fields of care. They attached great importance to their health, thought that it is important to search for the best care, primarily by asking family and friends for their care experiences, and had the opportunity to make an active choice, for instance because they knew their diagnosis in advance. One said: 'Because of the consultants who work here. They are the best' (*man, 65 years, internal medicine, Hosp.C, active*). Some patients, however, were not critical *per se* but were prompted to make an active choice, because, for example, they had a bad experience at the default hospital.

Discussion

Patient choice of providers is encouraged in various countries in order to stimulate competition between providers, among other goals. However, we found that various factors relating to the characteristics of the patient, the provider, and the health-care system influenced patients' hospital selection

process. Patients, therefore, select a hospital in a large variety of ways. The patients interviewed could be classified into five patient types, varying from patients who visited the default hospital because they did not have a choice, to patients who correspond to the image of the autonomous health-care consumer.

Comparison to the literature

Our finding that the majority of patients visited the default hospital without having used information about quality or considered other hospitals, is consistent with existing literature.^{11,12} Many of these patients visited, passively, the default hospital without having thought about the choice of a hospital. Consistent with existing literature,¹⁸ most of them did not attach significance to the choice of a hospital. For several patients, the choice of a hospital was a trivial issue. They did not see any reason to switch hospitals. They were content with the default hospital or they thought that every hospital should be able to help them. Others did not consider themselves experts on the quality of hospitals. Existing literature also indicates that many patients have trouble with the use of comparative information²⁸ and are insufficiently informed to make educated choices.⁴ Some felt that they did not even have the opportunity to make an active choice, for instance, because they did not have alternative hospitals nearby. This is also in line with previous research.^{19,20} Consequently, many patients let their GP or consultant decide on the provider they were to be referred to or simply visited their current or local hospital.³ Patients trust their referrer and think that he or she knows best which provider to visit.

Other patients felt that they did not have an opportunity to choose because they had already embarked on a path of care. This is compatible with the 'logic of caring', which assumes that the nature of health care makes it difficult or unrealistic to make active choices between health-care providers.⁹ Neoclassical microeconomic theory assumes that patients have the opportunity to search for the best hospital when a diagnosis is reached. However, according to the logic of caring, patients often do not have one clear moment at which a choice can be made. Even patients visiting the surgery department, who often needed elective care, generally did not make an active choice. This may be explained by the fact that even a specific elective operation does not concern a one-off, circumscribed event but a process that is part of a patient's life and health-care path and cannot be separated from previous health-care experiences.

Thirty per cent of the patients interviewed adopted the default option because of specific reasons. Although these patients regarded the issue of hospital choice as trivial, they still valued the opportunity to visit that particular hospital because they had a relationship with it or because of practical issues. Research has previously shown that patients visit the nearest hospital or the one where they have been before.³ Generally, patients are loyal to their local hospital.¹⁴

Almost three of ten patients were concerned about the choice of a hospital. However, only 13% of the patients interviewed corresponded to the image of the autonomous health-care consumer. If the default hospital had a bad reputation or patients had a bad experience with it, patients were prompted to switch hospitals. This is consistent with existing literature.^{16,17} Unlike existing literature, however, few patients mentioned negative publicity about a hospital in their locality as a factor that influenced their choice. A few patients, who believed that differences in quality exist between hospitals or that making an active choice is perfectly possible, made an active choice regardless of the situation. Our research indicates that patients only adopt the consumer role in specific situations or with particular characteristics, for instance, if they exhibit a greater capacity for active decision making. Other research shares this conclusion.^{15,16}

Limitations, strengths and further research

Our research is significant because it does not focus solely on patients' preferences regarding hospitals. Instead, it focuses on the assumption that patients differ in their intentions and their opportunities to make a choice. It constructs, from a patients' perspective, a typology of how patients select or 'end up at' a particular hospital. Interviewing a large number of patients from two departments of three Dutch hospitals allowed us to grasp many different perspectives.

However, we cannot be sure if our results can be generalized as we did not aim to acquire a sample that is representative of the population of hospital patients. However, our goal was to acquire exploratory in-depth information rather than to test hypotheses. In our study, we do mention some figures to give an impression about the relative sizes of the different patients groups. These figures need to be interpreted with some caution. Another limitation is that we were unable to draw conclusions about the numbers of patients who made a particular remark. One issue could have been mentioned by all patients or by just a few. However, although a

particular issue might have been mentioned by only a few patients, it does not have to be a trivial one. Were we to have asked them about that particular issue, more patients might have considered it an important factor.

This is an exploratory study. Quantitative research should describe the five patient groups as per the various factors that influence the process of making a choice of a hospital and test the differences between the groups regarding those factors.

Conclusion

Differences exist in the way patients select a hospital even though patient choice of hospitals is encouraged in Western countries. Generally, patients tend to visit the default hospital without having been concerned about the choice of a hospital. This is because they do not see any reason to choose another one. These patients valued choice as a means to be able to visit the default hospital or, in other words, a goal in itself, and not as an instrument to improve care on a macro level. Several barriers to making an active choice were identified. Some barriers might be reduced by taking measures to encourage choice, but other barriers are inherent in the health-care sector, such as the fact that patients often do not have opportunities to make a choice or that they are content with the default hospital. Therefore, policy makers may try in vain to bring principles originating from neoclassical microeconomic theory into health care. In health care, other principles seem to apply. The choice of a hospital is only one part of patients' health-care paths. Other means to ensure that patients visit a hospital that matches their preferences should be devised. Perhaps, GPs might be able to acquire patients' preferences regarding a hospital and use these to, together with the patient, choose a hospital that fits these preferences.

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References

1. Ikkersheim DE, Koolman X. Dutch healthcare reform: did it result in better patient experiences in hospitals? A comparison of the consumer quality index over time. *BMC Health Services Research*, 2012; 12: 1–6.
2. Vrangbaek K, Robertson R, Winblad U, van de Bovenkamp H, Dixon A. Choice policies in Northern European health systems. *Health Economics, Policy and Law*, 2012; 7: 47–71.
3. Dixon A, Robertson R, Bal R. The experience of implementing choice at point of referral: a comparison of the Netherlands and England. *Health Economics, Policy and Law*, 2010; 5: 295–317.
4. Birk HO, Henriksen LO. Which factors decided general practitioners' choice of hospital on behalf of their patients in an area with free choice of public hospital? A questionnaire study. *BMC Health Services Research*, 2012; 12: 1–10.
5. Victoor A, Friele RD, Delnoij DMJ, Rademakers JJDJM. Free choice of healthcare providers in the Netherlands is both a goal in itself and a precondition: modelling the policy assumptions underlying the promotion of patient choice through documentary analysis and interviews. *BMC Health Services Research*, 2012; 12: 1–11.
6. Enthoven AC. The history and principles of managed competition. *Health Affairs (Project Hope)*, 1993; 12 (Suppl.): 24–48.
7. Kroneman MW, Maarse H, van der Zee J. Direct access in primary care and patient satisfaction: a European study. *Health Policy*, 2006; 76: 72–79.
8. Kooreman P, Prast H. What does behavioral economics mean for policy? Challenges to savings and health policies in the Netherlands. *De Economist*, 2010; 158: 101–122.
9. Mol A. *De logica van het zorgen. Actieve patiënten en de grenzen van het kiezen*. Amsterdam: Van Gennep, 2006.
10. van Hoorn E, Bellemakers C, Koster J. *De kleine zelfbeschikking en de herovering van vraagsturing*. Amsterdam: IGPB & Harmelen: Kantel Konsult, 2003.
11. Victoor A, Delnoij DMJ, Friele RD, Rademakers JJDJM. Determinants of patient choice of healthcare providers: a scoping review. *BMC Health Services Research*, 2012; 12: 1–16.

12. Dijs-Elsinga J, Otten W, Versluijs M *et al.* Choosing a hospital for surgery: the importance of information on quality of care. *Medical Decision Making*, 2010; 30: 544.
13. Varkevisser M, van der Geest SA, Schut FT. Assessing hospital competition when prices don't matter to patients: the use of time-elasticities. *International Journal of Health Care Finance and Economics*, 2010; 10: 43–60.
14. Dealey C. The factors that influence patients' choice of hospital and treatment. *British Journal of Nursing* (Mark Allen Publishing), 2005; 14: 576–579.
15. Rademakers J, Nijman J, Brabers AEM, de Jong JD, Hendriks M. The relative effect of health literacy and patient activation on provider choice in the Netherlands. *Health Policy*, 2014; 114: 200–206.
16. Robertson R, Burge P. The impact of patient choice of provider on equity: analysis of a patient survey. *Journal of Health Services Research & Policy*, 2011; 16(Suppl. 1): 22–28.
17. Exworthy M, Peckham S. Access, choice and travel: implications for health policy. *Social Policy & Administration*, 2010; 40: 267–287.
18. Fotaki M, Roland M, Boyd A, McDonald R, Scheaff R, Smith L. What benefits will choice bring to patients? Literature review and assessment of implications. *Journal of Health Services Research & Policy*, 2008; 13: 178–184.
19. Tai WT, Porell FW, Adams EK. Hospital choice of rural Medicare beneficiaries: patient, hospital attributes, and the patient-physician relationship. *Journal of Health Services Research & Policy*, 2004; 39(6 Pt 1): 1903–1922.
20. Victoor A, Rademakers JJDJM, Reitsma-van Rooijen M, de Jong JD, Delnoij DMJ, Friele RD. The effect of the proximity of patients' nearest alternative hospital on active, informed choice: a cross-sectional questionnaire study. *Journal of Health Services Research & Policy*, 2013; 19: 4–11.
21. Roh C, Moon M. Nearby, but not wanted? The bypassing of rural hospitals and policy implications for rural health care systems. *Policy Studies Journal: The Journal of the Policy Studies Organization*, 2005; 33: 377–394.
22. Enthoven A, van de Ven W. Going Dutch – Managed-Competition Health Insurance in the Netherlands. *The New England Journal of Medicine*, 2007; 357: 2421–2423.

23. Centraal Bureau voor de Statistiek. Nabijheid voorzieningen; afstand locatie, wijk- en buurtcijfers 2006–2012. Den Haag: Centraal Bureau voor de Statistiek, 2014. Available at: statline.cbs.nl/StatWeb/publication/?DM=SLNL&PA=80306NED&D1=0-2,7,9,11,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,52,54,56,58,60,62,64,87-92,102,104,106-109&D2=0&D3=1&HDR=G2,T&STB=G1&VW=T, accessed 28 April 2014.
24. Strauss A, Corbin J. *Basics of Qualitative Research*. Thousand Oaks, CA, USA: SAGE Publications, 1998.
25. Waterman H, Brunton L, Fenerty C, Mottersthead J, Richardson C, Spencer F. Adherence to ocular hypotensive therapy: patient health education needs and views on group education. *Patient Preference and Adherence*, 2013; 7: 55–63.
26. MAXQDA 2007 Reference Manual for Windows 2000 and XP [computer program]. Marburg, Germany: VERBI Software, 2007.
27. Art. 1 of the ‘Medical research involving human subjects Act’, 1998. Available at: wetten.overheid.nl/BWBR0009408/geldigheidsdatum_30-11-2012, accessed 30 November 2012.
28. Damman OC, Hendriks M, Rademakers J, Spreeuwenberg P, Delnoij DM, Groenewegen PP. Consumers’ interpretation and use of comparative information on the quality of health care: the effect of presentation approaches. *Health Expectations*, 2012; 15: 197–211.

5

The effect of the proximity of patients' nearest alternative hospital on their intention to search for information on hospital quality

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Abstract

Objective

In several countries, patients are encouraged to choose health care providers. Simultaneously, there is a tendency towards the concentration of health care, which might lessen the choice. Our aim was to assess the impact of patients' distances from their providers on their information-seeking, which is one element of choice.

Methods

Two thousand members of the Dutch Health Care Consumer Panel were sent a questionnaire that included a question on whether they would search for information about hospitals to inform their choice. Distances from providers were obtained from a database that includes the distances between all postcodes in the Netherlands. To assess the influence of distance on information-seeking, logistic regression analyses were conducted.

Results

There was a good response (75%). Older, less educated respondents were less inclined to seek information when their nearest alternative was located further away (OR 0.85; 95% CI: 0.79–0.92), and younger, more educated respondents were more inclined to search in this situation (OR 1.11; 95% CI: 1.01–1.22).

Conclusions

As fewer older, less educated patients would search for information to guide their choice, they might not opt for the best hospital. Additionally, the need for providers to compete for the patronage of these patients might be lessened.

Introduction

Patients' choice of health care provider has become a prominent policy issue in several countries as one element of regulated competition.¹ Patients are encouraged to make an active choice or, in other words, to invest effort in acquiring information about price and quality of providers and to choose between them based on that information. It is anticipated that this will prompt providers to compete for patients by optimizing the care they deliver.^{1,2} Various measures have been taken to encourage patients to choose, such as publishing information on the quality of care.¹ However, concentrating care at fewer locations and encouraging health care insurers to selectively contract care may limit the choice.^{3,4}

Although patients are expected to choose, they generally opt for the default provider, often the nearest one.⁵ Whether patients choose varies according to provider, patient and health care system characteristics.⁶⁻¹⁰ A key factor seems to be whether patients have alternatives to their nearest provider. Because patients are averse to travel for health care,⁵ the distance to a provider might influence whether they consider it an alternative. When the nearest alternative is too far away, patients may not feel they have a choice. Whether providers are deemed viable may depend on their absolute distance from a patient's home or their distance relative to a patient's closest provider. A provider located 35 km away may not be seen as an alternative by somebody whose nearest provider is 5 km away while it might seem viable to somebody whose nearest provider is 32 km away.

A few studies have been carried out on the effect of the distance of alternative providers on choice. For instance, a study investigating why patients bypass the nearest hospital found that the relative distance to an alternative provider negatively influences bypassing.⁷ Another study found that patients are more likely to bypass nearby providers in areas with a high concentration of providers.¹¹ Furthermore, whether patients consider a particular hospital to be an alternative depends on its distance from their preferred hospital.¹² However, to our knowledge, the effect of the absolute distance to the nearest alternative on the choice behavior of various patient groups has never been researched or compared to the relative distance. The current work also has societal value. Patients are encouraged to choose, while their options are being restricted at the same time. If this leads to fewer choices, it might affect the functioning of patient choice as an instrument to enhance competition.

Searching for information on providers is an important element of making an active choice.² Our aim was to investigate whether patients in the Netherlands would search for information to choose a hospital and what impact the proximity of their nearest alternative hospital has on whether they would undertake a search or not. The proximity of patients' nearest alternative hospital is operationalized as the absolute distance to their nearest alternative hospital and the distance to this hospital relative to the distance to their nearest one. We focus on the choice of a hospital because hospital care is an aspect of health care where alternatives and opportunities to choose are available. In the Dutch Health Care system, patient choice is encouraged, there is a relatively large number of hospital beds (4.7 beds per 1,000 population), and having health care insurance, which covers the hospital costs incurred by patients, is mandatory.^{13,14}

We hypothesized that patients who live further away from their second nearest hospital are less prone to choose actively.⁷ The following patient groups are also less prone to make an active choice: older, low educated,⁵ male,¹⁰ less healthy patients,⁹ patients with chronic diseases,⁸ and patients whose nearest hospital delivers top clinical care or is not a teaching hospital⁷. Therefore, we expect them to be less inclined to search for information. Additionally, distance has a larger negative influence on information-seeking for older, less highly educated, less healthy patients and patients with chronic diseases. These groups are less mobile^{13,14} and if the nearest alternative hospital is located too far away, they might not consider it at all.

Methods

Participants

In March 2011, a questionnaire was sent to a sample from the Dutch Health Care Consumer Panel that was representative for the Dutch population in sex and age (18 years and above) (N = 2000). The panel is managed by the Netherlands Institute for Health Services Research and registered with the Dutch Data Protection Authority.¹⁷ Migrants and less educated people are under-represented in the panel. As per their previously stated preferences, half the sample (N = 928) received a written questionnaire while the other half (N = 1072) received an online questionnaire.

Instruments

The questionnaire included 52 questions regarding a large variety of health topics. It included the following question: 'If you are referred to a hospital/specialist, would you look for information to help you to choose one?' Other questions were not relevant for this study. Up-to-date information was available about the backgrounds of all panel members, including their age and residential four-digit postcode.

Data on the hospitals were collected from three websites.^{18–20} We included general hospitals, teaching hospitals and outpatient departments. Hospitals specializing in a few specific conditions, independent treatment facilities and private clinics (typically devoted to a few specific conditions) were not included. Because respondents were asked a question that was not focused on a specific condition, we expected them to consider only general hospitals offering a wide range of care.

Analysis

The absolute distances were defined as the shortest route by car (km) between patients' residential postcodes and the postcode of their second nearest hospital. These routes were obtained from a database that includes the distances between all four-digit postcodes in the Netherlands.²¹ For the relative distance, we assumed that people perceive a difference between two values differently depending on the size of the baseline value.²² Therefore, we defined the relative distance as a ratio, i.e. the distance to the alternative divided by the distance to the nearest hospital.

We treated a hospital with several sites as a single hospital and calculated the distance to the site closest to a patient's home (Box 1). We divided both distance variables into 10 groups of an equal number of observations, since the data were positively skewed.

Statistical analysis of the data was performed using Stata statistical software. Frequencies were calculated for background characteristics of the respondents and hospitals, and the question of whether patients would search for information. We weighed frequencies for this question for age (18–39, 40–64, 64 and above) and sex, so that these results could be generalized to the Dutch population, based on composition data for the Dutch population on 1 January 2011.²⁴

To assess the influence of distance to the nearest alternative hospital on information-seeking, we first conducted univariate logistic regression analyses on the influence of distance on information-seeking. Next, we built

a multiple logistic regression model by means of a manually executed forward strategy. The null model only included the distance to the nearest alternative. Variables were considered for inclusion in the model when bivariate logistic regression on the influence of the variable and distance on information seeking yielded a p value lower than 0.25. Since we divided both distance variables into 10 groups, every one-unit increase in the distance to the nearest alternative means 'every transition to a successive 10% group'.

Box 1 Calculation of the average distance between two addresses in one postcode

When a respondent's postcode was the same as that of their nearest hospital, the distance was set at the average distance between two addresses in one postcode: 1.1 km. The average distance of an address (a *six-digit* postcode) to the centre of its *four-digit* postcode is 800 m.²¹ If we assume this area to be circular in shape, its radius (r) must be 1.5 times the average distance of an address to the centre of its postcode. The average distance between two points within an area is $(128/45\pi)*r$. Given that the average distance of an address to the centre of its postcode is 800 m, this gives $1.5*128/45\pi*800 = 1086$ m, rounded up to 1100 m.²³ When the distance to the nearest alternative hospital was between zero and 1.1 km, this distance was used instead (applied to two hospitals).

Results

A total of 1500 members completed the questionnaire (75%). Table 1 shows the background characteristics of the participants and hospitals. Of the respondents, 609 (41.2%) indicated that they would look for information to help them to choose a hospital/specialist. Whether they would search for information is significantly influenced by the proximity of the nearest alternative hospital. Every one-unit increase in the absolute distance to the nearest alternative leads to a 4% ($p = 0.018$) decrease in the odds to search for information.

Table 1 Background characteristics of the participants and the hospitals

Variable	N	(%)	Md	(IQR) ^a	Range
<i>Distance</i>					
Distance to hospital 1 ^b (km)	1396	(100.0)	4.4	(6.30)	0.6–37.9
Distance to hospital 2 ^c (km)	1396	(100.0)	15.1	(12.72)	0.8–68.5
<i>Respondent characteristics</i>					
Age	1500	(100.0)			
Low (18–39 years)	339	(22.6)			
Middle (40–64 years)	627	(41.8)			
High (>64 years)	534	(35.6)			
Gender	1500	(100.0)			
Women	810	(54.0)			
Education level	1447	(96.5)			
Low ^d	237	(16.4)			
Medium ^e	865	(59.8)			
High ^f	345	(23.8)			
Ethnicity	1496	(99.7)			
Dutch	1401	(93.6)			
Income	1412	(94.1)			
Low (<=1750)	428	(30.3)			
Middle (1750–2500)	443	(31.4)			
High (>=2500)	541	(38.3)			
Subjective general physical health	1476	(98.4)			
Medium/bad	244	(16.5)			
Good	873	(59.2)			
Very good/ excellent	359	(24.3)			
Chronic or long-term disease	1237	(82.5)			
Yes	917	(74.1)			
<i>Hospital characteristics</i>					
Hospital type	201	(100.0)			
General hospital	128	(63.7)			
Teaching hospital	8	(4.0)			
Outpatient clinic	65	(32.3)			
Top-clinical care	201	(100.0)			
Delivers top-clinical care	62	(30.8)			

^aMedian (interquartile range); ^bHospital 1 = nearest hospital; ^cHospital 2 = nearest alternative hospital; ^dLow = primary school or only vocational training; ^eMedium = secondary school or intermediate vocational training; ^fHigh = tertiary education.

Table 2 shows the results of the bivariate analyses. Because only the absolute distance to the second nearest hospital has a significant influence on whether respondents search for information, the relative distance was not included in the models. Interaction terms were only reported when significant. The absolute distance to the nearest alternative hospital negatively influences information-seeking. Additionally, the odds for women to search for information are 66% higher than the odds for men, and the odds for respondents with chronic diseases to search for information are 37% lower than the odds for respondents without. The effect of the distance to the nearest alternative provider on information seeking varies for different patient groups. For respondents aged 65 or above, every one-unit increase in the absolute distance to the nearest alternative leads to a 12% decrease in the odds to search for information, and for less highly educated respondents, every one-unit increase leads to a 7% decrease (Figure 1).

Figure 1 The effect of the interaction of age and education level with the absolute distance to the nearest alternative hospital on information-seeking behavior.

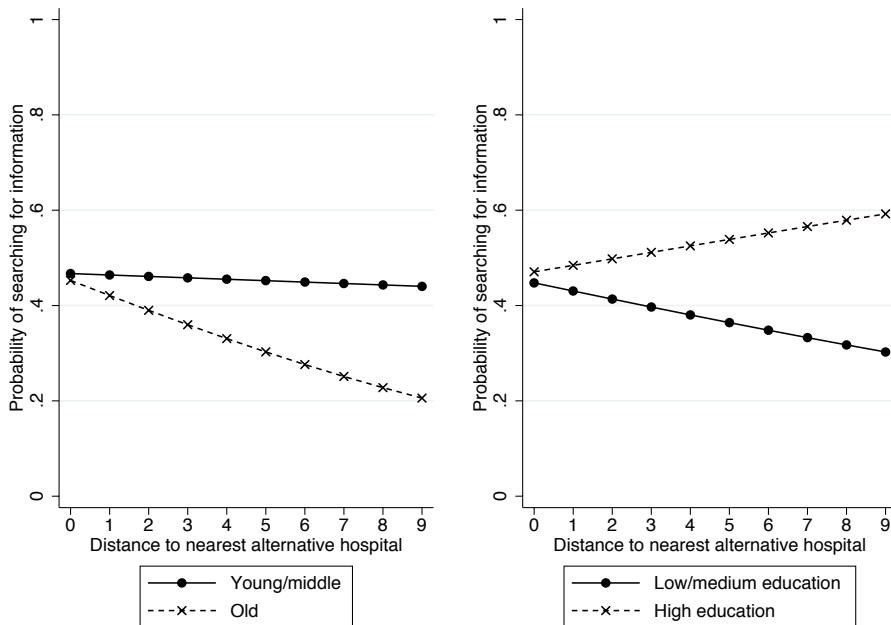


Table 2 Bivariate logistic regression analyses testing the effects of distance and respondent and nearest hospital characteristics on whether respondents would search for information

Variable	Odds	p	95% CI
Distance to the nearest alternative hospital			
Absolute distance (N = 1379)	0.96***	0.018	0.92–0.99
Relative distance (N = 1379)	1.00	0.961	0.96–1.04
Respondent characteristics			
Age (N = 1379)			
Low/middle (18–64)	Reference	Reference	Reference
High (>64)	0.94	0.784	0.62–1.43
Distance	0.99	0.611	0.94–1.03
Low/middle*distance	Reference	Reference	Reference
High*distance	0.89**	0.005	0.82–0.97
Gender (N = 1379) ^a			
Men	Reference	Reference	Reference
Women	1.66*	0.000	1.34–2.07
Distance	0.96***	0.028	0.92–1.00
Education level (N = 1343)			
Low ^b /medium ^c	0.91	0.685	0.58–1.43
High ^d	Reference	Reference	Reference
Distance	1.06	0.158	0.98–1.14
Low/medium*distance	0.88**	0.006	0.81–0.96
High*distance	Reference	Reference	Reference
Subjective general physical health (N = 1368) ^a			
Medium/bad	Reference	Reference	Reference
Good	0.95	0.715	0.70–1.28
Very good/excellent	1.17	0.363	0.83–1.66
Distance	0.96***	0.024	0.92–0.99
Chronic or long-term disease (N = 1178) ^a			
No	Reference	Reference	Reference
Yes	0.63**	0.001	0.48–0.82
Distance	0.95***	0.014	0.91–0.99

Table 2 Bivariate logistic regression analyses testing the effects of distance and respondent and nearest hospital characteristics on whether respondents would search for information (*Continued*)

Variable	Odds	p	95% CI
<i>Nearest hospital characteristics</i>			
Hospital type (N = 1379) ^a			
General hospital	Reference	Reference	Reference
Teaching hospital	1.58	0.075	0.95–2.63
Outpatient clinic	1.09	0.529	0.83–1.42
Distance	0.96 ^{***}	0.031	0.92–1.00
Delivers top-clinical care (N = 1379) ^a			
No top-clinical care	Reference	Reference	Reference
Top-clinical care	1.06	0.636	0.84–1.33
Distance	0.96 ^{***}	0.029	0.92–1.00

*p < 0.001; **p < 0.01; ***p < 0.05; NA = not applicable; distance = absolute distance to the nearest alternative hospital; ^aThe results for the model without the interaction term are reported, because no interaction was found between this variable and distance; ^bLow = primary school or only vocational training; ^cMedium = secondary school or intermediate vocational training; ^dHigh = tertiary education.

Table 3 shows the final multiple logistic regression model. Similar results were found, but the effect of distance had to be calculated for four different groups. For younger, more highly educated respondents, every one-unit increase in the distance to the nearest alternative leads to an 11% increase in the odds to search for information, while for older and less educated respondents, every one-unit increase leads to a 15% decrease (Figure 2).

Figure 2 The effect of the combined interaction of age and education level with the absolute distance to the nearest alternative hospital on information-seeking behavior.

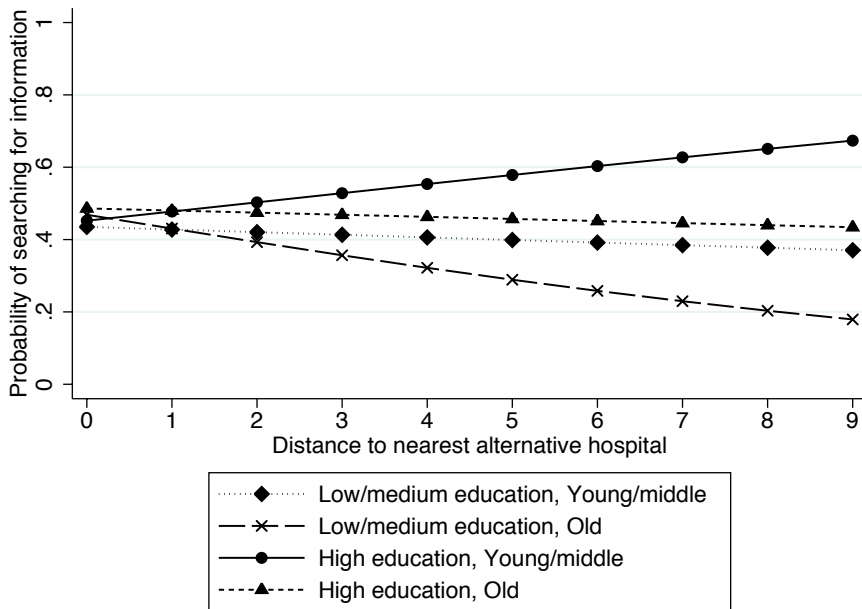


Table 3 Final multiple logistic regression model that explains information seeking (N = 1145)

Variable	Odds	p	95% CI
Distance (absolute)	1.11 ^{***}	0.033	1.01–1.22
Age			
Low/middle (18–64 years)	Reference	Reference	Reference
High (>64 years)	1.15	0.547	0.73–1.80
Gender			
Men	Reference	Reference	Reference
Women	1.39 ^{***}	0.016	1.06–1.81
Education level			
Low ^a /medium ^b	0.93	0.782	0.57–1.53
High ^c	Reference	Reference	Reference
Chronic or long-term disease			
No	Reference	Reference	Reference
Yes	0.68 ^{**}	0.008	0.52–0.90
Age*distance			
Low/middle age (18–64 years)	Reference	Reference	Reference
High age (>64 years)	0.88 ^{**}	0.006	0.80–0.97
Education level*distance			
Low/medium education level	0.88 ^{**}	0.009	0.79–0.97
High education level	Reference	Reference	Reference

^{*}p < 0.001; ^{**}p < 0.01; ^{***}p < 0.05; Distance = absolute distance to the nearest alternative hospital; ^aLow = primary school or only vocational training; ^bMedium = secondary school or intermediate vocational training; ^cHigh = tertiary education; Model characteristics: LR chi² = 74.03, p = 0.000, Pseudo R² = 0.0480.

Discussion

The majority of patients would not search for comparative information about hospitals/specialists when they need hospital care. Whether they search for information is influenced by the availability of a realistic alternative in terms of its absolute proximity. However, this influence is not the same for everyone. Older, less educated patients are less likely to search for information when they live further away from their nearest alternative hospital. Surprisingly, younger more highly educated patients are more likely to search for information in this situation. Furthermore, people with long-term conditions are less likely to search for information and women are more likely to.

Although most of our findings are in line with our hypotheses, there are three deviations from existing literature. First, the group stating an intention to search for information is quite large compared to the low uptake of patient choice of health care providers found in previous research.^{5,25} This may result from the fact that people generally intend to choose actively, whereas ultimately they do not.²⁶

Second, contrary to existing literature,⁷ we discovered that the absolute and not the relative distance to people's nearest alternative hospital influences information seeking. This may be caused by our operationalizations of active, informed choice (i.e. future information-seeking to guide provider choices as opposed to a previous choice) and of travel costs (distance in kilometres as opposed to travel time).

Finally, unlike previous studies,^{7,9} we did not find any effect of hospital type and general health on information-seeking. Existing literature, however, only studied the influence of hospital type on choice, whereas we investigated its additional effect while adjusting for distance.

This study has several implications. Fewer less-educated older patients may make active choices because of the limited options in their proximity due to the concentration and selective contracting of health care. Consequently, they might not opt for the best hospital. Additionally, since the elderly comprise the majority of patients, the need for providers to compete on quality and price to obtain patients might be reduced. In the end, the concentration and selective contracting of health care is at odds with patient choice, while both are advocated as a means to improve health care efficiency, either directly or by stimulating competition. Health care policy should therefore choose between empowering either patients or insurers and providers as a mechanism to improve health care quality.

The strengths of this study are that it tests the effect of both the relative distance and the absolute distance to patients' nearest alternative hospital on information-seeking. In addition, we took into account that people may perceive the extra distance to their nearest alternative provider differently depending on the distance to their nearest provider. One limitation concerns the adjustment of the distances between respondents and hospitals, because researchers are not allowed to use all six characters of patients' postcodes. Another limitation is that we asked respondents a hypothetical question. Despite this, we found an influence of the proximity of people's nearest alternative hospital on information-seeking. Finally, the question that was posed to the respondents was not narrowed to a specific condition. It would be interesting to study the effect of the proximity of patients' nearest alternative on choice with respect to specific health care conditions, thereby including treatment facilities specialized in only those conditions in the analyses.

Further research should also investigate the effect of the proximity of patients' nearest alternative on choice in other countries. The Netherlands is unusual because of several factors related to its health care system. Additionally, different operationalizations of active choice and travel cost need to be studied.

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References

1. Ikkersheim DE and Koolman X. Dutch healthcare reform: did it result in better patient experiences in hospitals? A comparison of the consumer quality index over time. *BMC Health Serv Res* 2012; 12: 1–6.
2. Lako Ch J and Rosenau P. Demand-driven care and hospital choice. Dutch health policy toward demand-driven care: results from a survey into hospital choice. *Health Care Anal* 2009; 17: 20–35.
3. Boonen LHHM. Consumer channeling in health care: (im)possible? PhD Thesis. Erasmus Universiteit Rotterdam, Rotterdam, 2009.
4. Glanville J, Duffy S, Mahon J, et al. Impact of hospital treatment volumes on patient outcomes. York: York Health Economics Consortium, University of York, 2010, pp.1–21.
5. Victoor A, Delnoij DMJ, Friele RD, et al. Determinants of patient choice of healthcare providers: a scoping review. *BMC Health Serv Res* 2012; 12: 1–16.
6. Tai WT, Porell FW and Adams EK. Hospital choice of rural Medicare beneficiaries: patient, hospital attributes, and the patient-physician relationship. *BMC Health Serv Res* 2004; 39(6 Pt 1): 1903–1922.
7. Varkevisser M and van der Geest SA. Why do patients bypass the nearest hospital? An empirical analysis for orthopaedic care and neurosurgery in the Netherlands. *Eur J Health Econ* 2007; 8: 287–295.
8. Dealey C. The factors that influence patients' choice of hospital and treatment. *Br J Nurs* 2005; 14: 576–579.
9. Harris KM. How do patients choose physicians? Evidence from a national survey of enrollees in employment-related health plans. *Health Serv Res* 2003; 38: 711–732.
10. Robertson R and Burge P. The impact of patient choice of provider on equity: analysis of a patient survey. *J Health Serv Res Policy* 2011; 16(Suppl 1): 22–28.
11. Hyndman JCG, Holman CDJ and Pritchard DA. The influence of attractiveness factors and distance to general practice surgeries by level of social disadvantage and global access in Perth, Western Australia. *Soc Sci Med* 2003; 56: 387–403.
12. Varkevisser M, van der Geest S and Schut F. Quality competition in regulated hospital markets: consumer information and patient choice for angioplasty. Patient choice, competition and antitrust enforcement in Dutch hospital markets. PhD Thesis. Rotterdam: Erasmus Universiteit Rotterdam, 2009, pp.117–149.

13. Enthoven A and van de Ven W. Going Dutch—managed-competition health insurance in the Netherlands. *N Engl J Med* 2007; 357: 2421–2423.
14. OECD. Health at a Glance: Europe 2012. Paris: OECD Publishing, 2012.
15. Butler AA, Menant JC, Tiedemann AC, et al. Age and gender differences in seven tests of functional mobility. *J NeuroEng Rehabil* 2009; 6: 1–9.
16. Sainio P, Martelin T, Koskinen S, et al. Educational differences in mobility: the contribution of physical workload, obesity, smoking and chronic conditions. *J Epidemiol Commun H* 2007; 61: 401–408.
17. Brabers AEM, Reitsma-van Rooijen M and de Jong JD. Consumentenpanel Gezondheidszorg. Basisrapport met informatie over het panel (2011). Utrecht: NIVEL, 2011, pp.1–58.
18. RIVM. Kiesbeter.nl. www.kiesbeter.nl/zorgverleners (accessed August 2012).
19. BSL, NPCF. ZorgkaartNederland. www.ZorgkaartNederland.nl (accessed August 2012).
20. Medical Media. Ziekenhuis.nl. www.ziekenhuis.nl (accessed August 2012).
21. Geodan IT b.v. Drive Time Matrix van Nederland. Product documentatie. Amsterdam: Geodan IT b.v. 2012, pp.1–7.
22. Blake R and Sekuler R. Appendix. Behavioral methods for studying perception. *Perception*. New York: The McGraw-Hill Companies, 2006, pp.553–568.
23. Larrosa I. Re: average distance between two points in a circle of radius r . www.mathforum.org/kb/messagepa?messageID=538371 (accessed August 2012).
24. CBS. Bevolking; geslacht, leeftijd en burgerlijke staat, 1 Januari 2012. www.cbs.nl (accessed August 2012).
25. Dijs-Elsinga J, Otten, W, Versluijs M, et al. Choosing a hospital for surgery: the importance of information on quality of care. *Med Decis Making* 2010; 30: 544-555.
26. Schwartz L, Woloshin S and Birkmeyer J. How do elderly patients decide where to go for major surgery? Telephone Interview survey. *BMJ* 2005; 331: 821-827.

6

Are patients' preferences regarding the place of treatment heard and addressed at the point of referral: an exploratory study based on observations of GP-patient consultations

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Abstract

Background

Today, in several north-western European countries, patients are encouraged to choose, actively, a healthcare provider. However, patients often visit the provider that is recommended by their general practitioner (GP). The introduction of patient choice requires GPs to support patients to be involved, actively, in the choice of a healthcare provider. We aim to investigate whether policy on patient choice is reflected in practice, i.e. what the role of the patient is in their choices of healthcare providers at the point of referral and to what extent GPs' and patients' healthcare paths influence the role that patients play in the referral decision.

Methods

In 2007–2008, we videotaped Dutch GP-patient consultations. For this study, we selected, at random, 72 videotaped consultations between 72 patients and 39 GPs in which the patient was referred to a healthcare provider. These were analysed using an observation protocol developed by the researchers.

Results

The majority of the patients had little or no input into the choice of a healthcare provider at the point of referral by their GP. Their GPs did not support them in actively choosing a provider and the patients often agreed with the provider that the GP proposed. Patients who were referred for diagnostic purposes seem to have had even less input into their choice of a provider than patients who were referred for treatment.

Conclusions

We found that the GP chooses a healthcare provider on behalf of the patient in most consultations, even though policy on patient choice expects from patients that they choose, actively, a provider. On the one hand, this could indicate that the policy needs adjustments. On the other hand, adjustments may be needed to practice. For instance, GPs could help patients to make an active choice of provider. However, certain patients prefer to let their GP decide as their agent. Even then, GPs need to know patients' preferences, because in a principal-agent relationship, it is necessary that the agent is fully informed about the principal's preferences.

Background

Patient choice of healthcare providers is currently an important element of the healthcare systems of various north-western European countries and is often supported by law. The rationale for this is twofold. Firstly, it empowers patients and gives them the opportunity to influence their own care process. Secondly, choice was introduced as one element of regulated competition [1-3]. Within this context, patients are viewed as autonomous healthcare consumers [3] and are expected to make active choices or, put differently, deliberate choices between healthcare providers. These choices would, in theory, be based on comparing information on quality and price [4]. This should enhance competition between providers [2,3] and, ultimately, result in a more personalised, responsive, efficient, and higher quality health service [3,5]. This line of reasoning originates from the neoclassical microeconomic theory [6]. However, in practice, instead of making active choices, patients tend to visit the default provider, often simply the one that is recommended by their general practitioner (GP) [7-10].

The fact that GPs can play a major role in deciding where patients go for specialist care is partly because in several countries, such as the UK and the Netherlands, patients need a referral from a GP before they can access specialist care [11]. Additionally, patients may be reluctant to decide on a provider [3], because they do not always perceive differences in quality of providers [12], they often have no insight into the quality of providers [13,14], and are often unaware of the costs that they incurred because they commonly do not directly pay for services [4]. Instead they expect their GP to act as their agent and understand and use performance information when making referral decisions [9]. In a principal-agent relationship, the choice that is made by the agent is the one that the principal would have made if they were themselves fully informed. It is therefore necessary that the agent is fully informed about the principal's preferences [15].

Traditionally, however, GPs refer their patients to a specific provider based on, for instance, connections to that provider or their own medical judgement, instead of acquiring patients' preferences regarding the place of treatment [11,16]. Consequently, patient choice hardly happens at the point of referral [3]. This is understandable, because referring a patient is a process that is heavily influenced by a complex of interrelated factors.

For instance, little comparative information is available and GPs do not always trust the information that is available [17]. However, although it is not clear whether patient choice leads to better health outcomes than visiting the default, the introduction of patient choice of healthcare providers calls for changes to the referral process [16]. In accordance with policy on patient choice, GPs are expected to take on the task of supporting patients to be actively involved in their own care, including the choice of a healthcare provider. More specifically, they need, in their referrals, to incorporate patients' preferences and to provide advice regarding the choice of a provider [3,16]. However, it is not clear if this policy is reflected in practice.

There is evidence that different factors influence GPs' referral decisions, such as patient and GP characteristics [18]. Some GPs, for instance, are more positive towards facilitating patient choice than others [5] and some patients are more active regarding the choice of a provider than others [19]. The process that patients follow from their first demand for care until the end of their treatment, called the 'healthcare path', may have an additional influence on their referral pattern. Going to a hospital for treatment is not an isolated incident. Instead, visits to healthcare providers form a path of interconnected events. For example, a patient may go to the GP first, is then referred to a hospital for diagnostic purposes and, finally, is sent to another hospital department, or even another hospital, for treatment. While following this path, there may not be any clear opportunity to make a choice, particularly not independent of any previous care the patient has received [20-22].

Research focus

We aim to investigate if policy regarding patient choice is reflected in practice at the point of referral, i.e. whether GPs help patients to make an active choice of a healthcare provider, for example by informing them about different referral options, giving them information about alternatives and asking for their preferences. Our research questions are: 'at the point of referral, what is the role of the patient in choosing a healthcare provider?'; 'to what extent does the GP influence the role that patients play in the referral decision?'; and 'to what extent do patients' healthcare paths influence the role that patients play in the referral decision?' Our study, with its demonstration of how patient choice is operating in practice at the point of referral, may provide guidance to GPs

about how they can adjust their referral behaviour in order to comply with policy regarding patient choice and patients' preferences for the provider they are referred to. Conversely, it may help policy makers understand how policy should be adapted to better match practice.

The study is conducted in the Netherlands. Here, patient choice of healthcare providers is encouraged since regulated competition was introduced during the healthcare reform of 2006 to enable patients to personalize their care and to improve healthcare quality and efficiency [4]. Citizens are obliged to take out healthcare insurance covering hospital costs incurred and GPs serve as gatekeepers to secondary care [23]. They are required to provide information about treatment alternatives in order to enable patients to play an active role in their own care [24].

Method

Recruitment of professionals

Video recordings were collected from GP-patient consultations as part of the 'GP-patient communication study in 2007-2008' [25]. GPs who participated in the study are all members of the Netherlands Information Network of General Practice (LINH), a representative network of 84 general practices and more than 330,000 patients [26]. A sample of 93 GPs was drawn from LINH of which 40 GPs (44%) from 20 practices agreed to participate in this study [25] (see [27] for the recruitment procedure). These 40 GPs were representative of Dutch GPs regarding gender and type of practice, but were, on average, 4 years older than the average Dutch GP. GPs were told that the study was about whether the healthcare reform in 2006 led to adjustments regarding the way they communicate with their patients. Consequently, they were unaware of the fact that our observations focused on referral decisions.

Recruitment of patients and procedure

The 40 GPs agreed to have approximately twenty consecutive, standard consultations, videotaped. The recording with an unmanned digital camera took place on one or two random days, resulting in 808 consultations being recorded. A total of 77.6% of the patients agreed to participate. Those who refused were somewhat older, on average 48 years compared to 43 years, and were more often men.

All the GPs and patients who participated filled in an informed consent form before the recording of the consultation. Participants could withdraw their consent at any time, although no one did. Prior to the consultation, patients completed a questionnaire about their socio-demographic characteristics.

Analyses

Where possible, two videotaped GP-patient consultations in which the patient was referred to a care provider were selected randomly per GP. The consultations were coded by one observer (JS) using an observation protocol we developed to describe the referral process (Additional file 1). We did not develop the observation protocol in advance, but based it on the random sample of the video recordings collected. We assumed when no new themes emerged that it covered the referral process and we considered it complete. When patients were referred for more than one condition then only the first condition mentioned was assessed for this study. The protocol consisted of 16 items, which address the following topics:

1. We used five items to observe the role that patients played in the choice of the healthcare provider they were referred to (items 1–5). Item 1 (with a three-point Likert scale) was used to observe the extent to which patients had input into the decision about where they were to be referred to (1 = little or no input of the patient, GP chooses referral; 2 = some input of the patient; 3 = a large amount of input of the patient, patient chooses referral). Patients' scores on this item were based on their scores on the items 2–5. All of these items were equally important.
2. Six items were used to observe the extent to which GPs influence the role that patients played in the referral decision (items 6–11).
3. We developed four items that relate to different aspects of patients' healthcare paths (items 12–15) in order to assess the role that patients' healthcare paths played in the choice of the healthcare provider the patients were referred to. We coded whether patients visited that healthcare provider before, whether they previously visited another caregiver with their condition,

whether they knew their diagnosis, or probable diagnosis, at the point of referral and the goal of their referral.

4. One open question (item 16) assessed the provider the patient was referred to.

To assess interrater reliability, a random ten per cent of the consultations were rated by a second observer independently (AV), resulting in sufficiently high average Kappa scores of 0.87 (range 0.38-1.00). The reliability of one item was below moderate (item 10) with a Kappa score of 0.38 [28], due to a different understanding of what constituted practical information (i.e. whether the name of the provider was practical information). After discussing this issue, this item was assessed by both AV and JS on all videos, and no conflicts were found comparing the results.

Statistical analyses

The descriptive analyses and the interrater reliability calculation were performed using Stata 12. The explorative and qualitative nature of the data does not allow statistical analyses to be performed or for determining causation.

Ethical considerations

The study was carried out according to Dutch privacy legislation. The privacy regulations were approved by the Dutch Data Protection Authority. Approval by a medical ethics committee was not required under Dutch law for this observational study [29]. Prior to consultation, written informed consent was obtained from all GPs and patients.

Results

Patient and GP characteristics

One GP did not refer any patients during the consultations recorded, five GPs referred only one patient, and one consultation was not eligible for inclusion because the patient's attendant made the referral decision on his behalf. Ultimately, 72 videotaped consultations between 72 patients and 39 GPs were selected (55% of all consultations in which a referral took place).

Patients were referred to a large variety of healthcare providers. Most patients were referred to a physiotherapist (n = 13(18%)), followed by an orthopaedist (n = 12(17%)) and a cardiologist (n = 7(10%)).

Table 1 describes the characteristics of the patients and the GPs involved in the GP-patient consultations which were selected. The majority of both the GPs and the patients were male. Patients were on average 49.2 years old and GPs 51.2 years old. The majority of the patients had a medium education level.

Role of the patient

At the point of referral, patients differed in the amount of input they had in their referral decision. Based on item 1, the patients were divided into three groups. The first group comprises patients who, at the point of referral by their GP, had little or no input into the choice of a healthcare provider (n = 45(63%)). The GP chose the referral option and patients simply agreed with the proposed option. For instance, a GP said: "I'd like to send you to that respiratory therapist who, originally, was a physiotherapist" and another GP chose a hospital on behalf of her patient because he stated that he did not have insight into the quality of hospitals. Most patients did not indicate a preference for a specific provider. The one patient who did was referred by his GP to another provider than the one he indicated a preference for. Nor did patients bring up a provider themselves and two of them (3%) asked their GP which provider they should visit, for instance "To which neurologist should I go?".

The second group consists of patients who had a large amount of input into the choice of a referral option (n = 18(25%)). These patients chose the healthcare provider they were referred to themselves or asked for alternative options. For instance, one patient who needed arch supports said to his GP: "Listen, I'm getting a new corset in fourteen days and I saw that they make arch supports at [name orthopedist] as well". Another patient indicated her preference for a consultant upon the following question from her GP: "who did you think of?" Patients indicated a preference for a specific provider (n = 13(72%)), often without the GP having to mention options, or asked for a preference (n = 9(50%)). Some of them explained why they preferred that provider, for instance "I can come with [name wife] then. Because [name wife] has an appointment with him at 11 a.m. too"(n = 6(33%)). Most patients brought up that provider themselves (n = 12(67%)). In the consultations

in which the patient did not indicate a preference, the choice was left open and the patient had to choose a provider on their own after the consultation.

Patients from the third group fall in between the first and second group. This group consists of patients who were given a choice by their GP of a few options or told their GP that they did not want to be referred to a specific option (n = 9(13%)). For example, a GP said: “[name hospital A] or [name hospital B]?” Patients indicated a preference for a specific provider (n = 7(78%)), often when the GP mentioned a few options (n = 6 (67%)), and a part of them explained why they preferred that provider (n = 4(44%)). However, they did not bring up a provider themselves. For instance, as one GP asked his patient “[name hospital A] or [name hospital B?]”, his patient replied with “I prefer [name hospital]. I’m fairly well known there”.

Table 1 shows the background characteristics of the patients per subgroup. Notably, the patients who were assigned to the ‘some input’ group deviate from the other two groups, most likely because of the small number of consultations in this group. In the remaining part of the results section, we leave the second group out of the reckoning when we focus on the different groups. The reasons are that the ‘some input’ patient group is very small and we want to be able to indicate the differences between consultations in which the patient has, or has not, input into the choice of a provider.

Table 1 Background characteristics of the patients of the GPs per patient group

	Total (n=72)	No/little input (n=45)	Some input (n=9)	Much input (n=18)
GP				
Age in years (M(SD))	51.2(6.0)	50.2(6.0)	51.4(5.4)	53.4(5.9)
Gender (n(%))				
Man	45(62.5)	29(64.4)	5(55.6)	11(61.1)
Patient				
Age in years (M(SD)) ¹	49.2(21.9)	47.2(21.7)	39.1(30.9)	58.4(14.6)
Gender (n(%))				
Man	39(54.2)	27(60.0)	5(55.6)	7(38.9)
Education level (n(%))				
None	1 (1.4)	0 (0.0)	1(11.1)	0 (0.0)
Low ²	8(11.1)	5(11.1)	0 (0.0)	3(16.7)
Medium ³	30(41.7)	18(40.0)	2(22.2)	10(55.6)
High ⁴	12(16.7)	8(17.8)	2(22.2)	2(11.1)
Missing	21(29.2)	14(31.1)	4(44.4)	3(16.7)
Referral goal (n(%))				
Diagnosis	43(59.7)	28(62.2)	7(77.8)	8(44.4)
Treatment	28(38.9)	16(35.6)	2(22.2)	10(55.6)
Second opinion	1 (1.4)	1 (2.2)	0 (0.0)	0 (0.0)

¹Patients aged seventeen years or younger were also included in the calculation (n=9). During these consultations, a parent was present who talked with the GP on behalf of the patient; ²Low = primary school or only vocational training; ³Medium = secondary school or intermediate vocational training; ⁴High = tertiary education.

Influence of the GP

The GP took the initiative to refer a patient to a healthcare provider in 56 (78% of all) consultations. For example: "I'd like you to go to the physiotherapist". Notably, patients from the large amount of input group took the initiative for a referral in seven consultations (39%), while

patients from the little or no input group took the initiative for a referral in five consultations (11%).

Concerning the question where to refer for treatment, the GP asked the patient whether they prefer a specific healthcare provider in 17 (24% of all) consultations. For instance, by saying "Do you prefer a specific hospital?" In the little or no input group, the GP asked for the patient's preference in only 13% of the consultations. In these consultations the question was either a leading one or the patient indicated that he or she had no preferences, for instance, one GP said "I assume that you want to go to [name hospital]?" and one patient answered "I do not have insight into the quality of hospitals" when his GP asked for his preference. Additionally, in the majority of the consultations from the little or no input group, the GPs did not discuss alternative referral options (n = 40 (89%)), but indicated a preference for a specific healthcare provider (n = 42(93%)). This was illustrated by the following quote: "You need to make an appointment [with the E.N.T. specialist] and I will give you a tele- phone number for that". In most cases, (n = 41(91%)), GPs revealed this preference on their own initiative and not based upon the request of the patient. Furthermore, the GPs did not explain why they referred a patient to a specific provider (n = 34(76%)). They only provided an explanation in some cases, for instance saying: "Perhaps it is most useful if we ask him to look at you, so that you don't have another doctor on your back". In the large amount of input group, the GP asked for the patient's preference in five consultations (28%). For instance by saying: "Who did you think of?". Additionally, they indicated a preference for a specific healthcare provider in only three consultations (17%). In most of these cases, they explained why they referred the patient to that specific provider, for instance because "[name consultant] is a very calm and honest man" (n = 2(11%)).

GPs gave their patients information about healthcare providers in 43 (60% of all) consultations. However, in 28 (65%) of these consultations, this concerned solely practical information, such as opening times and the location of the institution. The GP only gave information about the quality of care, waiting times and the specialisation of the caregiver in a minority of the consultations (n = 9 (13%), n = 5(7%) and n = 3(4%) respectively). Notably, in the large amount of input group, GPs always gave quality information in addition to practical information (n = 2 (11%)). For instance: "Those are the two good ones. There are more

physiotherapists in [location], where you live. You are free to choose". In the little or no input group, the GP only gave quality information in some of the consultations (n = 4(9%)).

The influence of patients' healthcare paths

A small majority (n = 42(58%)) of the patients had already been to a healthcare provider before the consultation, either for diagnostic or treatment purposes. In addition, 27 patients (38%) had previously been to the specific provider to which they were referred. Furthermore, in half of the consultations (n = 36), the patient had already received a diagnosis or the GP gave the diagnosis or at least a probable one. Finally, in 43 (60%) of the consultations, the patient was referred for diagnostic, or further diagnostic, tests. Patients from the little or no input group were referred for diagnostic purposes instead of treatment in 28 consultations (62%), while patients from the a large amount of input group were referred for diagnostic purposes in eight consultations ((44%).

Discussion

The majority of the patients had little input into the choice of a healthcare provider at the point of referral by their GP. Their GPs chose a healthcare provider for these patients. The GPs took the initiative for these referrals asking only for patients' preferences in some of these consultations. They did not discuss alternative referral options. They indicated a preference for a specific healthcare provider but did not explain why. When they gave information it was solely practical.

Even though the majority of the patients had little input, a quarter still chose a healthcare provider themselves without the GP restricting their set of choices. These patients did not necessarily make a deliberate choice based on comparative information as is expected according to the policy on patient choice, but at least, they played a more active role in the choice of a provider at the point of referral. In the case of these patients, their GP seemed to have supported them in becoming actively involved in their choice of a healthcare provider. This indicates that differences exist in the roles that GPs and patients play in the choice of a healthcare provider at the point of referral. Patients' healthcare paths seemed to

have had some influence on the amount of input that patients had in their own referral. Patients who were referred for diagnostic purposes seem to have had less input into their choice of provider.

Comparison with existing literature

Previous research found that GPs believe that a referral generally takes place upon a request by the patient [30]. We found, however, in the majority of the consultations, that the GP took the initiative to discuss a referral. The finding that most patients do not have much input into decisions taken at the point of referral is in line with other literature. According to existing research, patients often indicate that they visit the provider recommended by their GP [7-10] and GPs indicate that they choose a hospital on behalf of their patients [3]. Therefore, practice does not correspond to the idea that patients act as autonomous consumers. This can be explained by several facts. Firstly, some countries have a strong system of primary care gate keeping [11]. Secondly, in the Netherlands, a standard GP-patient consultation lasts only ten minutes, which may be a bit short for discussing different referral possibilities. Thirdly, patients may be reluctant to decide on a provider, amongst other factors because of their lack of insight into the quality of providers [13]. Finally, patients may not attach importance to the choice of a provider [31].

Although GPs' major role in patients' provider choices can be explained and there is no convincing research that proves that patient involvement in the referral decision leads to better health outcomes, by the fact that patient choice is encouraged GPs should not simply choose providers on behalf of their patient. Instead, according to legislation on patient choice, they are expected to incorporate patients' views into their referrals, using a shared decision-making approach [16,32]. In addition to these laws, caregivers have always taken the responsibility for delivering good quality care and part of this is to inform patients about appropriate and high quality care in order to enable shared decision-making [33]. Research into other decisions related to care, such as the choice of a treatment, reveals that GPs should be able to identify patients' preferences because almost all patients can express their priorities [34]. We found, however, that consistent with existing research [16], relatively few GPs support patients in becoming actively involved in their choice of a healthcare provider, for instance by informing patients about the quality of different referral options.

Moreover, during the consultations that we observed, few GPs mentioned why they referred a patient to a specific healthcare provider. This finding is in line with existing literature, which found that GPs based their referrals on factors other than information on quality of care. Instead their opinion about a particular provider or connections to specific providers played a role [16,17].

Our results indicate that patients' healthcare paths influence the role that patients play in the referral decision. Patients who are referred for diagnostic purposes instead of treatment seem to have had less input into the referral decision. This is in line with existing literature. Consistent with the 'logic of care', the nature of care might not be suited towards making an active choice of a provider [20,21]. Many situations erode the opportunity to make active choices, such as occasions when patients do not yet know their diagnosis at the point of referral. In that case, patients have to choose a hospital while being unaware of the care that they will need. It seems therefore natural that patients who are referred for diagnostic purposes are less inclined to make an active choice than patients who are referred for treatment.

Strengths, limitations and further research

Existing research into referral decisions used focus groups, interviews or questionnaires to investigate GPs' [3,5,16,18] and patients' [9,10] roles in the choice of provider. Only a few studies exist that focused on actual referral data in order to investigate referral decisions [17,18]. These studies investigated the factors that influence GPs' referral decisions, but provide no insight in what happens in the interaction between GP and patient while discussing the referral. We believe this is the first study that observed actual GP-patient consultations in order to analyse the role that patients play in the referral decision and whether GPs support patients in actively choosing a provider. Observations are a more objective source than self-reporting by GPs or patients, which could be biased. We were able to investigate what actually happened during the consultations by developing the observation protocol based on video recordings of actual GP-patient consultations. Another strength of this study is that the GPs participating are representative of Dutch GPs with regard to gender and the type of practice. It was also important that GPs did not know that our observations focused on referral decisions and that we analysed routine GP consultations instead of focussing on specific

patient populations or relying on a trial situation. Therefore, our results represent the actual daily situation in general practice.

A limitation was that the video recordings were collected in 2007 and 2008. At that time, the Dutch healthcare system had only just been reformed, beginning in 2006. Therefore, the GPs might not have had enough time to adjust their practice accordingly. However, even today, GPs indicate that they choose a provider on behalf of their patients [3]. Therefore, there are no indications that practice has changed since 2007. A second limitation was that GPs and patients were not asked to fill out a questionnaire or participate in an interview investigating the referral process. Consequently, we were unaware of which provider patients ultimately visited, patients' and GPs' attitudes towards patient choice and what GPs and patients were thinking. For instance, a GP could have referred a patient to a particular provider because of its good reputation, without explaining this reason to the patient. That is, however, inherent in the nature of observational studies. Thirdly, the total number of consultations was insufficient to be able to compare referral patterns between GPs. Fourthly, the qualitative nature of the study and the fact that two consultations per GP were assessed did not allow statistical analysis to be performed nor for adjusting the results for differences between GPs or investigating if GPs adjust the way they communicate to the patient. Finally, although the reliability of one item was below moderate, we kept it in the observation protocol after addressing the cause of the below moderate reliability. Results regarding this question should be interpreted with some caution.

Future research could investigate whether the idea that GPs are expected to encourage patients to make an active choice of provider gains support from both GPs and patients. Research could also identify the barriers that can be encountered when GPs and patients take up their new roles and provide guidance on finding appropriate solutions for these barriers. Furthermore, it should be studied whether active choice leads to better health outcomes than visiting the default. Finally, future research should investigate why exactly patient choice hardly happens at the point of referral.

Conclusion

GPs played a key role in choosing a healthcare provider in the majority of the GP-patient consultations. Often, the GP chose a healthcare provider on behalf of the patient. At the same time, however, policy on patient choice expects from patients that they make active choices of healthcare providers. It is assumed that this will ultimately lead to more personalized care of higher quality and efficiency. Our study shows, however, that the policy on patient choice is not reflected in daily practice. On the one hand, this could indicate that the policy needs adjustments. The current expectations for both GPs and patients regarding the choice of a provider may be unrealistic. On the other hand, to achieve the goals of the policy on patient choice, adjustments may be needed to practice. For instance, GPs could help patients more often to choose the provider that fits their needs and preferences. For example, they could investigate whether their patients want a more active role in the choice of a provider, identify their patients' preferences regarding healthcare providers and discuss several referral options. Patients, for their part, could indicate their preferences and what they expect from their GP regarding the choice of a provider. Comparative information, accessible for both GPs and patients, and decision aids to support the GP assisting a patient making a choice of a provider might help in this matter. However, certain patients might not be interested in making active choices and would prefer to let their GP decide on a provider. Even then, GPs need to know patients' preferences, because in a principal-agent relationship, it is necessary that the agent is fully informed about the principal's preferences.

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References

1. Ikkersheim DE, Koolman X: Dutch healthcare reform: did it result in better patient experiences in hospitals? A comparison of the consumer quality index over time. *BMC Health Serv Res* 2012, 12:1–6.
2. Vrangbaek K, Robertson R, Winblad U, Van de Bovenkamp H, Dixon A: Choice policies in Northern European health systems. *Health Econ Policy Law* 2012, 7:47–71.
3. Birk HO, Henriksen LO: Which factors decided general practitioners' choice of hospital on behalf of their patients in an area with free choice of public hospital? A questionnaire study. *BMC Health Serv Res* 2012, 12:1.
4. Victoor A, Friele R, Delnoij D, Rademakers J: Free choice of healthcare providers in the Netherlands is both a goal in itself and a precondition: modelling the policy assumptions underlying the promotion of patient choice through documentary analysis and interviews. *BMC Health Serv Res* 2012, 441:1.
5. Rosen R, Florin D, Hutt R: *An Anatomy of GP Referral Decisions. A qualitative study of GPs' views on their role in supporting patient choice.* London: King's Fund; 2007.
6. Enthoven AC: The history and principles of managed competition. *Health Aff (Millwood)* 1993, 12(Suppl):24–48.
7. Reitsma-van Rooijen M, Brabers A, Masman W, de Jong J: *De kiezende burger.* Utrecht: NIVEL; 2012.
8. Dealey C: The factors that influence patients' choice of hospital and treatment. *Br J Nurs* 2005, 14:576–579.
9. Magee H, Davis LJ, Coulter A: Public views on healthcare performance indicators and patient choice. *J R Soc Med* 2003, 96:338–342.
10. Merle V, Germain JM, Tavolacci MP, Brocard C, Chefson C, Cyvoct C, Edouard S, Guet L, Martin E, Czernichow P: Influence of infection control report cards on patients' choice of hospital: pilot survey. *J Hosp Infect* 2009, 71:263–268.

11. Dixon A, Robertson R, Bal R: The experience of implementing choice at point of referral: a comparison of the Netherlands and England. *Health Econ Policy Law* 2010, 5:295–317.
12. Ketelaar NABM, Munneke M, Bloem BR, Westert GP, Faber MJ: Recognition of physiotherapists' expertise in Parkinson's disease. *BMC Health Serv Res* 2013, 13:1–17.
13. Damman OC, Spreeuwenberg P, Rademakers J, Hendriks M: Creating compact comparative health care information: what are the key quality attributes to present for cataract and total hip or knee replacement surgery? *Med Decis Making* 2012, 32:287–300.
14. Lako CJ, Rosenau P: Demand-driven care and hospital choice. Dutch health policy toward demand-driven care: results from a survey into hospital choice. *Health Care Anal* 2009, 17:20–35.
15. Dixon A, Robertson R, Appleby J, Burge P, Devlin N, Magee H: Patient choice: how patients choose and how providers respond. London: The King's Fund; 2010.
16. Winblad U: Do physicians care about patient choice? *Soc Sci Med* 2008, 67:1502–1511.
17. Ikkersheim D, Koolman X: The use of quality information by general practitioners: does it alter choices? A randomized clustered study. *BMC Fam Pract* 2013, 14:1–7.
18. Ringard A: Why do general practitioners abandon the local hospital? An analysis of referral decisions related to elective treatment. *Scand J Public Health* 2010, 38:597–604.
19. Rademakers J, Nijman J, Brabers AEM, de Jong JD, Hendriks M: The relative effect of health literacy and patient activation on provider choice in the Netherlands. *Health Policy*. in press. doi:10.1016/j.healthpol.2013.07.020.
20. van Hoorn E, Bellemakers C, Koster J: De kleine zelfbeschikking en de herovering van vraagsturing. Amsterdam; Harmelen: IGPB; Kantel Konsult; 2003.
21. Mol A: De logica van het zorgen. Actieve patiënten en de grenzen van het kiezen. Amsterdam: Van Gennep; 2006.

22. Shahian DM, Yip W, Westcott G, Jacobson J: Selection of a cardiac surgery provider in the managed care era. *J Thorac Cardiovasc Surg* 2000, 120:978–989.
23. Enthoven A, van de Ven W: Going Dutch - managed-competition health insurance in the Netherlands. *N Engl J Med* 2007, 357:2421–2423.
24. Rijksoverheid: Informatiepunt dwang in de zorg. www.dwangindezorg.nl/rechten/wetten/wgbo
25. Noordman J, Verhaak P, van Dulmen S: Discussing patient's lifestyle choices in the consulting room: analysis of GP-patient consultations between 1975 and 2008. *BMC Fam Pract* 2010, 11:1–10.
26. Verheij RA, van Dijk CE, Stirbu-Wagner I, Dorsman SA, Visscher S, Abrahamse H, Davids R, Braspenning J, Althuis T, Korevaar JC: Netherlands Information Network of General Practice. Facts and figures on GP care in the Netherlands. [Landelijk Informatienetwerk Huisartsenzorg. Feiten en cijfers over huisartsenzorg in Nederland]. Utrecht/Nijmegen: NIVEL/IQ healthcare; 2009.
27. Noordman J, Verhaak P, van Beljouw I, van Dulmen S: Consulting room computers and their effect on GP-patient communication: comparing two periods of computer use. *Family Practice* 2010, 27:644–651.
28. Sim J, Wright CC: The kappa statistic in reliability studies: use, interpretation, and sample size requirements. *Phys Ther* 2005, 85:257–268.
29. Art. 1 of the 'Medical research involving human subjects Act'. wetten.overheid.nl/BWBR0009408/geldigheidsdatum_30-11-2012
30. Faber MJ, van Loenen T, Westert GP: International Health Policy Survey 2012, Commonwealth Fund. Nijmegen: IQ healthcare; 2012.
31. Fotaki M, Roland M, Boyd A, McDonald R, Scheaff R, Smith L: What benefits will choice bring to patients? Literature review and assessment of implications. *J Health Serv Res Policy* 2008, 13:178–184.
32. Charles C, Gafni A, Whelan T: Decision-making in the physician-patient encounter: revisiting the shared treatment decision-making model. *Soc Sci Med* 1999, 49:651–661.

33. Hendriks AC, Frederiks BJM, Verkerk MA: Het recht op autonomie in samenhang met goede zorg bezien. *Pro Vita Humana* 2009, 16:10–18.
34. Mulley AG, Trimble C, Elwyn G: Stop the silent misdiagnosis: patients' preferences matter. *BMJ* 2012, 345:1.

APPENDIX 1. OBSERVATION PROTOCOL

GP code:

Patient code:

Observation date:

Consultation duration:

Name observer:

1) How much input does the patient have regarding the choice of a care provider at the moment of referral?

1

2

3

NA

1 = little or no input. The GP chooses the provider and the patient simply agrees with the proposed institution or caregiver. It is obvious that the patient follows up the advice of the GP.

2 = some input. The patient is given a choice by the GP between a few providers or tells the GP that he or she does not want to be referred to a specific provider.

3 = a large amount of input. Not the GP, but the patient him or herself chooses the provider he or she is referred to or asked for alternative options. Alternatively, no decision is made during the consultation and the patient has to choose a care provider after the consultation.

2) Does the patient indicate a preference for a specific healthcare provider?

Yes

a) the patient visits this provider frequently

b) the patient has been there before

c) the patient works at this provider

d) this provider has been recommended by family/friends/acquaintances

e) this provider had been recommended by the media (e.g. newspapers, internet)

f) it is unknown why the patient prefers this provider

g) it is the nearest provider

h) the patient knows the caregiver

- i) this provider had been recommended by a patient organisation
- j) this provider had been recommended by the patient's insurer
- k) other, i.e.:

No

3) When does the patient indicate his or her preference for a specific provider?

- After the GP mentioned referral options and/or information about these options
- After the GP asked for this preference without having mentioned referral options
- Without having been asked for this preference by the GP or without the GP having mentioned referral options and/or information about these options

NA

4) Who brought up the provider the patient is referred to?

- GP
- Patient
- NA

5) For what reason or reasons does the patient want to be referred to a specific healthcare provider?

.....
 NA

6) Does the GP ask the patient whether he or she prefers a specific healthcare provider?

- Yes
- No

7) Does the GP discuss more than one referral option?

- Yes
- No

- 8) Does the GP indicate a preference for a specific healthcare provider?
- Yes a) own initiative b) upon the patient's request
 - No
 - NA
- 9) For what reason or reasons does the GP refer the patient to a specific healthcare provider?
-
- NA
- 10) Does the GP give the patient information about referral options?
- Yes
 - a) Information about practical issues*
 - b) Information about the waiting list
 - c) Quality information
 - d) Information about the provider's specialisation
 - No
- * e.g. location, the way they act, name provider and opening times
- 11) Who takes the initiative to refer the patient to a healthcare provider?
- GP
 - Patient
- 12) Has the patient already visited a healthcare provider prior to this consultation?
- Yes
 - No
- 13) Has the patient already been diagnosed or does the GP give the diagnosis or probable diagnosis?
- Yes
 - No

14) What is the goal of the referral?

- Diagnostics
- Treatment
- Second opinion

15) Has the patient visited the provider to which he or she is referred in the past (healthcare institution or caregiver)?

- Yes
- No
- Unknown

16) To which provider is the patient referred?

.....

7

Is there a relationship between patient choice of healthcare providers and the perceived quality of care?

A cross-sectional questionnaire study

Aafke Victoor, Margreet Reitsma-van Rooijen, Roland D Friele, Diana MJ Delnoij, Judith D de Jong, Jany JDJM Rademakers. Is there a relationship between patient choice of healthcare providers and the perceived quality of care? (submitted).

Abstract

Background

Patient choice is a pivotal element in today's healthcare. This is true both as an asset for patients, allowing an opportunity to choose, and as an instrument to enhance the quality of care through making active choices. This study investigates whether 'choice opportunity' and 'choice activity' are positively related to the perceived quality of care.

Methods

In 2014, a questionnaire was sent to 1,500 members of the 'Dutch Health Care Consumer Panel' concerning the perceived quality of care and patients' hospital selection. The latter questions examined whether patients feel they have had choice opportunity and the degree to which they displayed choice activity.

Results

Patients without choice opportunity reported worse patient experiences than their counterparts. Patients visiting a hospital without prior consideration reported smaller health improvements after their hospital visits than patients displaying choice activity. However, they reported better patient experiences.

Conclusions

Having choice opportunity and displaying choice activity are related to the perceived quality of care. However, relatively few patients made active hospital choices and many reported a lack of choice opportunity. Although our findings indicate that patient choice is an important asset for patients, it can be questioned whether it could function as an instrument.

Introduction

Background

Although scientific literature indicates that people systematically deviate from rationality when making choices,[1,2] in the USA and several North-West European countries, patients are expected to be critical, autonomous healthcare consumers who actively choose healthcare providers.[3-5] Choosing actively is defined as 'making a deliberate, rational choice between healthcare providers based on comparative information'.[6] Since the quality of care is expected to be the primary consideration in patients' choices of providers,[5] and given that money follows the patients,[7] actively choosing patients could, in theory, prompt healthcare providers to compete for them by improving the care they deliver. Policy makers argue that this will ultimately lead to higher quality care.[6] Besides the instrumental goal of patient choice, it is also considered a goal in itself. Enabling patients to choose a provider allows them to manage their own care [4] and is assumed to lead to better care experiences.[8] It is generally believed that the opportunity to choose enhances people's lives.[9,10]

Instead of making active choices, however, patients tend to visit the nearest provider or the one that is recommended by their general practitioner (GP), which one could define as the default provider.[1,11-15] The default effect means that patients simply visit the standard option without prior consideration.[1] Part of the explanation is that many do not feel any urgency to make an active choice, because they are content with the default hospital.[16] Others, however, do not have the opportunity to choose a provider.[16] For instance, consistent with the 'logic of caring', the day-to-day reality of healthcare does not always lend itself to making autonomous provider choices. For example, the diagnostic phase often advances into treatment without leaving a clear opportunity to make a choice.[16-19] In addition, patients' choice processes vary. For instance, younger, higher educated, healthier patients, and patients with a higher income, are more inclined to choose actively than their counterparts.[20]

Despite the complexity of patients' choice processes, patients can be classified regarding the way they choose a provider. Based on interviews conducted with hospital patients, during previous research we distinguished different groups regarding patients' hospital selection process. These were: 1) patients who feel that they do not have choice opportunity; 2) passive patients, who visit the default hospital because they do not think

about choosing a hospital; 3) default choosers, who visit the default option because of, for instance, its close proximity; and, patients who display choice activity, either because; 4) they use information to support their choice *or* consider other hospitals; or 5) they both use information *and* consider other hospitals.[16]

In line with assumptions underlying policy on patient choice, it could be expected that specific patient groups will report receiving higher quality care than others. Patients who display choice activity might receive higher quality care than the other patient groups since these active patients are assumed to select the highest quality hospital. This should be particularly evident in contrast with passive patients who simply visited the default hospital without giving it any thought. If that is true, this indicates that patient choice can function as an instrument to enhance care. With regard to patient choice as a goal in itself, having the opportunity to choose a provider is considered an important benefit for patients. Even if they do not choose, actively, the highest quality provider, they still value the option to visit the hospital of their preference. Not having the opportunity to make a choice should therefore result in worse care experiences.

While patient choice is high on the policy agenda, evidence that patient choice leads to higher quality care is scarce. The current paper investigates whether patient choice can function as an instrument to enhance the quality of care and/or is an important asset to patients. To this end, insight is acquired into the relationship between patients' hospital selection process and the perceived quality of care by means of a quantitative questionnaire study with a research sample that is representative of Dutch hospital patients. Patient experiences and patient reported outcomes (PROMS) are used as hospital quality indicators. This is because they are important healthcare quality indicators from the patient's perspective and make up an important part of the comparative quality information that is assumed to form the basis of patients' active choices.[21-25]

Research focus

We answer the following questions:

1. Is making an active choice for a specific hospital associated with a higher perceived quality of care as opposed to simply visiting a

hospital without giving it any thought? This is the instrumental goal of patient choice. As per the policy assumptions regarding patient choice, it is expected that a positive relationship exists between choice activity and the quality of care experienced by patients - patients who displayed choice activity report better patient experiences/PROMS than passive patients.

2. Is having the opportunity to choose a hospital associated with a higher perceived quality of care than not having it? This is patient choice as a goal in itself. In accordance with the policy assumptions regarding patient choice, we expect that patients who felt that they had the opportunity to choose report better patient experiences/PROMS than patients without the opportunity to choose.

Our study is conducted in the Netherlands where patient choice of providers is encouraged since regulated competition was introduced in 2006.[6] Patients, generally, live in close proximity to several hospitals,[26] GPs serve as gatekeepers to secondary care and citizens are obliged to take out healthcare insurance covering hospital costs.[27] Although the quality of care is guaranteed by the 'Health Care Inspectorate' (IGZ), quality differences exist between providers.[28,29]

Methods

Participants

In January 2014, a mixed-mode questionnaire was sent to 1,500 members of the 'Dutch Health Care Consumer Panel' (CoPa). From CoPa, samples can be drawn that are representative of the Dutch population in gender and age (18 years and above) or based on specific characteristics of the members, such as their demographics or use of care. CoPa is managed by the Netherlands Institute for Health Services Research (NIVEL). The protection of the data collected is laid down in privacy regulations safeguarding ethical consent and registered with the Dutch Data Protection Authority (no. 1262949).[30] Up-to-date information is available about members concerning age, gender, education, income and self-reported general health status. According to the 'Dutch law on Medical Research involving human subjects', our study did not require approval from an ethics committee.[31] Our research complied with the Helsinki Declaration.

Data collection

In previous questionnaires conducted towards the end of 2013, samples of panel members were asked whether they visited, or needed to visit a hospital, in 2013. Panel members replying 'yes' were approached for this study (n=1271). Secondly, 229 further panel members were approached. Because hospital use increases with age, members aged 50 or above were approached at random, it being unknown whether they visited a hospital or not. As per members' previously stated preferences, one part of the sample (n=718) received a written questionnaire, while the other part (n=782) received an online questionnaire.

Measurement

Patients' care experiences

We used three measurements of patient experiences: the patient-centredness of the care patients received, whether patients would recommend the hospital, the so-called 'friends and family' or F&F test, and the global rating of the hospital. All questions were extracted from the Consumer Quality Index (CQ-index; CQI).[32, 33] The CQI is a family of questionnaires that is commonly used in the Netherlands to measure the quality of care from the patient's perspective and subsequently serves as input for performance indicators of quality of care.[34,35]

Patient-centredness is an important part of the quality of care from the patient's perspective because it largely determines patients' overall experiences.[36] In accordance with De Boer, Delnoij and Rademakers (2011), five questions were selected from the CQI to represent patient-centred care.[35] Items focused on the patients' main caregiver and were answered on a four-point scale from 1 (never) to 4 (always). Individual scores were calculated by adding up the scores of the separate items belonging to the scale and subsequently dividing them by the number of items filled in of which at least three items were needed. Cronbach's alpha was .86 (almost perfect).[37] The F&F test read: 'Would you recommend this hospital to friends and family?' (Answered on a four-point scale: 1='certainly not' to 4='certainly'). The question regarding the global rating of the hospital was posed as follows: 'Using any number from 0 to 10, where 0 indicates the worst hospital possible, and 10 the best, what number would you use to rate your hospital?'

In addition to patient experiences, we used a PROM that is the Global Perceived Effect (GPE) of the care received. GPE scales measure the quality

of the care received from providers given its effects on the patients' health.[38, 39] We used the following scale: 'How would you judge your general health compared with your health before your visits to the hospital? My health is now...' (seven-point scale: 1=very much better to 7=very much worse).

Hospital selection process

We assessed the way patients chose a particular hospital by means of nine closed questions with response categories including the option 'other'. These questions/response categories were based on 142 interviews with outpatients from different hospitals about how they chose their hospital.[16] The questions concerned patients' choice of a hospital during the previous 12 months:

- Patients were asked whether they felt that they could choose a hospital themselves. If not, they were asked why not, replying, for instance: 'because my care history was known here'.
- Patients needed to indicate why they visited a particular hospital, replying, for example: 'this hospital was nearby/easy to access'.
- Patients were asked whether they considered visiting another hospital. If not, they were asked why they did not want to visit another hospital, replying, for instance: 'I did not have a specific reason for not wanting to visit other hospitals'.
- Patients had to indicate whether they switched hospitals for their condition and, if they had, why, for example, replying: 'I was dissatisfied with the other hospital'.
- Patients had to answer the question whether they searched or asked for information about their hospital, or other ones, in order to help them choose a hospital.
- Patients had to indicate why they did not search for information nor consider other hospitals. Replies included: 'I already knew which hospital I wanted to visit', and 'I felt that I could not choose a hospital myself'. The latter option was used to inquire again whether patients had choice opportunity.

Patient groups

We used the above mentioned questions concerning patients' hospital selection process in order to construct the following four different patient groups corresponding to those found in an earlier study:[16]

1. Patients who explicitly stated they had no opportunity to choose - patients without choice opportunity. This, for instance, was because their GP or company doctor referred them to this particular hospital, their care history was known there or appointments were already scheduled.
2. Patients who simply attended the default hospital without giving it any thought - passive patients. They, for instance, already knew which hospital they would visit, ended up somewhere and it was sensible to stay there, or thought that there were no differences in the quality of care.
3. Patients who chose the default hospital and did not want to visit another one, mainly out of loyalty or for practical reasons - default choosers. They found other hospitals too far away or that visiting another hospital would be too much trouble.
4. Patients who searched, or asked for, information about hospitals in order to help them choose one, *and/or* who considered attending another hospital - patients displaying choice activity. Patients switched hospitals for instance because they wanted a second opinion, considered it to be a better hospital than their previous one or were dissatisfied with their previous hospital. In the earlier study [16], only patients who both considered attending another hospital, *and* searched, or asked for, information (group 5) were seen as truly active patients. Because both groups display choice activity, we do not make this distinction in the current paper.

Analysis

Statistical analysis of the data was performed using Stata statistical software. We conducted Chi-squared tests (dichotomous variable) and anovas (continuous variables) to test differences between the four groups with regard to patients' demographics, health status and perceived quality of care. Chi-squared tests (dichotomous variable) and t-tests (allowing for unequal variances if applicable) (continuous variables) were conducted to test whether the quality of care patients experienced differed between

patients who displayed choice activity (Group 4) and passive patients who simply attended the default hospital without giving it any thought (Group 2) (research question 1: the instrumental goal of patient choice). Regarding the GPE variable, we only took patients into account whose treatment was completed. The F&F test variable was dichotomised (certainly/probably not; probably/certainly), since few patients answered certainly/probably not. The same tests were conducted to investigate if the quality of care patients experienced differed between patients without choice opportunity (Group 1) and patients with choice opportunity (Groups 2, 3 and 4) (research question 2: patient choice as a goal in itself).

We also tested whether the relationships between patient group and patient experience measures/GPE were caused by confounding variables. We conducted ANCOVAS (continuous variable) and logistic regression analyses (dichotomous variable) on the relationship between measurements of patient experiences/GPE and patient group, while adjusting for patients' demographic characteristics and health status. The exact results of these tests are shown only in the Appendix. The disappearance of relationships may indicate that the perceived quality is influenced by characteristics of patients belonging to specific groups. However, in real life, these patients do have these characteristics and, therefore, actually have these care experiences.

Results

Study sample and patient groups

In total, 1,097 members completed the questionnaire (73%). Table 1 describes the characteristics of the respondents of the total study sample and per group. Most patients were in the 65-74 age bracket and were women. They had good health, medium education, and net household income of 1,750-2,700 euros per month. Their care experiences were rather good. Relatively few patients displayed any choice activity (14%).

Differences exist between the patients belonging to the different groups (Table 1). Patients who displayed choice activity (Group 4) were most often female. This is compared to the other groups, especially to passive patients (Group 2), ($\chi^2(3, N=1,079)=11.39$, $p=.010$). Additionally, they were more often 18-54 years old and less often 75 years or older compared to the other groups ($\chi^2(9, N=1,079)=40.72$, $p=.000$), had a higher monthly household income ($\chi^2(6, N=1,041)=17.22$, $p=.009$) and were more highly educated

($\chi^2(6, N=1,056)=19.21, p=.004$). Patients of group 4 had worse patient experiences than the other groups, except from patients without choice opportunity (($F(3,1052)=10.45, p=.000$); ($\chi^2(3, N=1,061)=13.02, p=.005$); ($F(3,1055)=9.57, p=.000$)), while their GPE score was higher (($F(3,897)=3.53, p=.015$)). No significant differences were found regarding patients' health.

Healthcare experiences

Concerning the relationship between choice activity and the perceived quality of care, passive patients (Group 2) gave a higher patient-centredness score ($t(249.3)=1.98, p=.024; d=.22$) and higher scores on the F&F test ($\chi^2(1, N=374)=4.76, p=.029; OR=.28$) than patients who displayed choice activity (Group 4), but reported a lower GPE ($t(209.9)=-2.31, p=.024; d=-.28$). No significant differences were found between the groups regarding the global rating of the hospital (Table 2). Adjusting the analyses for confounding variables resulted in the disappearance of the relationships between choice activity and the measurements of patient experiences (Appendix). The relationship between choice activity and GPE score remained.

Regarding the relationship between choice opportunity and the perceived quality of care, patients with choice opportunity (Groups 2, 3 and 4) gave higher scores on the F&F test ($\chi^2(1, N=1,061)=6.44, p=.011; OR=2.26$), gave a higher overall judgment to the hospital ($t(703.3)=-4.23, p=.000; d=-.28$), and found the care they received was more patient-centred than patients without choice opportunity (Group 1) ($t(707.0)=-4.94, p=.000; d=-.33$). No significant differences were found between the groups regarding the GPE scale. All relationships remained after adjusting the analyses for confounding variables (Appendix).

Table 1 Demographic characteristics, health status and perceived quality of care of the total study sample and per patient group (n(%)).

	Total ¹ (n=1,079)		Patient groups				p-value ³
	n	%/m(sd)	1) without choice 404(37%)	2) passive patients 228(21%)	3) default choosers 297(27%)	4) displayed choice activity ² 150(14%)	
Age (years)							.000
18-54	248	23	26	21	15	33	
55-64	177	16	18	19	12	17	
65-74	335	31	28	29	35	34	
75 or older	319	30	28	31	37	17	
Missing	0	0	0	0	0	0	
Gender							.010
Woman	558	52	51	43	55	60	
Missing	0	0	0	0	0	0	
Education level							.004
Low ⁴	198	18	19	21	20	9	
Medium ⁵	568	53	53	54	53	49	
High ⁶	290	27	26	24	24	39	
Missing	23	2	1	2	3	2	
Income ⁷							.009
<1750	365	34	34	32	39	26	
1750-2700	385	36	37	36	34	33	
>2700	291	27	25	29	22	39	
Missing	38	4	3	4	5	1	
Subj. health							.187
Poor/bad	263	24	25	19	24	31	

Table 1 Demographic characteristics, health status and perceived quality of care of the total study sample and per patient group (n(%)) (Continued)

	Patient groups						p-value ³
	n	%/m(sd)	1) without choice 404(37%)	2) passive patients 228(21%)	3) default choosers 297(27%)	4) displayed choice activity ² 150(14%)	
Good	598	55	55	57	57	51	
Very good/ excellent	214	20	19	24	20	17	
Missing	4	0	0	0	0	1	
Patient-centredness	1056	3.65(0.52)	3.54(0.56)	3.74(0.41)	3.73(0.47)	3.63(0.57)	.000
Missing	23	2	4	2	1	0	
F&F test							
Would probably/ certainly recommend the hospital	1022	96	92	96	97	94	.005
Missing	18	2	2	2	1	0	
Global rating	1059	7.98(1.08)	7.79(1.21)	8.06(0.78)	8.22(0.96)	7.90(1.22)	.000
Missing	20	2	2	1	2	2	
GPE	901	4.93(1.14)	4.86(1.14)	4.78(1.00)	5.06(1.16)	5.09(1.26)	.015
Missing	178	16	17	15	15	20	

¹Only 9 (1%) respondents who answered the questions about their hospital selection process did not fit into one of the groups; ²This group consisted of two subgroups, i.e. patients who invested effort (n=100) and active choosers (n=50); ³The four main patient groups were compared; ⁴Primary school/vocational training; ⁵Secondary school/intermediate vocational training; ⁶Tertiary education; ⁷Net household income per month in euros.

Table 2. The relationship between patients' hospital selection process and the perceived quality of care (n=1,079).

	Passive versus active choice ¹				Having choice versus not having choice ²			
	Passive patients		Patients who displayed choice activity		Patients without choice		Patients with choice	
	n	m(sd)/n(%)	n(%)	m(sd)/n(%)	n	m(sd)/n(%)	m(sd)/n(%)	p-value
Patient-centredness	373	3.74(0.41)	3.63(0.57)	0.049	1056	3.54(0.56)	3.71(0.48)	0.000
F&F test	374	4(1.8%)	9(6.0%)	0.029	1061	22(5.6%)	17(2.6%)	0.011
Probably/certainly <i>not</i> recommend the hospital								
Probably/certainly recommend the hospital		220(98.2%)	141(94.0%)			372(94.4%)	650(97.5%)	
Global rating	372	8.06(0.78)	7.90(1.22)	0.166	1059	7.79(1.21)	8.10(0.98)	0.000
GPE	314	4.78(1.00)	5.09(1.12)	0.022	901	4.86(1.14)	4.97(1.14)	0.166

¹Passive patients' and 'Patients who displayed choice activity' were compared; ²Patients without choice opportunity' and 'patients with choice opportunity' were compared.

Discussion

Our study indicates that a relationship exists between the process by which patients select a healthcare provider and their perceived quality of care. More specifically, patients who displayed choice activity reported a more substantial health improvement after their hospital visits than passive patients. This finding corresponds with findings from another study that investigated the relationship between active choice and patients' care experiences.[40,41] The positive relationship between active choice and the subjective outcome of the care patients received indicates that patient choice might be able to function as an instrument to enhance the quality of care. However, consistent with our previous findings and existing literature,[16,42] relatively few patients (14%) displayed choice activity and only some of these patients (4.6%) both used information *and* considered other hospitals (could be considered to be truly active). Instead, most patients visited the default hospital or were of the opinion that they did not have a choice opportunity. Future research should investigate whether competitive pressure arising from patients in the healthcare provider market is sufficient to stimulate providers to improve the care they deliver. Besides, contrary to our expectations, patients who displayed choice activity scored lower on two of three patient experiences measures than those who simply attended the default hospital without giving it any thought. An explanation could be that patients who displayed choice activity have high expectations and are more critical regarding the care they receive. Existing literature supports this finding.[43] Generally, more highly educated, female and younger patients, who are overrepresented in the group of patients who displayed choice activity, attach more importance to various aspects of patient-centred care than their counterparts. Female and younger patients find that the care they receive is less patient-centred. This explanation is supported by the disappearance of the relationships between choice activity and the measurements of patient experiences when adjusting for these variables. Maybe, because these patients are more critical regarding their care experiences, they make more active choices.

We found too that a relationship between *having choice opportunity* and the perceived quality of care is at least as strong as that between *choice activity* and the perceived quality of care. Patients who had the opportunity to choose a hospital reported better patient experiences than their counterparts. Other evidence supports this finding: free choice is generally

found to lead to a greater satisfaction.[8,44,45] The positive relationship between having choice opportunity and the perceived quality of care indicates that patient choice, as policy makers expected, is an important asset for patients. Even though most patients did not choose, actively, the highest quality hospital, a significant part of them still valued the option of attending the hospital of their choice. Other research indicates that patients attach importance to issues other than receiving the highest quality of care, for instance the proximity of a provider.[16] While patients do not choose, actively, a hospital,[12] patients do have certain preferences and, therefore, value the opportunity to attend 'their hospital'.[46]

The fact that some patient groups reported a higher quality than others could, alternatively, be explained by the cognitive dissonance theory.[47] According to this theory, individuals tend to seek consistency among their behaviour and cognition. Existing inconsistencies must be eliminated. As it is often difficult for people to change their behaviour, they often change their cognition. Applied here, the fact that patients who had choice opportunity or displayed choice activity experienced higher quality care, might result from the fact that these patients rationalised their decision to visit a particular hospital, believing, 'because I chose this hospital, it must be a good one'.

The relationships between choice activity and the measurements of patient experiences disappeared when adjusting for patients' demographics. This indicates that the perceived quality is indeed influenced by characteristics of patients who displayed choice activity. However, in real life, these patients do have these characteristics and, therefore, they actually have these patient experiences. All other relationships remained, which is a strong indication that the differences in the perceived quality of care are indeed attributable to choice activity and opportunity.

Strengths, limitations and future research

This is the first study that investigated the relationship between the process by which patients choose a healthcare provider and the perceived quality of care, while differentiating between choice as an instrument and choice as a goal in itself. We show patient choice is an important asset for patients. But, at the same time, we question whether it functions as an instrument to enhance the quality of care through competition between providers. The large study sample makes our results generally applicable to the population of Dutch hospital patients, while interviews with a great many hospital

patients were used to guide the development of the questionnaire. Limitations include the lack of an objective outcome measure for the effect of treatment. We did not acquire information on patients' general health before and after their treatment in order to assess its global perceived effect.

Future research should investigate if competitive pressure arising from patients in the healthcare provider market is sufficient to stimulate providers to improve care. Furthermore, it should be studied if active choice is related to a higher objective quality of care. In addition, if patient choice indeed functions as an instrument to improve care, then it should also be investigated how healthcare can be organised to enable and stimulate patient choice. GPs could be encouraged to take patients' preferences into account when choosing a referral destination or the communication between hospitals could be improved to facilitate switching hospitals. Finally, future research should investigate whether the patient groups that we formed differ from each other with regard to several factors that are found to influence choice activity and opportunity in existing literature. Any measures to stimulate patient choice could then be directed to the different groups identified. The current study already showed that the groups differed from each other regarding their demographics, which is consistent with existing literature.[20]

Conclusion

Both displaying choice activity and having choice opportunity are associated with the perceived quality of care. This indicates that patient choice is an important asset for patients. However, it can be questioned if patient choice could really function as an instrument since relatively few patients made active hospital choices and many reported a lack of choice opportunity. Even so, policy makers and other stakeholders in healthcare could aim to remove the barriers to free choice. Patients might not choose, actively, to visit the highest quality hospital, but have a better care experience if they have the opportunity to visit the hospital of their preference.

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References

- 1 Kooreman P, Prast H. What does behavioral economics mean for policy? Challenges to savings and health policies in the Netherlands. *The Economist* 2010;158:101-22.
- 2 Kahneman D. *Thinking, Fast and Slow*. London: Penguin Books 2011.
- 3 Groenewoud AS. *It's your Choice! A study of search and selection processes, and the use of performance indicators in different patient groups*. Rotterdam: Erasmus Universiteit Rotterdam 2008.
- 4 Vrangbaek K, Robertson R, Winblad U, et al. Choice policies in Northern European health systems. *Health Economics, Policy and Law* 2012;7:47-71.
- 5 Birk HO, Henriksen LO. Which factors decided general practitioners' choice of hospital on behalf of their patients in an area with free choice of public hospital? A questionnaire study. *BMC Health Serv Res* 2012;12:1-10.
- 6 Victoor A, Friele R, Delnoij D, et al. Free choice of healthcare providers in the Netherlands is both a goal in itself and a precondition: modelling the policy assumptions underlying the promotion of patient choice through documentary analysis and interviews. *BMC Health Serv Res* 2012;12:1-11.
- 7 Smith T. Can patient choice shape organisational behaviour to provide patients with what they want? *Qual Saf Health Care* 2003;12:473-76.
- 8 Kroneman MW, Maarse H, van der Zee J. Direct access in primary care and patient satisfaction: a European study. *Health Policy* 2006;76:72-9.
- 9 Dowding K, John P. The value of choice in public policy. *Public Administration* 2009; 87:219–33.
- 10 Fujiwara J, Usui N, Park SQ, et al. Value of freedom to choose encoded by the human brain. *J Neurophysiol* 2013;110:1915-29.
- 11 Hildon Z, Allwood D, Black N. Patients' and clinicians' views of comparing the performance of providers of surgery: a qualitative study. *Health Expect* 2012;Published Online First: 20 September 2012. doi: 10.1111/hex.12037

- 12 Burge P, Devlin N, Appleby J, et al. Do patients always prefer quicker treatment? : a discrete choice analysis of patients' stated preferences in the london patient choice project. *Appl Health Econ Health Policy* 2004;3:183-94.
- 13 Dixon A, Robertson R, Bal R. The experience of implementing choice at point of referral: a comparison of the Netherlands and England. *Health Econ Policy Law* 2010;5:295-317.
- 14 Victoor A, Delnoij DMJ, Friele RD, et al. Determinants of patient choice of healthcare providers: a scoping review. *BMC Health Serv Res* 2012;12:1-16.
- 15 Dealey C. The factors that influence patients' choice of hospital and treatment. *Br J Nurs* 2005;14:576-9.
- 16 Victoor A, Delnoij DMJ, Friele RD, et al. Why patients do not make an active hospital choice. An exploratory study based on individual interviews with hospital patients. *Health Expect* 2014; Published Online First: 17 June 2014. doi:10.1111/hex.12224
- 17 Mol A. De logica van het zorgen. Actieve patiënten en de grenzen van het kiezen. Amsterdam: Van Genneep 2006.
- 18 Shahian DM, Yip W, Westcott G, et al. Selection of a cardiac surgery provider in the managed care era. *J Thorac Cardiovasc Surg* 2000;120:978-89.
- 19 van Hoorn E, Bellemakers C, Koster J. De kleine zelfbeschikking en de herovering van vraagsturing. Amsterdam: IGPB; Harmelen: Kantel Konsult 2003.
- 20 Nijman J, Hendriks M, Brabers AEM, et al. Patient activation and health literacy as predictors of health information use in a general sample of Dutch health care consumers. *J Health Commun* Published Online First: 8 January 2014. doi:10.1080/10810730.2013.837561
- 21 Coulter A, Fitzpatrick R, Cornwell J. The Point of Care. Measures of patients' experience in hospital: purpose, methods and uses. London: The King's Fund 2009.
- 22 Booi JC, Zegers M, Evers PMPJ, et al. Improving cancer patient care: development of a generic cancer consumer quality index questionnaire for cancer patients. *BMC Cancer* 2013;13:1-13.
- 23 Wiegers TA, Bekkerma N. Cliëntervarings Indicatoren en Etalageplus-informatie voor de Eerstelijns Verloskunde. Utrecht: NIVEL, 2011.

- 24 Verhoef LM, van de Belt TH; Engelen LJLPG, et al. Social Media and Rating Sites as Tools to Understanding Quality of Care: a Scoping Review. *J Med Internet Res* 2014;16.
- 25 Rademakers J, Nijman J, Brabers AEM, et al. The relative effect of health literacy and patient activation on provider choice in the Netherlands. *Health Policy* 2014;114:200-6.
- 26 CBS. Nabijheid voorzieningen; afstand locatie, wijk- en buurtcijfers 2006-2012.
<http://statline.cbs.nl/StatWeb/publication/?DM=SLNL&PA=80306NED&D1=0-2,7,9,11,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,52,54,56,58,60,62,64,87-92,102,104,106-109&D2=0&D3=1&HDR=G2,T&STB=G1&VW=T> (accessed 4 April 2014).
- 27 Enthoven A, van de Ven W. Going Dutch - Managed-Competition Health Insurance in the Netherlands. *N Engl J Med* 2007;357:2421-3.
- 28 de Regt LHP. Governance in private healthcare organizations. Can quality be managed? Den Haag: Raad voor de Volksgezondheid & Zorg 2013.
- 29 van den Berg M, Heijink R, Zwakhals L, et al. Health care performance in the Netherlands: Easy access, varying quality, rising costs. *Eurohealth* 2011;16:27-9.
- 30 Brabers AEM, Reitsma-van Roijen M, de Jong JD. Consumentenpanel Gezondheidszorg: basisrapport met informatie over het panel. Utrecht: NIVEL 2012.
- 31 Wet medisch-wetenschappelijk onderzoek met mensen. http://wetten.overheid.nl/BWBR0009408/geldigheidsdatum_13-05-2013 2013 2013 (accessed 22 July 2014).
- 32 de Boer D, Veenhof C, Delnoij D. CQ-index Fysiotherapie, versie 2.3. Psychometrische eigenschappen en discriminerend vermogen. Utrecht: NIVEL 2009.
- 33 Krol M, Sixma H, Rademakers J. CQ-index Revalidatiecentra Kinderen en Jongeren: Meetinstrumentontwikkeling. Kwaliteit van revalidatiecentra vanuit het perspectief van kinderen en jongeren. Utrecht: NIVEL 2012.
- 34 Hopman P, de Boer D, Rademakers J. Kennisvraag: wat heeft vijf jaar CQ-index opgeleverd? Utrecht: NIVEL 2011.
- 35 de Boer D, Delnoij D, Rademakers J. The importance of patient-centered care for various patient groups. *Patient Educ Couns* 2011;90:405-10.

- 36 Ahmad F, Gupta H, Rawlins J, et al. Preferences for gender of family physician among Canadian European-descent and South-Asian immigrant women. *Fam Pract* 2002;19:146-53.
- 37 Sim J, Wright CC. The Kappa Statistic in Reliability Studies: Use, Interpretation, and Sample Size Requirements. *Phys Ther* 2005;85:257-68.
- 38 Black N. Patient reported outcom measures could help transform healthcare. *BMJ* 2013;346:f167.
- 39 Kamper SJ, Ostelo RWJG, Knol DL, et al. Global Perceived Effect scales provided reliable assessments of health transition in people with musculoskeletal disorders, but ratings are strongly influenced by current status. *J Clin Epidemiol* 2010;63:760-6.
- 40 Coulter A, Le Mailstre N, Henderson L. Patients' experience of choosing where to undergo surgical treatment. Oxford: Picker Institute 2005.
- 41 Jones L, Mays N. Systematic review of the impact of patient choice of provider in the English NHS. London: London School of Hygiene and Tropical Medicine 2009.
- 42 Fotaki M, Roland M, Boyd A, et al. What benefits will choice bring to patients? Literature review and assessment of implications. *J Health Serv Res Policy* 2008;13:178-84.
- 43 Rademakers J, Delnoij D, Nijman J, et al. Educational inequalities in patient-centred care: patients' preferences and experiences. *BMC Health Serv Res* 2012;12:1-8.
- 44 Bottero M. Does Freedom of Choice cause Satisfaction? *Humana.Mente* 2009;10:111-22.
- 45 Szabo E, Moody H, Hamilton T, et al. Choice of treatment improves quality of life. A study on patients undergoing dialysis. *Arch Intern Med* 1997;157:1352-5.
- 46 Anell A, Rosén P, Hjortsberg C. Choice and participation in health services: a survey of preference among Swedish residents. *Health Policy* 1997;40:157-68.
- 47 Festinger L. *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press 1957.

Appendix: The relationship between patients' hospital selection process and the perceived quality of care, adjusted for patients' demographics and subjective general health.

Table 1 The relationship between patients' hospital selection process and the perceived patient-centredness of the care patients received, adjusted for patients' demographics and subjective general health.

Patient-centredness	Passive versus active choice ¹ (n=355)			Having choice versus not having choice ² (n=995)		
	df	F	p-value	df	F	p-value
Patient group	1	2.41	0.122	1	21.09	0.000
Age (years)	3	1.91	0.128	3	7.75	0.000
Gender	1	1.02	0.314	1	3.19	0.074
Education level	2	0.95	0.387	2	2.77	0.063
Income ³	2	0.74	0.476	2	1.30	0.274
Subj. health	2	1.25	0.288	2	10.40	0.000

¹'Passive patients' and 'Patients who displayed choice activity' were compared; ²'Patients without choice opportunity' and 'patients with choice opportunity' were compared; ³Net household income per month in euros.

Table 2 The relationship between patients' hospital selection process and whether patients would recommend the hospital to others (F&F test), adjusted for patients' demographics and subjective general health.

Patient-centredness	Passive versus active choice ¹ (n=231)			Having choice versus not having choice ² (n=1002)		
	B	SE	p-value	B	SE	p-value
Patient group						
Group 1	Ref	Ref	Ref	Ref	Ref	Ref
Group 2	-1.07	0.72	0.140	0.84	0.34	0.015
Age (years)						
18-54	Ref	Ref	Ref	Ref	Ref	Ref
55-64	-0.67	1.07	0.528	0.39	0.52	0.450
65-74	-0.94	0.92	0.307	0.49	0.45	0.277
75 or older	-1.25	0.97	0.199	0.57	0.48	0.230
Gender						
Man	Ref	Ref	Ref	Ref	Ref	Ref
Woman	-0.53	0.69	0.448	-0.32	0.36	0.370
Education level						
Low ³	NA ⁷	NA ⁷	NA ⁷	1.20	0.62	0.053
Medium ⁴	1.47	0.73	0.045	0.58	0.39	0.139
High ⁵	Ref	Ref	Ref	Ref	Ref	Ref
Income ⁶						
<1750	Ref	Ref	Ref	Ref	Ref	Ref
1750-2700	0.39	0.92	0.669	-0.02	0.41	0.969
>2700	-0.14	0.97	0.887	0.16	0.50	0.749
Subj. health						
Poor/bad	Ref	Ref	Ref	Ref	Ref	Ref
Good	0.54	0.70	0.441	0.49	0.37	0.180
Very good/ excellent	NA ⁷	NA ⁷	NA ⁷	2.07	0.78	0.008

¹'Passive patients' and 'Patients who displayed choice activity' were compared; ²'Patients without choice opportunity' and 'patients with choice opportunity' were compared; ³Primary school/vocational training; ⁴Secondary school/intermediate vocational training; ⁵Tertiary education; ⁶Net household income per month in euros; ⁷Not applicable because n=0 in one of the cells of the analysis.

Table 3 The relationship between patients' hospital selection process and the global rating they gave to the hospital, adjusted for patients' demographics and subjective general health.

Patient-centredness	Having choice versus not having choice¹ (n=997)		
	df	F	p-value
Patient group	1	15.96	0.000
Age (years)	3	3.88	0.009
Gender	1	5.71	0.017
Education level	2	3.99	0.019
Income ²	2	0.07	0.934
Subj. health	2	6.08	0.002

¹'Patients without choice opportunity' and 'patients with choice opportunity' were compared;

²Net household income per month in euros.

Table 4 The relationship between patients' hospital selection process and the global perceived effect (GPE) of the care patients received, adjusted for patients' demographics and subjective general health.

Patient-centredness	Passive versus active choice¹ (n=300)		
	df	F	p-value
Patient group	1	8.36	0.004
Age (years)	3	1.02	0.385
Gender	1	1.26	0.262
Education level	2	0.65	0.521
Income ²	2	0.70	0.497
Subj. health	2	1.88	0.155

¹'Passive patients' and 'Patients who displayed choice activity' were compared; ²Net household income per month in euros.

8

Summary and discussion

In several Western countries, patient choice is a pivotal element in today's healthcare policy. It has multiple goals, an important one being to encourage providers to compete with each other. In this context, patients are enabled and encouraged to actively choose a healthcare provider or, in other words, to make a deliberate, rational choice between healthcare providers based on comparative quality and cost information. In theory, the money follows the patients and so patients who choose actively make healthcare providers compete for them by improving the care they deliver. Ultimately, this should lead to more efficient healthcare at a higher level of quality. Patient choice is also a goal in itself. Empowering patients by giving them the right and the opportunity to make autonomous provider choices is believed to be an important asset for patients. The goal of this thesis was to test these policy assumptions regarding patient choice of healthcare providers against the reality. Firstly, it provides insight into how patients actually choose a healthcare provider. Secondly, it investigates if patient choice (both the opportunity to choose and actively doing so) could bring about the intended effects. This was done by examining whether a relationship exists between patients' healthcare provider selection processes and the perceived quality of care.

The goals of Part 1 of this thesis were: 1) to get a better understanding of the concept of "patient choice of healthcare providers" as postulated in the supporting documentation for healthcare system reform; and 2) to provide a picture of what is already known about patient choice in existing literature. A policy analysis and a scoping review were conducted. Because existing research indicated that patients do not normally make active choices about healthcare providers, the second part of the thesis investigated how patients then choose, or "end up at", a particular hospital and which factors influence their process of making a choice. The proximity of providers, the availability of alternative options and the advice given by the general practitioner (GP) were found to be important determinants of patients' choice of providers. Therefore, the influence of these factors on whether or not patients make an active choice was also investigated in more detail in this part of the thesis. Finally, in the third part of the thesis, we studied the relationship between patients' hospital selection process and the quality of care they experience, i.e. whether specific patient groups perceive having received higher quality care than other groups. This provides insight into whether patient choice could lead to higher quality care, both overall and for individual patients, as expected by policy makers.

In this final chapter, I will summarize the key findings for each research question formulated in Chapter 1 and elaborate on the implications of the study outcomes for both the scientific literature and policy. Policy recommendations and research suggestions are offered.

Main Findings

Part 1

Research question 1: What assumptions did policy makers have about patients' choice of healthcare providers when the new Dutch healthcare system was developed?

Patient choice of healthcare providers is both a goal in itself and a pivotal element in a system where regulated competition between healthcare providers is key to controlling the evolution of costs and improving and safeguarding the quality, efficiency and accessibility of healthcare. Within the context of regulated competition, patients are expected to behave as rational actors and to make active choices of healthcare providers: based on comparative information, from all available alternative providers, patients ought to deliberately choose the one that delivers the cheapest, highest quality care. The policy analysis we conducted indicates that policy makers assume that if certain conditions are satisfied, patients will make active provider choices. Those conditions are: that patients are willing and able to choose, travel and switch provider; that sufficient quality and costs information is available to inform patients; that there are enough healthcare providers to choose between; and that patients are free to choose their healthcare provider. Several instruments have been put in place to ensure that patients can act as consumers on the healthcare market. For instance comparative quality information is provided to make sure that patients are well-informed. The government obliges providers to publish understandable, effective and correct comparative information. Other actors also contribute to the availability of comparative information, such as patient organizations. However, much less attention has been paid to the willingness and ability of patients to choose a provider. Also, the consequences on equity of outcomes if several patient groups are less inclined or capable to choose actively has received little attention. The same

conditions and instruments are important for patient choice as a goal in itself, especially the right to freely choose a healthcare provider.

Research question 2: What is already known about whether and how patients choose a specific healthcare provider and the provider characteristics they base their choice on?

Patient choice of a healthcare provider does not seem to be as straightforward a process as is sometimes assumed in health policy. Our literature review indicates that patients' choices are determined by a complex interplay between a variety of patient and provider characteristics. There is no such thing as the typical patient: different patients make different choices in different situations. Additionally, research indicates that patients do not, generally, choose actively. Reasons are that a substantial proportion of patients do not think active choice is very important, that choice opportunities are limited for many patients and that the available information is not enough or unsuitable for basing decisions on. Because most patients are unable and/or unwilling to make an active choice, there is a difference between the provider characteristics that patients say they base their decision on and how they end up at a particular provider in real life. Although patients seem to attach importance to comparative information in hypothetical situations, in real life they visit the default provider. The default effect means that people do not take action or, in the patient choice context, do not actively choose a provider but simply visit the standard option. Examples of the default option are the nearest provider, the one patients have visited before or the one they are referred to. Additionally, patients base their decisions not only on outcome quality indicators but also on a variety of provider characteristics. In fact, although the importance attached to the different characteristics varies among the patient groups; structure (opening hours, facilities) and – in particular – process indicators (e.g. communication, information) are generally more important than outcome indicators (patient experiences, mortality rates). It can thus be argued that the choice process is much more complex than is often assumed.

Part 2

Research question 3: How do patients either choose or “end up at” a particular hospital and which factors determine patients’ processes when choosing a hospital?

Interviews with hospital patients were used for identifying various factors that act as barriers to or stimuli/enablers for active choice of providers. Most patients took the default hospital mainly because making an active choice was not an important issue for them. Patients often had no reason to make an active choice. The default hospital was for example nearby and they were content with the care they had previously received there. Others felt that they did not have any opportunity to choose, for example because they had no alternative choices in their environment or had already embarked upon one care path and it was hard or illogical for them to switch providers. Based on these factors and the extent to which their choice was active, we classified patients into patient groups regarding the way they choose or “end up at” a particular hospital. A subsequent quantitative study provided insights into the relative sizes of the different groups in a research sample that was representative for Dutch hospital patients. The patient groups that we identified were:

1. Patients without an opportunity to choose (37%): Patients who explicitly state they have no opportunity to choose, often because they have already embarked upon a care path. For instance, their GP may refer them to a particular hospital, their care history is known there or they do not know their diagnosis in advance and consequently cannot choose a hospital that specializes in their condition (they stay at the hospital they ended up at initially because it is illogical or inconvenient to switch to another hospital).
2. Passive patients (21%): Patients who simply attend the default hospital without giving it any thought. Choice is a trivial issue for these patients. For instance, they already knew which hospital they would go to, or they end up somewhere and it is sensible to stay there or to think that there would not be any quality differences.
3. Default choosers (27%): Patients who deliberately choose the default hospital and do not want to visit another one. Having the opportunity to choose is important for these patients, but only to make sure they are able to visit the default provider. Although they regard the issue of making an

active hospital choice as trivial, they still value the opportunity to visit a particular hospital, mainly out of loyalty or for practical reasons. They may for instance find that other hospitals are too far away or that visiting another hospital would be too much trouble.

4. Patients exhibiting choice behaviour (14%): Patients who use information about hospitals in order to help them choose one and/or consider attending another hospital. Most of them are prompted to make an active choice of a hospital. They want a second opinion, for instance, or have had a bad experience at a particular hospital. However, some of them do correspond to the image of the autonomous healthcare consumer, regardless of the situation. They believe that differences in quality between hospitals do exist and that it is perfectly possible to make an active choice. Consistently with existing literature, only a small part of this group (around 5%) of all patients can be considered as truly active, in that they both considered attending another hospital *and* used information about hospitals in the selection process. The rest of this group only exhibited one of these activity traits.

Research question 4: To what degree does the availability of a realistic alternative in terms of its absolute proximity from a patient's home address determine the intention to make an active choice?

We found that the majority of patients do not search for comparative information about hospitals/specialists when they need hospital care. Whether patients searched for information was influenced by the availability of a realistic alternative in terms of its absolute proximity. However, this influence was not the same for everyone. Older, less educated patients were less likely to search for information when they live further away from their nearest alternative hospital. Furthermore, people with long-term conditions were less likely to search for information and women were more likely to do so.

Research question 5: At the point of referral, what is the role of the patient in choosing a healthcare provider and to what extent do GPs help patients make an active choice of a healthcare provider?

From the observations of patient-GP consultations, it seems that the policy on patient choice is not reflected in daily practice. The majority of patients

had little input in the choice of a healthcare provider at the point of referral by their GP. Their GPs took the initiative for these referrals and chose a healthcare provider for these patients, asking only for patients' preferences in some of the consultations. They did not discuss alternative referral options. They indicated a preference for a specific healthcare provider but did not explain why. When they gave information it was solely practical. However, differences exist in the roles that GPs and patients play in the choice of a healthcare provider at the point of referral. A minority of patients chose a healthcare provider themselves without the GP restricting their set of choices. These patients did not necessarily make a deliberate choice based on comparative information, as is expected according to the policy on patient choice, but they did at least play a more active role in the choice of a provider at the point of referral. In the case of these patients, their GP seemed to have supported them in becoming actively involved in their choice of a healthcare provider. The process that patients follow from their first demand for care until the end of their treatment, known as the "healthcare path", seemed to have had some influence on the amount of input that patients had in their own referral destination. Patients who were referred for diagnostic purposes seem to have had less input into their choice of provider than patients who were referred for treatment.

Part 3

Research question 6: Is there a relationship between patients' healthcare provider selection processes and the perceived quality of care?

The policy theory underlying the promotion of patient choice implies that a relationship should exist between patients' healthcare provider selection processes (the four patient groups we found in Chapter 4) and the quality of the care patients reported having received at the hospital they went to. Our study shows that this relationship does indeed exist. Patients who exhibited choice behaviour reported more substantial health improvements after their hospital visits than passive patients who simply attended the default hospital without prior consideration. In addition, patients exhibiting choice behaviour gave lower scores on two of the three patient experience measures we used. This could indicate that they have higher expectations and are more critical regarding the care they receive and that they make more active choices as a consequence. However, as relatively few patients made truly active hospital choices and many reported a lack of opportunity

to choose, it is open to question whether patient choice could really function as an instrument to enhance the quality of care.

We found too that a relationship between *having an opportunity to choose* and the perceived quality of care is at least as strong as that between *choice activity* and the perceived quality of care. Patients who had the opportunity to choose a hospital - but did not necessarily make use of this opportunity - reported better patient experiences than their counterparts. The positive relationship between having choice opportunity and the perceived quality of care indicates that patient choice, as policy makers expected, is an important benefit for patients. Even though most patients did not actively choose the highest quality hospital, patients have a better care experience if they have the right and opportunity - i.e. the autonomy - to attend the hospital of their preference.

Methodological reflection

Strengths and limitations have already been given for each individual study. However, the most important ones are stressed in this paragraph. Firstly, contrary to most other research on patient choice, this thesis does not assume that choosing a provider is a deliberate action. Consequently, it does not focus on patients' preferences regarding provider characteristics but starts from the assumption that patients differ in their intentions and opportunities to make a choice. Patients might not be bothered about the choice of a provider, simply because there is no reason for them to be. In healthcare, patients tend to focus their time and energy on their health problem, while relying on the expertise of their doctors to treat them in the best possible way and make choices on their behalf. We found that patients will only choose when something happens, such as a bad experience with the default provider, and when patients have the opportunity to make a choice. Only then do their preferences regarding provider characteristics become important. A second strength is that we focused primarily on choices that were made in real choice situations. The scoping review we conducted pointed out that relatively few studies analysed real choices, using experimental designs instead. There is a difference between the factors that patients say they find important and the ones they actually base their decisions on. It is therefore important to focus on real choice situations if you want to know how patients really choose. An important limitation of this

thesis concerns the fact that we did not study the relationship between patients' healthcare provider selection processes and the objective quality of care. We can therefore only say that patient choice might be able to function as an instrument to enhance quality of care and not that it really does work as such an instrument. Follow-up research should study whether patients who exhibited choice behaviour select hospitals of higher quality according to existing comparative information. Another limitation is that the study into the relationship between patients' healthcare provider selection processes and the perceived quality of care did not provide insights into why the two concepts are related. Based on the policy theory, we assumed that active patients experience better care because they chose a better hospital and that patients who have the opportunity to choose experience better care because having the opportunity to choose is an important benefit for patients. However, the relationship between patient choice and perceived quality of care might be attributable to different mechanisms. For instance, the fact that some patient groups reported better patient experiences and patient reported outcomes might be less an effect of choice on quality than a result of "cognitive dissonance" ("because I chose this hospital, it must be a good one"). Future research should clarify this issue.

Implications

In the introduction, a distinction was made between "choice in practice" and "choice in policy theory". This distinction is made again below while elaborating on the implications of the study outcomes. Firstly, our findings will be compared to existing literature and suggestions for future research will be defined. The meaning of our findings for policy on patient choice will subsequently be outlined and recommendations for policy makers will be given.

Choice in practice

Consistently with existing literature,⁽¹⁾ this thesis indicates that most patients do not actively choose a healthcare provider. They either have the feeling that they do not have the opportunity to choose, or they go to the default provider, for instance the nearest one. This was also found by earlier studies.⁽²⁻⁷⁾ Although some patients with specific characteristics are generally more inclined to make an active choice of provider,⁽⁸⁾ patients only adopt the

consumer role if they do not have a relationship with a provider yet, or in specific situations (for instance if they had a bad care experience).^(1,9-11) In the introduction, several concepts and theories were specified that lead to the following explanations for the fact that patients often go to the default provider instead of actively choosing one: 1) patients are loyal to their current or local provider; 2) patients often do not have the opportunity to choose; 3) many patients see no reason to make an active choice and 4) people are generally not able to make completely rational choices. Our research indicates that all of them are plausible.

Firstly, even though most patients did not actively choose the highest quality provider, a significant proportion of them still valued having autonomy or, in other words, having the right and opportunity to choose a provider, because that ensured that they could attend the default provider. This is in line with existing literature.⁽¹²⁾ While the uptake of active choice is slow,⁽²⁾ patients do have certain preferences and therefore value the opportunity to visit “their hospital”.⁽¹³⁾ As is often claimed, the right and opportunity to choose enhance our lives.^(14,15) The fact that patients prefer to visit the default provider complies with the organizational theory of Hirschman. According to that theory, patients who are not satisfied with the performance of a healthcare provider are assumed to leave (exit) or to give voice to their dissatisfaction (voice). Whether or not to stay largely depends on the degree of loyalty of the patients to the specific provider (loyalty).⁽¹⁶⁾ Our findings indicate that patients are indeed loyal to the default provider or to the physician who chose it on their behalf. We even found that, although having a bad experience with the default hospital prompts patients to bypass it, some of them select an alternative hospital only for a specific specialty. Some patients even stayed with, or went back to, the default hospital once their consultant had apologized.

The second explanation is that patients often do not have the opportunity to choose. We did indeed find that a large group of patients explicitly stated they had no opportunity to choose, primarily because of their healthcare pathway. It seems that the nature of healthcare does not lend itself for making rational choices. Existing literature also indicates that, although the logic (meaningful coherent cluster of ways of thinking and doing) of choosing is consistent with the workings of free markets where autonomous people make choices between clearly-defined products, it does not fit in well with the day-to-day reality of healthcare.⁽¹⁷⁾ For instance, although several choice options are needed for patients to choose between, there are often no

realistic alternatives in healthcare. We did indeed find that the availability of choice alternatives positively influences the degree to which patients' choices are active, which is consistent with existing literature.⁽¹⁸⁾ The logic of caring seems to describe the ways of thinking and doing in health care better than the logic of choosing. The logic of caring assumes that caring rather than choosing matter more in healthcare. Care is not a product but a process that patients follow from their first demand for care until the end of their treatment. This is known as the "healthcare path". Patients' healthcare paths do not always allow for choices. We did indeed find, consistently with the logic of caring, that hospital patients who were interviewed felt that they were already sitting in a moving train and it was hard or illogical for them to get off that train. They did not know their diagnosis in advance or thought that they only had a minor problem. Consequently, they could not choose a hospital that specialized in their condition or thought that choosing a high-quality hospital was unnecessary. Once they were diagnosed, it was easier to stay at their current hospital. Our study focusing on the moment of referral by patients' GP also highlighted the importance of patients' healthcare path. Patients who did not know their diagnosis in advance more often let their GP decide on a provider.

The third explanation is that patients are not bothered about the choice of a hospital, because they see no reason to make an active choice. The default hospital is, for example, nearby and they are content with the care they had previously received there. Patients expect sufficiently high quality care wherever they go. This also corresponds to the logic of caring, which assumes that caring is not about choosing. In healthcare, patients tend to focus their time and energy on their health problem, while relying on the expertise of their doctors to treat them in the best possible way.

Finally, it is often claimed that people in general are unable to make completely rational choices,⁽⁴⁾ both because they have insufficient cognitive abilities to make rational choices and because there are imperfections in the market. In the case of healthcare, usable information to guide the choice of provider is scarce, for example,⁽¹⁹⁾ which means that patients are insufficiently well informed to make educated choices.⁽²⁰⁾ Consequently, as is often claimed, decision making is subject to biases and heuristics to simplify the choice problem. For instance, patients opt for the first alternative that is satisfactory and are biased in favour of the current provider, i.e. the default option.^(4,21-23) We did indeed find that patients do not consider themselves

experts on the quality of hospitals. They indicated that they do not have a good picture of the quality of the care that is delivered at other hospitals.

Relying on the GP to choose a hospital on their behalf or visiting the hospital they are familiar with were ways patients coped with this lack of insight.

Differences between patients

Although most patients do not have a reason to be bothered about the choice of a provider or do not even have the opportunity to choose, an important finding of this thesis is that patients differ in the way they choose a healthcare provider. Consistently with existing research (e.g. (8, 24)), various factors were found to form barriers or alternatively were enablers/facilitators of active choice. They were divided into patient characteristics (e.g. age); provider characteristics (e.g. teaching hospital); healthcare system characteristics (e.g. number of alternative providers); and interaction factors - factors related to both the healthcare sector and the patients (e.g. GP referrals and patients' healthcare paths).

Female, younger, better educated patients and those with a higher income (patient characteristics) are for instance more inclined to exhibit choice behaviour. Existing research (e.g. (12, 24)) claims that these patients have better access to healthcare services. According to Dusheiko, the better educated or economically advantaged are more health literate, better informed and more mobile and have higher expectations about the possibility of obtaining improved treatment elsewhere. Consequently, they can afford the increased search and travel costs, obtaining faster access to the best services.⁽¹²⁾ Also, patients living in areas where alternative choice options are nearby (a healthcare system characteristic) have greater accessibility to healthcare services. These patients are more inclined to make an active choice than patients living in an area without local alternatives.⁽¹⁸⁾

Patients also differ in whether or not they are prompted to make an active choice. For instance, consistently with existing literature, we found that although patients often rely on the GP to choose a hospital on their behalf (interaction factor), GPs vary considerably in the extent to which they actively support patient choice.⁽²⁵⁾ Consequently, patients differ in the amount of input they have in the decision about their referral destination at the point of referral. In addition, some patients encounter situations during their healthcare pathway that enable and encourage them to make an active choice, while (consistently with the "logic of caring"⁽¹⁷⁾) most do not. For

instance, we found that patients who did not know or suspect their diagnosis in advance and were referred for diagnostic purposes had less input in their choice of a provider at the point of referral than patients who were referred for treatment. Once they embarked on a path of care, it was illogical or inconvenient for them to make an active choice. On the other hand, some patients were offered the opportunity to choose another provider by their current physician or had a bad experience with that physician which prompted them to switch providers.

Future research

Although this thesis is a valuable contribution to existing literature because it has acquired insights into patients' provider choice processes by studying real choice situations, several suggestions for follow-up research can be considered:

- In this thesis, the relationship between patients' healthcare provider selection processes and the perceived quality of care was investigated. Follow-up research should be conducted into the relationship between patients' healthcare provider selection processes and the objective quality of care, for instance by studying whether patients who exhibited choice behaviour selected hospitals of higher quality according to existing comparative information.
- Because the study into the relationship between patients' healthcare provider selection processes and the perceived quality of care did not provide insights into why the two concepts are related, follow-up research should provide insights into the underlying mechanisms of the relationship between patient choice and the perceived quality of care.
- This thesis indicates that active patients are more critical about the care they receive and that active choice is associated with higher patient reported outcome measures (PROMS). On the other hand, not many patients actively choose a healthcare provider. Future research should investigate whether the competitive pressure arising from patients in the healthcare provider market is a sufficient stimulus for providers to improve the care they deliver. Additionally, it would be a good idea to study whether there is any reason to fear healthcare providers adjusting the care they deliver only for active patients, and thus neglecting the larger group of patients who do not choose actively. However, to be able to investigate the latter issue, it is first necessary to acquire insights into

the characteristics of the patients belonging to the different patient groups we defined.

- Future research should therefore investigate whether the patient groups differ from each other with regard to several factors that are found to influence choice activity and opportunity in existing literature, for instance the extent to which patients' illness influences their life (illness perception). As well as allowing an answer to the question of whether care might only be adjusted for specific patient groups, research into the differences between the groups provides more insight into the situations in which patients do and do not make active choices and enables policy makers to focus any measures that are taken to enable/encourage patient choice on the different groups identified. The current study already showed that the groups differ from each other in terms of their demographics, which is consistent with existing literature. It is however worth noting that the way patients choose a provider is not a static patient characteristic. The typology is based on patients' choice behaviour, and not on e.g. their demographic characteristics. Although some patients are more inclined to make active choices than their counterparts, any one patient might probably choose differently in another situation and consequently belong to another patient group in that situation. Although older patients tend to be willing to visit the default hospital, if they think that their illness will have a large influence, they may actively choose nevertheless.
- Policy on patient choice concerns the choice of all kinds of providers, while this thesis mainly focused on the choice of a hospital. Although existing literature does not indicate that the choice of any other kind of provider is processed very differently, future research could investigate how patients choose other kinds of providers, for instance a physiotherapist, in more detail. If patients' choices of these providers are more active, we could learn from these choice situations and apply this knowledge to the choice of a hospital. This also applies to situations in which it is more likely for patients to actively choose a hospital, for instance when they need to visit a hospital for an illness about which sufficient information is available, such as breast cancer. It would also be interesting to study the choices of patients who visited a hospital or independent treatment facility specializing in a few specific conditions, since it is more likely that their provider choice had been active.

- Patients might be more active regarding the choice of a treatment. Future research should investigate patients' processes when choosing a treatment. Knowledge about patient choice of a treatment could also be applied to the choice of a provider.
- Finally, patients' healthcare paths (the process that patients follow from their first demand for care until the end of their treatment) were found to be an important determinant of patients' choice process. It would be interesting to get more insights into patients' healthcare path, for instance the progression of their healthcare path, the choices they can and have to make on this path, whether they are aware of those choice moments or not and the process of making a choice, the problems they encounter and needs they have at these moments. Future research could, for example, follow patients along their healthcare path.

Choice in policy theory

As explained in the introduction, the assumption that critical patients prompt providers to compete with each other, leading to more efficient and better care is based on two theories: 1) the theory of managed competition developed by Enthoven;⁽²⁶⁾ and 2) the organizational theory of Hirschman.⁽¹⁶⁾ From the theory of managed competition, it is assumed that patients actively choose a healthcare provider. From the organizational theory developed by Hirschman,⁽²³⁾ it is assumed that patients who are not content with the care delivered by a provider "punish" them by going elsewhere (exit) or stay and attempt to improve the services by giving voice to their dissatisfaction (voice). In both scenario's, providers seeking to maximize profits must compete to obtain and retain patients as their clients by adjusting the care they deliver to suit patients' needs and wishes, because the money follows the patients.⁽¹⁹⁾ Because there are imperfections in the healthcare market, competition between providers is "managed".⁽¹⁹⁾ This means that a "sponsor" acting on behalf of the patients establishes rules to create and sustain a free and fair healthcare market,⁽²⁶⁾ for instance rules to ensure that the conditions for patient choice are satisfied. Those conditions are: patients are willing/able to choose, travel and switch provider; sufficient quality and cost information is available to inform patients; there are sufficient healthcare providers to choose between; and patients are free to choose their healthcare provider.

This thesis indicates that the conditions that policy makers considered necessary to enable and encourage patient choice are not or are not yet

satisfied, especially patients' ability and willingness to choose a provider. Partly because of this, patients' processes of choosing a provider proceed differently than expected by policy makers. In practice, few patients exhibit choice behaviour activity and only some of these patients are truly active. Although some barriers to choice we identified might be reduced by satisfying the conditions for patient choice, many others are inherent in the healthcare sector. The logic of choosing simply does not seem to fit into healthcare. The process of "ending up at a specific provider" does not resemble that the action of selecting an energy supplier, for instance. Policy makers might therefore need to adjust their expectations regarding the way patients choose a provider and the effects patient choice will have on the overall quality of care.

On the other hand, however, not all patients need to make an active choice for competition to be encouraged. In fact, as per the organizational theory of Hirschman, active patients provide the hospital with a feedback mechanism that triggers an effort to improve while the passive patients provide it with the funds needed for that improvement.⁽¹⁶⁾ In addition, we found that patients who exhibit choice behaviour had a greater health gain resulting from their treatment and were more critical regarding the patient-centredness of the care they received. Therefore, patient choice might function as an instrument to enhance quality to some extent. Whether the competitive pressure arising from patients in the provider market is sufficient for encouraging providers to improve the care they deliver remains unknown, however.

In any event, patients do value the opportunity to have more autonomy regarding the choice of a provider. We found that patients who indicated that they did not have the opportunity to freely choose a provider reported worse patient experiences than their counterparts. Because of this and because some patients do make active choices, patient choice is still a worthwhile effort for patients if it enables them to choose a provider freely and helps them make the right choices. For instance, patients could be made aware of their right to choose at several moments during their healthcare pathway and of the relevance of choosing a hospital that is best able to help them.

Policy recommendations

The findings of this thesis lead to the following policy recommendations:

- One reason why few patients actively choose a healthcare provider is that they believe that they lack the opportunity to choose a provider freely. Although many of the barriers to active choice that we identified are inherent in the healthcare sector, careful consideration should be given to the question of how healthcare could be organized to enable and encourage patient choice. Currently, healthcare is not focused on or suitable for making active choices. Consequently, patients do not have clear moments during their healthcare pathway at which they could make an active choice of provider. For instance, at the moment of referral by the GP, many patients do not know their diagnosis yet and so the choice of a provider seems trivial and hard to make. In Chapter 6 of this thesis, it was found that patients who were referred for diagnostic purposes seem to have had less input into their choice of provider. And when patients are diagnosed at the hospital they ended up at initially, it is illogical or inconvenient for them to switch to another hospital for treatment. It should therefore be explored how GPs or other medical personnel can assist patients in making active, deliberate choices. They could for example make patients aware of quality differences between hospitals, investigate whether they want a more active role in the choice of a provider, identify their preferences regarding healthcare providers and discuss several referral options. Comparative information, accessible for both GPs and patients, and decision aids to support the GP when helping a patient choose a provider might be useful. In addition, ways of making it easier for patients to make an active choice throughout their whole healthcare pathway should be thought about. For example, communication between hospitals could be improved to make it easier to switch hospitals and patients should be made aware of their right to choose at several moments along their healthcare pathway.
- Another factor that makes patients feel that they do not have the opportunity to choose a provider themselves is that they do not have insight into the quality of providers. Comparative information about providers should therefore be available and usable for all patients, no matter, for instance, what level of health literacy they have (ability to use healthcare information). It is important that this information is accessible for patients during all stages of their disease, including when they do not

know their diagnosis yet and are searching for information about their complaints. Research is currently being conducted on the influence of patients' ability to manage their own health and care on whether they can and do make active choices and the way information should be presented to patients. Additionally, the National Healthcare institute assumes at present that it is more appropriate to provide patients with information about health complaints instead of about a specific diagnosis, because patients need information from the start of their illness instead of when they already know their diagnosis.

- While patient choice is encouraged, other governmental measures lead to fewer choice options in the proximity of the patients and a restriction of their freedom to choose a provider. For instance, as insurers are expected to be prudent buyers of healthcare on behalf of the patients, they are encouraged to contract healthcare selectively. Consequently, there are fewer providers available in the patients' proximity, which, according to our studies, determines the opportunity for patients to choose a provider. Less highly educated older patients in particular are less inclined to make active provider choices if their freedom and opportunity to choose a provider are restricted. As the elderly comprise the majority of healthcare consumers, the need for healthcare providers to compete on quality and price to obtain patients might be reduced. In the end, measures such as the concentration and selective contracting of healthcare are at odds with patient choice, while all are advocated as a means of improving healthcare quality and efficiency, either directly or by encouraging competition. If encouraging patient choice is a goal of healthcare policy, policy makers and healthcare insurers should weigh up the pros and cons of concentrating and selectively contracting healthcare.
- Although follow-up research should be conducted into the differences between the patient groups that we defined, this thesis already indicates that there is diversity between patients in the way they choose a healthcare provider. This diversity should be taken into account while thinking about measures to increase the quality of healthcare and enable and encourage patient choice. For instance, making patients aware of their right to choose at several moments during their healthcare pathway, offering free transport and making comparative information usable for all patients (instead of only for well-educated and literate patients) might be useful measures for patients without the opportunity to choose. Patients who take the default option despite the fact that they do not

encounter barriers to choosing, on the other hand, might be encouraged to choose if they are made aware of the relevance of choosing a hospital that is best able to help them, for instance by the GP who could also help them make a choice. Patients who exhibit choice behaviour might value the availability of comparative information to support their choices.

Conclusion

How do patients choose a particular healthcare provider, which factors determine patients' processes of making a choice and could patient choice (both the opportunity to choose and active choice) bring about the intended effects?

Patient choice of healthcare providers is a central element in today's healthcare policy, both as a goal in itself or - alternatively formulated - an important benefit for patients (having choice opportunity) and as an instrument to enhance quality of care by encouraging competition between providers (making active choices). However, instead of choosing a healthcare provider actively, the majority of patients go to the default provider. Patients are simply not bothered about the choice of a provider. There is no reason for them to be, because they are content with and loyal to the default provider or to the physician who chose a provider on their behalf. Others do not even have the opportunity to choose a provider actively, mostly because they did not have a clear choice moment during their healthcare path. Some of the identified barriers to patient choice might be reduced by satisfying the conditions for patient choice that policy makers have formulated. Most, however, are inherent in the healthcare sector. Although the logic of choosing is consistent with the workings of free markets, where autonomous people make their own choices between certain specific, clearly defined products, it does not fit well in the day-to-day reality of healthcare. Other principles seem to apply there that the logic of caring might be better able to describe. Policy makers may therefore be trying in vain to bring principles originating from neoclassical microeconomic theory into healthcare. On the other hand, it should be realised that although the logic of choosing does not fit into healthcare, the logic of caring is not at odds with patient choice. This is exemplified by the opportunity to choose being associated with better patient experiences.

Although most patients do not actively choose the highest quality provider, they still value having the autonomy to choose “their” provider freely, i.e. patient choice as a goal in its own right. In addition, a small group of patients do exhibit choice behaviour. It is therefore important for patients that they should be given opportunities to choose throughout their healthcare pathway and that they should be made aware of those opportunities. Because patient and physician could act together as a team to optimize the patient’s health, physicians might be the ones who could help patients to choose a provider that fits their needs and preferences.

References

1. Fotaki M, Roland M, Boyd A, McDonald R, Scheaff R, Smith L: What benefits will choice bring to patients? Literature review and assessment of implications. *J Health Serv Res Policy* 2008, 13:178–84.
2. Burge P, Devlin N, Appleby J, Rohr C, Grant J: Do patients always prefer quicker treatment? A discrete choice analysis of patients' stated preferences in the London Patient Choice Project. *Appl Health Econ Health Policy* 2004, 3:183–94.
3. Dixon A, Robertson R, Bal R: The experience of implementing choice at point of referral: a comparison of the Netherlands and England. *Health Econ Policy Law* 2010, 5:295–317.
4. Kooreman P, Prast H: What does behavioral economics mean for policy? Challenges to savings and health policies in the Netherlands. *The Economist* 2010, 158:101–22.
5. Hildon Z, Allwood D, Black N: Patients' and clinicians' views of comparing the performance of providers of surgery: a qualitative study. *Health Expect* 2012 [Epub ahead of print]. DOI: 10.1111/hex.12037.
6. Victoor A, Delnoij DMJ, Friele RD, Rademakers JJDJM: Determinants of patient choice of healthcare providers: a scoping review. *BMC Health Serv Res* 2012;12(272):1-16.
7. Dealey C. The factors that influence patients' choice of hospital and treatment. *Br J Nurs* 2005;14(10):576-9.
8. Rademakers J, Nijman J, Brabers A, de Jong J, Hendriks M: The relative effect of health literacy and patient activation on provider choice in the Netherlands. *Health Policy* 2014;114(2):200-6.
9. Robertson R, Burge P: The impact of patient choice of provider on equity: Analysis of a patient survey. *J Health Serv Res Policy* 2011;16(Suppl 1):22-8.
10. Sinaiko A.D.; Rosenthal M.B: The impact of tiered physician networks on patient choices. *Health Serv Res* 2014;49(4):1348-63.
11. Faber M, Bosch M, Wollersheim H, Leatherman S, Grol R: Public Reporting in Health Care: How Do Consumers Use Quality-of-Care Information? *Med Care* 2009;47(1):1-8.
12. Dusheiko M: Patient Choice and Mobility in the UK Health System: Internal and External Markets. *Dev Health Econ Public Policy* 2014;12:81-132.
13. Anell A, Rosén P, Hjortsberg C. Choice and participation in health services: a survey of preferences among Swedish residents. *Health Policy* 1997;40:157-68.

14. Dowding K, John P: The value of choice in public policy. *Public Administration* 2009; 87:219–33.
15. Fujiwara J, Usui N, Park SQ, Williams T, Iijima T, Taira M, Tsutsui K, Tobler PN. Value of freedom to choose encoded by the human brain. *J Neurophysiol* 2013;110:1915-29.
16. Hirschman AO: *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press; 1970.
17. Mol A: *De logica van het zorgen. Actieve patiënten en de grenzen van het kiezen*. Amsterdam: Van Gennep; 2006.
18. Tai WT, Porell FW, Adams EK: Hospital choice of rural Medicare beneficiaries: patient, hospital attributes, and the patient-physician relationship. *Health Serv Res* 2004;39(6 Pt 1):1903-22.
19. van der Kraan WGM, van der Grinten, TED: The development of Demand-driven care as a new governance concept. Paper presented at NIG Annual Work Conference 2004 Rotterdam. Rotterdam: Erasmus Universiteit Rotterdam; 19 October 2004.
20. Birk HO, Henriksen LO: Which factors decided general practitioners' choice of hospital on behalf of their patients in an area with free choice of public hospital? A questionnaire study. *BMC Health Serv Res* 2012;12(126):1-10.
21. Kahneman D: *Thinking, Fast and Slow*. London: Penguin Books; 2011.
22. Ariely D: *Predictably Irrational*. New York: HarperCollinsPublishers; 2009.
23. Damman OC: *Public reporting about healthcare users' experiences: the Consumer Quality Index*. Utrecht: NIVEL; 2010.
24. Exworthy M, Peckham S: Access, Choice and Travel: Implications for Health Policy. *Social Policy & Administration* 2010;40(3):267-87.
25. Rosen R, Florin D, Hutt R: *An Anatomy of GP Referral Decisions. A qualitative study of GPs' views on their role in supporting patient choice*. London: 2007.
26. Enthoven AC: The history and principles of managed competition. *Health Aff (Millwood)* 1993;12(Suppl 1):24-48.

Samenvatting (Summary in Dutch)

In Nederland is in 2006 het zorgstelsel hervormd en is marktwerking in de zorg geïntroduceerd. Net als in verschillende Westerse landen, is de keuze van patiënten voor een zorgaanbieder een centraal element in het beleid ten aanzien van de zorg. Vanuit het marktdenken wordt van patiënten verwacht dat zij 'actief' een zorgaanbieder kiezen. Dit houdt in dat zij informatie over kwaliteit en kosten van verschillende zorgaanbieders inwinnen en daarna de beste uitkiezen. Verwacht wordt dat actief kiezende patiënten zorgaanbieders ertoe aanzetten met elkaar te concurreren op basis van deze kenmerken. Hierdoor zal de kwaliteit van de zorg omhoog gaan en zullen de kosten beperkt worden, zo wordt verondersteld. Naast deze instrumentele functie van patiëntenkeuze, is het ook van waarde voor patiënten. Door patiënten het recht en de mogelijkheid - autonomie - te geven om zelf keuzes te maken, hebben ze meer regie over hun zorg. Het doel van dit promotieonderzoek is om deze beleidsaannames met betrekking tot de keuze van patiënten voor een zorgaanbieder te toetsen aan de realiteit. Ten eerste wordt inzicht verkregen in hoe patiënten een zorgaanbieder kiezen. Ten tweede wordt antwoord gegeven op de vraag of patiëntenkeuze (zowel keuzemogelijkheid als actieve keuze) de beoogde effecten teweeg kan brengen door de relatie tussen het keuzeproces van patiënten en de ervaren kwaliteit van zorg te onderzoeken.

In Deel 1 van dit proefschrift worden de resultaten van een beleidsanalyse en een literatuuronderzoek beschreven. Middels deze studies wordt: 1) onderzocht wat beleidsmakers van patiënten verwachtten toen zij het zorgstelsel hervormden in 2006; en 2) inzicht verkregen in wat er al bekend is in de literatuur over de keuze van patiënten voor een zorgaanbieder. Omdat uit bestaand onderzoek blijkt dat patiënten normaal gesproken geen actieve keuzes maken, gaat het tweede deel van dit proefschrift in op de vraag hoe patiënten dan wel een zorgaanbieder kiezen of, passiever geformuleerd, bij een bepaalde aanbieder terecht komen. Daarnaast wordt in dit deel besproken welke factoren een actieve keuze belemmeren of juist faciliteren. Het blijkt dat de afstand tot zorgaanbieders, de beschikbaarheid van keuzealternatieven en het advies dat gegeven wordt door de huisarts de belangrijkste factoren zijn die de keuze van patiënten voor een zorgaanbieder bepalen. Daarom wordt de invloed van deze factoren op het al dan niet actief kiezen door patiënten apart onderzocht in dit deel van dit proefschrift. Tenslotte onderzoeken we in het laatste deel van dit proefschrift de relatie tussen het keuzeproces van patiënten en de ervaren kwaliteit van zorg. Hierdoor wordt antwoord gegeven op de vraag

of patiëntenkeuze zou kunnen leiden tot betere zorg, zowel in het algemeen als voor individuele patiënten. Dit wordt immers verwacht door beleidsmakers.

Deel 1

Onderzoeksvraag 1: Welke aannames hadden beleidsmakers ten aanzien van de keuze van patiënten voor zorgaanbieders toen ze het nieuwe zorgstelsel invoerden?

De keuze van patiënten voor zorgaanbieders is zowel een doel op zichzelf als een centraal element in een zorgstelsel waarin gereguleerde marktwerking tussen zorgaanbieders van belang is om de ontwikkeling van de zorgkosten te beheersen en de kwaliteit, efficiëntie en toegankelijkheid van de zorg te verbeteren en te waarborgen. Binnen deze context wordt van patiënten verwacht dat zij zich als rationele zorgconsumenten gedragen en dat zij 'actief' een zorgaanbieder kiezen wanneer zij zorg nodig hebben. Een actieve keuze betekent een weloverwogen, rationele keuze gebaseerd op vergelijkingsinformatie over de kwaliteit en kosten van zorgaanbieders. De beleidsanalyse die we uitgevoerd hebben, wees uit dat beleidsmakers ervan uit gaan dat als aan bepaalde condities voldaan wordt, patiënten actief kiezen. Deze condities zijn: patiënten willen/kunnen kiezen/reizen/van zorgaanbieder wisselen, er is voldoende vergelijkingsinformatie beschikbaar om patiënten te informeren, er zijn genoeg zorgaanbieders om tussen te kiezen en, tenslotte, patiënten zijn volledig vrij om naar de zorgaanbieder van hun voorkeur toe te gaan. Verschillende maatregelen zijn genomen om ervoor te zorgen dat patiënten hun rol kunnen vervullen. Zo zijn zorgaanbieders vanuit de overheid verplicht om vergelijkingsinformatie aan te bieden aan patiënten om ze te informeren over de kwaliteit van de verschillende zorgaanbieders. Verschillende partijen werken aan de ontwikkeling en het aanbieden van deze informatie, niet alleen de zorgaanbieders zelf, maar ook anderen, zoals patiëntenorganisaties. Echter, er is minder aandacht voor of patiënten wel actief willen kiezen en hiertoe in staat zijn. Ook is er niet nagedacht over de consequenties van het feit dat verschillende groepen patiënten, zoals ouderen en lager opgeleiden, over het algemeen minder goed in staat zijn om actief te kiezen. Dezelfde condities en instrumenten zijn van belang voor patiëntenkeuze als een doel op zichzelf, vooral het recht op vrije keuze van een zorgaanbieder.

Onderzoeksvraag 2: Wat is er bekend in de literatuur over of en hoe patiënten een zorgaanbieder kiezen en de kenmerken van zorgaanbieders die patiënten belangrijk vinden?

De keuze van patiënten voor een zorgaanbieder lijkt over het algemeen niet zo te verlopen als verwacht door beleidsmakers. Ons literatuuronderzoek wijst uit dat de keuzes van patiënten bepaald worden door een complexe wisselwerking tussen vele kenmerken van patiënten en zorgaanbieders. Er bestaat niet zoiets als de typische patiënt: verschillende patiënten maken verschillende keuzes in verschillende situaties. Onderzoek wijst echter uit dat patiënten over het algemeen niet actief kiezen. Redenen hiervoor zijn dat voor een groot aantal van hen de keuze voor een zorgaanbieder relatief onbelangrijk is, dat de mogelijkheden om actief te kiezen beperkt zijn en dat de beschikbare informatie schaars en veelal niet goed bruikbaar is. Omdat patiënten over het algemeen niet actief willen of kunnen kiezen, is er een verschil tussen de factoren waarop patiënten zeggen hun keuze te baseren en hoe ze bij een zorgaanbieder terecht komen in een echte keuzesituatie. Ook al lijken ze in hypothetische keuzesituaties belang te hechten aan vergelijkingsinformatie, in echte keuzesituaties gaan ze naar de voordehand liggende zorgaanbieder - de default zorgaanbieder - toe. Dit betekent dat mensen geen actie ondernemen of, in de context van patiëntenkeuze, geen actieve keuze maken maar simpelweg naar de voor de hand liggende optie gaan. Voorbeelden van de default of voordehand liggende optie zijn de dichtstbijzijnde zorgaanbieder, degene waar patiënten eerder geweest zijn of degene waar ze naartoe verwezen zijn. Daarnaast nemen patiënten, als ze een keuze maken, niet alleen uitkomstindicatoren (patiëntervaringen, sterftecijfers) mee, maar ook verschillende structuur- (openingstijden, voorzieningen) en, voornamelijk, procesindicatoren (communicatie, informatie). Het keuzeproces van patiënten is dus veel complexer dan verondersteld toen het zorgstelsel hervormd werd.

Deel 2

Onderzoeksvraag 3: Hoe komen patiënten bij een bepaald ziekenhuis terecht en hoe beïnvloeden verschillende kenmerken van patiënten, ziekenhuizen en het zorgstelsel de keuzemogelijkheid en keuzeactiviteit van patiënten?

Middels interviews met patiënten van ziekenhuizen vonden wij verscheidene factoren die actieve keuze beperkten of juist stimuleerden/mogelijk maakten. De meeste patiënten bezochten het voordehand liggende ziekenhuis, hoofdzakelijk omdat ze het maken van actieve keuzes niet belangrijk vonden. Ze hadden geen reden om een actieve keuze te maken. Het voordehand liggende ziekenhuis was bijvoorbeeld dichtbij en ze waren tevreden over de zorg die ze hier kregen. Anderen waren van mening dat ze geen keuzemogelijkheid hadden, bijvoorbeeld omdat er geen keuzealternatieven in de omgeving waren of omdat ze al patiënt waren bij een bepaald ziekenhuis en het makkelijker was om daar te blijven. Gebaseerd op deze factoren en de mate waarin de keuze van patiënten actief was, deelden we patiënten in verschillende groepen in met betrekking tot de manier waarop ze een ziekenhuis kozen. Een kwantitatief onderzoek gaf ons vervolgens inzicht in de relatieve groepsgroottes in een steekproef die representatief is voor de Nederlandse ziekenhuispatiënt. De groepen die we vonden waren:

1. Patiënten die aangeven geen keuzemogelijkheid te hebben, vaak doordat ze al met een zorgtraject (het traject dat patiënten doorlopen vanaf hun eerste vraag naar zorg tot het einde van hun behandeling) bezig zijn - patiënten zonder keuzemogelijkheid (37%). Hun huisarts verwijst ze bijvoorbeeld naar een bepaald ziekenhuis, hun zorggeschiedenis is ergens bekend of hun diagnose is onbekend op het moment dat ze een ziekenhuis moeten kiezen waardoor ze niet naar een gespecialiseerd ziekenhuis toe kunnen gaan (vervolgens blijven ze bij het ziekenhuis waar ze terechtgekomen zijn, omdat het onlogisch of lastig is om dan nog naar een ander ziekenhuis te gaan).
2. Patiënten die gewoon naar het voordehand liggende ziekenhuis gaan zonder over de keuze van een zorgaanbieder na te denken - passieve patiënten (21%). De keuze van een zorgaanbieder is een relatief onbelangrijk onderwerp voor deze patiënten. Ze weten van tevoren bijvoorbeeld al naar welk ziekenhuis ze toe zullen gaan, komen ergens terecht en vinden het logisch om daar te blijven of zijn in de veronderstelling dat er geen kwaliteitsverschillen tussen ziekenhuizen bestaan.
3. Patiënten die om een bepaalde reden graag naar het voordehand liggende ziekenhuis willen en niet naar een ander ziekenhuis - default kiezers (27%). Ook al is de keuze van een zorgaanbieder een relatief

onbelangrijk onderwerp voor deze patiënten, ze willen graag naar het voordehand liggende ziekenhuis toe, hoofdzakelijk omdat ze loyaal zijn aan dit ziekenhuis of om praktische redenen. Ze vinden andere ziekenhuizen bijvoorbeeld te ver weg of vinden het te veel gedoe om van ziekenhuis te wisselen.

4. Patiënten die hun keuze baseren op informatie over ziekenhuizen en/of andere ziekenhuizen overwegen - patiënten die keuzeactiviteit vertonen (14%). De meesten worden gestimuleerd om een actieve keuze te maken. Ze willen een second opinion bijvoorbeeld, of hebben slechte ervaringen met een bepaald ziekenhuis. Echter, sommigen voldoen aan het beeld van de autonome zorgconsument, onafhankelijk van de situatie. Zij zien in dat er kwaliteitsverschillen bestaan tussen ziekenhuizen en zijn van mening dat het maken van een actieve keuze goed mogelijk is. Overeenkomstig bestaande literatuur, kan slechts een klein deel van deze groep patiënten beschouwd worden als echt actief (5%). Zij baseren hun keuze op informatie over ziekenhuizen *en* overwegen andere ziekenhuizen.

Onderzoeksvraag 4: In welke mate beïnvloedt de beschikbaarheid van een alternatieve optie voor het dichtstbijzijnde ziekenhuis in termen van afstand de intentie om een actieve keuze te maken?

De meerderheid van de patiënten geeft aan niet naar vergelijkingsinformatie over ziekenhuizen/specialisten op zoek te gaan wanneer zij ziekenhuiszorg nodig hebben. Of patiënten op zoek gaan naar informatie wordt beïnvloed door de beschikbaarheid van een realistisch keuzealternatief in termen van de absolute afstand tot dit alternatief vanaf het thuisadres. Echter, de invloed van deze afstand op de intentie om informatie te zoeken is niet voor iedereen gelijk. Zo zullen oudere lager opgeleide patiënten minder snel informatie zoeken dan anderen, wanneer zij verder weg wonen van het dichtstbijzijnde alternatief. Verder zijn patiënten met een chronische aandoening over het algemeen minder geneigd informatie te zoeken, terwijl vrouwen hier juist meer toe geneigd zijn. Beleidsmakers moeten zich hiervan bewust zijn, wanneer zij besluiten de zorg voor bepaalde aandoeningen te concentreren en verzekeraars aan te moedigen om selectief te contracteren. Deze maatregelen hebben namelijk effect op het aantal keuzealternatieven voor patiënten en, daarom, op de intentie van patiënten om een actieve keuze voor een zorgaanbieder te maken. De maatregelen

zouden alleen genomen moeten worden als ze voorkomen dat patiënten kiezen voor zorg van mindere kwaliteit of als ze resulteren in een significante efficiëntieverbetering.

Onderzoeksvraag 5: Wat is de rol van de patiënt bij het maken van keuzes op het moment van verwijzing door de huisarts en in welke mate helpt de huisarts de patiënt om een actieve keuze te maken?

Uit observaties van patiënt-huisarts consulten blijkt dat het patiëntenkeuzebeleid niet terug te zien is in de dagelijkse praktijk. De meerderheid van de patiënten had geen tot weinig input in de keuze van een zorgaanbieder op het moment van verwijzen. Hun huisarts nam het initiatief voor een verwijzing en koos een zorgaanbieder voor de patiënten, hierbij alleen vragend naar de voorkeuren van de patiënt in sommige consulten. Ze bespraken geen alternatieve verwijsopties, maar verwezen naar een specifieke zorgaanbieder zonder aan te geven waarom. Als ze al informatie gaven was deze uitsluitend van praktische aard. Echter, er bestaan verschillen in de rollen die huisartsen en patiënten hebben in de keuze van een zorgaanbieder op het moment van verwijzing. Ook al had de meerderheid van de patiënten weinig input, een kwart van hen koos zelf een zorgaanbieder zonder dat de huisarts het aantal keuzeopties beperkte. Zij maakten niet per se een actieve keuze, zoals verwacht door beleidsmakers, maar hadden in elk geval een wat actievere rol in de keuze van een zorgaanbieder op het moment van verwijzing. In hun geval moedigde de huisarts hen aan om actief betrokken te zijn in de keuze voor een zorgaanbieder. Het zorgpad van patiënten, het proces dat patiënten volgen vanaf het moment dat ze voor het eerst zorg vragen tot het einde van hun behandeling, had enige invloed op de hoeveelheid input van patiënten in de keuze. Patiënten die verwezen werden voor diagnose hadden namelijk minder input dan patiënten die direct verwezen werden voor behandeling.

Deel 3

Onderzoeksvraag 6: Bestaat er een relatie tussen het keuzeproces van patiënten en de ervaren kwaliteit van zorg?

Verwacht werd dat er een relatie bestaat tussen het keuzeproces van patiënten (de vier patiëntgroepen die we vonden in Hoofdstuk 4) en de

ervaren kwaliteit van zorg. Ons onderzoek wijst uit dat deze relatie inderdaad bestaat. Ten eerste rapporteerden patiënten die keuzeactiviteit vertoonden een grotere gezondheidswinst door hun ziekenhuisbezoek(en) dan passieve patiënten. Deze bevinding komt overeen met de beleidsverwachting dat actieve patiënten het beste ziekenhuis uitzoeken en, dientengevolge, betere zorg ontvangen dan anderen. Daarnaast hadden patiënten die keuzeactiviteit vertoonden slechtere patiëntervaringen dan passieve patiënten. Wellicht hebben patiënten die keuzeactiviteit vertonen hogere verwachtingen en zijn zij kritischer ten opzichte van de zorg en maken ze daarom actievere keuzes. Echter, omdat relatief weinig patiënten actief kozen en veel patiënten geen keuzemogelijkheid hadden, is het de vraag of patiëntenkeuze echt zou kunnen functioneren als een instrument om de kwaliteit van de zorg te verbeteren.

We vonden tevens dat de relatie tussen het *hebben van keuzemogelijkheid* en de ervaren kwaliteit van zorg minstens net zo sterk is als die tussen *keuzeactiviteit* en de ervaren kwaliteit van zorg. Patiënten die keuzemogelijkheid hadden, maar deze niet per definitie gebruikten, rapporteerden betere patiëntervaringen dan patiënten die dat niet hadden. Keuzevrijheid lijkt daarom een belangrijk goed te zijn voor patiënten. Zelfs al kiezen de meesten niet actief voor het beste ziekenhuis, ze hebben een betere zorgervaring als ze het recht en de mogelijkheid - autonomie - hebben om zelf te kunnen kiezen voor een zorgaanbieder.

Methodologische reflectie

Ook al zijn de sterke en zwakke punten van de verschillende studies reeds per hoofdstuk beschreven, een aantal punten geldt voor het gehele proefschrift. Ten eerste gaat dit proefschrift er, in tegenstelling tot bestaand onderzoek, niet van uit dat het kiezen van een zorgaanbieder een weloverwogen gebeurtenis is. Het richt zich dan ook niet op de voorkeuren van patiënten voor kenmerken van zorgaanbieders, maar vertrekt vanuit de veronderstelling dat patiënten verschillen met betrekking tot hun intenties en mogelijkheden om te kiezen. Wellicht zijn patiënten helemaal niet bezig met de keuze van een zorgaanbieder, simpelweg omdat hier geen reden voor is. In de zorg richten patiënten zich namelijk op hun ziekte en hoe ze hiermee om kunnen gaan, terwijl ze vertrouwen op de expertise van hun artsen om ze zo goed mogelijk te behandelen en de beste keuzes voor ze te maken. Pas als zich een bepaalde situatie voordoet, bijvoorbeeld een slechte

ervaring, en patiënten gestimuleerd worden een keuze te maken, kan het van belang zijn om hun voorkeuren voor zorgaanbiederkenmerken te onderzoeken. Een ander sterk punt van dit proefschrift is dat het voornamelijk echte keuzesituaties onderzoekt. Bestaand onderzoek richt zich veelal op hypothetische keuzesituaties, terwijl bekend is dat er een enorm verschil is tussen hoe patiënten zeggen te kiezen en hoe het keuzeproces daadwerkelijk verloopt. Een beperking van dit proefschrift betreft het onderzoeken van de relatie tussen het keuzeproces van patiënten en de ervaren kwaliteit van zorg. Omdat we niet naar de objectieve kwaliteit van de ziekenhuizen volgens bestaande kwaliteitsinformatie gekeken hebben, kunnen we alleen concluderen dat patiëntenkeuze zou kunnen werken als instrument om de kwaliteit van de zorg te verbeteren en niet dat het daadwerkelijk werkt als instrument. Aanvullend onderzoek zou hiernaar kunnen kijken. Een tweede beperking is dat het onderzoek naar de relatie tussen het keuzeproces van patiënten en de ervaren kwaliteit van zorg geen inzicht verschaft in waarom de twee concepten gerelateerd zijn. De beleidstheorie gaat ervan uit dat actieve patiënten betere zorg ervaren omdat zij een beter ziekenhuis kiezen en dat patiënten die keuzemogelijkheid hebben betere zorg ervaren omdat het hebben van keuzemogelijkheid een belangrijk goed is voor patiënten. Echter, de relatie tussen patiëntenkeuze en de ervaren kwaliteit van zorg kan ook te wijten zijn aan andere mechanismen, bijvoorbeeld cognitieve dissonantie (“ik heb voor dit ziekenhuis gekozen, dus moet het wel een goed ziekenhuis zijn”). Toekomstig onderzoek zou hier duidelijkheid in kunnen verschaffen.

Implicaties

De bevindingen van dit proefschrift hebben verschillende implicaties, zowel voor de bestaande literatuur als het beleid ten aanzien van patiëntenkeuze.

Patiëntenkeuze in bestaande literatuur

De bevindingen van dit proefschrift sluiten aan bij bestaand onderzoek. Zo vonden ook wij dat de meeste patiënten geen actieve keuze maken voor een zorgaanbieder. In plaats daarvan gaan zij simpelweg naar de voor de hand liggende zorgaanbieder, bijvoorbeeld de dichtstbijzijnde of degene waar ze eerder geweest zijn. In de literatuur worden verschillende oorzaken genoemd voor dit gedrag, namelijk: 1) dat patiënten loyaal zijn aan hun huidige of lokale zorgaanbieder; 2) dat patiënten vaak geen keuzemogelijkheid hebben; 3) dat patiënten vaak geen reden hebben om een

actieve keuze te maken; en 4) dat mensen over het algemeen niet in staat zijn om volledig rationele keuzes te maken. Dit proefschrift toont aan dat deze verklaringen allen plausibel zijn. Zo gaat de theorie van Hirschman ervan uit dat mensen loyaal zijn aan 'hun' zorgaanbieder, wat ook naar voren kwam uit ons onderzoek. Patiënten waren over het algemeen niet bezig met de keuze van een zorgaanbieder, simpelweg omdat ze loyaal waren aan de lokale of bekende zorgaanbieder of degene die ze naar deze zorgaanbieder verwees. Echter, ondanks dat ze niet per definitie actief kozen, rapporteerden ze betere zorgervaringen. Dit impliceert dat het voor patiënten waardevol is om keuzemogelijkheid te hebben. Een tweede verklaring is dat patiënten vaak niet de mogelijkheid hebben om te kiezen. In de zorg zijn bijvoorbeeld niet altijd voldoende keuzealternatieven beschikbaar, terwijl wij vonden dat de beschikbaarheid van keuzealternatieven en de afstand hiertoe bepaalden of patiënten de intentie hadden om een actieve keuze te maken. Daarnaast hadden patiënten het idee dat ze in een rijdende trein zaten waar ze niet uit konden. Diagnostische- en behandelingsfasen wisselden elkaar af, zonder dat er een duidelijk keuzemoment was. Het 'kiezen' lijkt daarom niet in de zorg te passen. De 'logica van het zorgen' van Annemarie Mol lijkt een betere manier om de manieren van denken en doen in de zorg te beschrijven dan de 'logica van het kiezen'. De logica van het zorgen gaat ervan uit dat het in de zorg niet om kiezen gaat maar om zorgen. Zorgen is geen product maar een proces dat patiënten doorlopen vanaf hun eerste vraag naar zorg tot het einde van hun behandeling, het zorgtraject genoemd. De derde verklaring, dat patiënten vaak geen reden hebben om een actieve keuze te maken, sluit hierbij aan. Omdat het default ziekenhuis bijvoorbeeld dichtbij is, patiënten tevreden zijn met de daar ontvangen zorg of ervan uit gaan dat de kwaliteit van de zorg overal voldoende is, zien zij vaak geen reden om een actieve keuze te maken. Dit komt overeen met de logica van het zorgen. In de zorg richten patiënten hun tijd en energie op hun zorgvraag, terwijl ze erop vertrouwen dat hun artsen de expertise en wens hebben om ze zo goed mogelijk te behandelen. Ten slotte zijn mensen over het algemeen niet in staat om rationeel te kiezen. Zo is goede vergelijkingsinformatie vaak schaars, ook in de zorg, waardoor patiënten onvoldoende geïnformeerd zijn om een goede keuze te kunnen maken. Naar het eerste geschikte alternatief of de huidige zorgaanbieder toe gaan of vertrouwen op het oordeel van de huisarts zijn daarom logische manieren waarop patiënten met dit probleem omgaan.

Een belangrijke bevinding van dit proefschrift is dat patiënten van elkaar verschillen met betrekking tot hoe ze een zorgaanbieder kiezen, wat wederom aansluit bij bestaand onderzoek. De mate waarin de keuze van patiënten actief was, werd bepaald door verschillende factoren: patiënt-, ziekenhuis-, en zorgstelselkenmerken en door interactiefactoren (factoren gerelateerd aan zowel de zorgsector als de patiënt, zoals de verwijzing van de huisarts of iemands zorgpad). Zo hebben hoger opgeleiden en patiënten met een hoger inkomen een betere toegang tot zorg en informatie, waardoor zij over het algemeen eerder geneigd zijn actief te kiezen.

Dit proefschrift vormt een waardevolle toevoeging aan de bestaande literatuur omdat het inzicht geeft in het keuzeproces van patiënten door echte keuzesituaties te onderzoeken. Toch blijft er een aantal zaken onduidelijk. Vervolgonderzoek is nodig:

- Om te kunnen zeggen dat patiëntenkeuze echt werkt als instrument om de kwaliteit van de zorg te verbeteren, zou de relatie tussen het keuzeproces van patiënten en de kwaliteit van zorg volgens bestaande vergelijkingsinformatie bekeken moeten worden.
- Omdat ons onderzoek naar de relatie tussen het keuzeproces van patiënten en de ervaren kwaliteit van zorg geen inzicht verschaft in waarom de concepten gerelateerd zijn, zal vervolgonderzoek hier duidelijkheid in moeten verschaffen.
- Ook al wijst dit proefschrift uit dat actieve patiënten kritischer zijn ten opzichte van zorg en betere zorguitkomsten hebben, maken relatief weinig patiënten een actieve keuze. Vervolgonderzoek zou moeten bekijken of de groep actieve kiezers groot genoeg is om concurrentie tussen zorgaanbieders aan te wakkeren en of de zorg dan niet alleen aangepast wordt aan deze patiënten. Om dit laatste te kunnen onderzoeken, is het noodzakelijk om meer inzicht te krijgen in welke patiënten behoren tot de groep actieve kiezers.
- Vervolgonderzoek is nodig om te onderzoeken of de patiëntgroepen van elkaar verschillen met betrekking tot factoren die het keuzeproces beïnvloeden volgens bestaande literatuur, bijvoorbeeld de invloed die de ziekte van patiënten op hun leven heeft. Naast het feit dat hierdoor antwoord gegeven kan worden op de vraag of de zorg uitsluitend aangepast wordt aan bepaalde patiënten, wordt hierdoor inzicht verkregen in de situaties waarin patiënten wel of geen actieve keuze

maken. Dit stelt beleidsmakers in staat om maatregelen die genomen worden om patiëntenkeuze te stimuleren te richten op bepaalde patiëntgroepen. Opgemerkt dient echter te worden dat de manier waarop patiënten een zorgaanbieder kiezen geen statisch patiëntkenmerk is. De typologie is gebaseerd op het keuzegedrag van patiënten en niet, bijvoorbeeld, op hun demografische kenmerken. Al zijn sommige patiënten eerder geneigd actief te kiezen dan anderen, ze zullen in een andere situatie wellicht anders kiezen en daardoor tot een andere patiëntgroep behoren. Al gaan ouderen, bijvoorbeeld, vaak naar de voordehand liggende zorgaanbieder, als ze denken dat hun ziekte een grote invloed heeft op hun leven zullen ze wellicht toch geneigd zijn actief te kiezen.

- In het beleid ten aanzien van patiëntenkeuze gaat het om de keuze voor een zorgaanbieder in het algemeen, terwijl in dit proefschrift vooral de keuze voor een ziekenhuis onderzocht is. Ook al geeft bestaande literatuur geen indicatie voor een geheel ander verloop van het keuzeproces rondom de keuze van andere zorgaanbieders, bijvoorbeeld fysiotherapeuten, vervolgonderzoek zou deze keuzeprocessen kunnen bestuderen. De opgedane kennis hierover zou toegepast kunnen worden op de keuze voor een ziekenhuis. Dit geldt ook voor situaties waarin vaker actief wordt gekozen, zoals wanneer patiënten naar een ziekenhuis moeten voor een aandoening waarover veel informatie beschikbaar is, zoals borstkanker. Het zou tevens interessant zijn om de keuzes van patiënten te bestuderen die naar een gespecialiseerde instelling gegaan zijn, omdat het waarschijnlijker is dat hun keuze actief was.
- Patiënten zijn actiever met betrekking tot de keuze voor een behandeling. Toekomstig onderzoek zou het keuzeproces van patiënten voor behandelingen kunnen bestuderen. Kennis hierover kan toegepast worden op de keuze voor een zorgaanbieder.
- Ten slotte vonden wij dat het zorgtraject van patiënten hun keuzeproces in belangrijke mate beïnvloedt. Het zou daarom interessant zijn om meer inzicht te verkrijgen in dit zorgtraject, bijvoorbeeld het verloop van dit traject, de keuzes die patiënten kunnen en moeten maken gedurende dit traject, of ze zich bewust zijn van deze keuzemomenten en het verloop van hun keuzeprocessen en de problemen en behoeften die ze hebben op deze momenten. Toekomstig onderzoek zou, bijvoorbeeld, patiënten kunnen volgen gedurende hun zorgtraject.

Patiëntenkeuze in het beleid

Bij de hervorming van het zorgstelsel in 2006, zijn beleidsmakers ervan uit gegaan dat patiënten een weloverwogen keuze maken voor een zorgaanbieder op basis van vergelijkingsinformatie (actief kiezen) wanneer aan bepaalde condities voldaan is. Dit proefschrift wijst uit dat het keuzeproces van patiënten complexer is dan van tevoren gedacht door beleidsmakers. Om verschillende redenen vertonen namelijk relatief weinig patiënten keuzeactiviteit en gaan zij vaak naar de voordehand liggende zorgaanbieder toe. Ook al zullen sommige drempels voor actieve keuze verdwijnen als aan de condities voor patiëntenkeuze voldaan is, andere drempels zijn inherent aan de zorgsector. Het kiezen lijkt simpelweg niet in de zorg te passen. Het proces van 'terecht komen bij een bepaalde zorgaanbieder' verloopt anders dan de afgebakende keuze voor, bijvoorbeeld, een energieleverancier. Daarom zullen beleidsmakers hun verwachtingen aan moeten passen met betrekking tot hoe patiënten een zorgaanbieder kiezen en de effecten die patiëntenkeuze heeft op de kwaliteit en kosten van de zorg. Aan de andere kant hoeven niet alle patiënten actief te kiezen om concurrentie tussen zorgaanbieders aan te wakkeren. Het is zelfs zo dat er ook passieve patiënten nodig zijn die de zorgaanbieder de kans geven om zich te verbeteren. Daarnaast ervoeren patiënten die keuzeactiviteit vertoonden betere zorguitkomsten en waren ze kritischer ten opzichte van het zorgproces. Dit zou kunnen betekenen dat patiëntenkeuze in enige mate zou kunnen werken als instrument om de zorg te verbeteren. Het is echter niet bekend of de patiënten die actief kiezen voor voldoende concurrentiedruk zorgen.

Hoe dan ook lijkt het hebben van het recht en de mogelijkheid - autonomie - om zelf een zorgaanbieder te kiezen waarde voor patiënten te hebben. Patiënten die keuzemogelijkheid hadden, hebben namelijk betere patiëntervaringen dan patiënten die dat niet hadden. Daarom, en omdat een kleine groep patiënten wel actief kiest, is het van belang voor patiënten om hen in staat te stellen zelf keuzes te maken en hen te ondersteunen bij het maken van de juiste keuzes. Zo zouden patiënten bewust gemaakt kunnen worden van hun recht op vrije keuze gedurende hun gehele zorgpad en zou de relevantie van het kiezen van een goed ziekenhuis hun duidelijk gemaakt kunnen worden.

Onze bevindingen leiden tot een aantal aanbevelingen voor het beleid ten aanzien van patiëntenkeuze:

- Een belangrijke oorzaak voor het feit dat weinig patiënten actief kiezen, is dat ze van mening zijn geen keuzemogelijkheid te hebben. Ook al zijn bepaalde belemmeringen voor actieve keuze inherent aan de zorgsector, zoals het feit dat er vaak onvoldoende keuzealternatieven in de buurt zijn, er zal gezocht moeten worden naar manieren waarop de zorg georganiseerd kan worden om patiëntenkeuze gemakkelijker te maken en aan te moedigen. Momenteel is de zorg niet gericht op en geschikt voor het maken van keuzes door patiënten. Patiënten ervaren hierdoor vaak geen duidelijk keuzemoment. Zo weten patiënten hun diagnose vaak niet op het moment dat ze verwezen worden, waardoor het kiezen van de beste zorgaanbieder relatief onbelangrijk lijkt en lastig is. In hoofdstuk 6 van dit proefschrift vonden we dat patiënten die verwezen werden voor diagnose minder input hadden dan patiënten die direct verwezen werden voor behandeling. Als zij eenmaal gediagnosticeerd zijn bij een bepaald ziekenhuis, is het onlogisch of lastig om nog naar een ander ziekenhuis te gaan voor de behandeling. Wellicht kan de huisarts patiënten helpen met het maken van actieve, weloverwogen keuzes, bijvoorbeeld met behulp van keuzehulpmiddelen of vergelijkingsinformatie die tevens geschikt zijn voor huisartsen. Daarnaast zal het voor patiënten makkelijker moeten zijn om gedurende hun gehele zorgpad een actieve keuze te maken, bijvoorbeeld door de communicatie tussen ziekenhuizen te verbeteren om het wisselen van ziekenhuis te vergemakkelijken of door patiënten bewust te maken van hun recht op vrije keuze op meerdere momenten gedurende hun zorgpad.
- Patiënten geven aan geen inzicht te hebben in de kwaliteit van ziekenhuizen. Het is daarom van belang om vergelijkingsinformatie beschikbaar te maken die bruikbaar is voor alle patiënten, ongeacht, bijvoorbeeld, hun vaardigheid om gezondheidsinformatie te begrijpen en te gebruiken. Ook is het van belang dat deze informatie beschikbaar is voor patiënten tijdens alle stadia van hun ziekte, dus ook wanneer de diagnose nog niet bekend is en zij uitsluitend op basis van hun klachten op zoek kunnen gaan naar informatie. Momenteel wordt al veel onderzoek gedaan naar hoe vergelijkingsinformatie het beste aangeboden kan worden en aan welke informatie behoefte is.
- Terwijl de keuze van patiënten gestimuleerd wordt, leiden andere maatregelen van de overheid ertoe dat patiënten minder keuzeopties en keuzevrijheid hebben. Van verzekeraars wordt bijvoorbeeld verwacht dat zij uitsluitend 'goede' zorg inkopen voor hun cliënten, zodat het

duurder is voor patiënten om naar een, volgens hun verzekeraar, 'slechte' zorgaanbieder te gaan. Vooral lager opgeleide oudere patiënten zijn minder geneigd om een actieve keuze voor een zorgaanbieder te maken als hun keuzevrijheid en –mogelijkheid beperkt wordt. Daarom staan maatregelen als de concentratie van bepaalde zorg en het selectief contracteren haaks op de bevordering van patiëntenkeuze, terwijl al deze maatregelen genomen worden om de zorg te verbeteren, direct of middels het stimuleren van marktwerking. Als patiëntenkeuze een doel is van de overheid, dan is het van belang om de voor- en nadelen van maatregelen als de concentratie van de zorg en selectief contracteren tegen elkaar af te wegen.

- Er bestaan verschillen tussen patiënten in hoe ze bij een zorgaanbieder terecht komen. Het is van belang deze diversiteit in acht te nemen bij het nemen van maatregelen om patiëntenkeuze mogelijk te maken of te bevorderen. Zo is het bewust maken van patiënten van hun recht op vrije keuze vooral van belang voor patiënten die het idee hebben niet te kunnen kiezen. Patiënten die voor de voordehand liggende optie kiezen zouden juist gestimuleerd kunnen worden om actief te kiezen door ze bewust te maken van de relevantie van het kiezen voor een goed ziekenhuis.

Conclusie

Hoe kiezen patiënten een zorgaanbieder, welke factoren beïnvloeden dit keuzeproces en zou patiëntenkeuze (zowel het hebben van keuzemogelijkheid als het maken van een actieve keuze) de beoogde effecten kunnen hebben?

De keuze van patiënten voor zorgaanbieders is zowel een doel op zichzelf (het hebben van keuzemogelijkheid) als een centraal element (actief kiezen) in een zorgstelsel waarin gereguleerde marktwerking tussen zorgaanbieders van belang is om de ontwikkeling van de zorgkosten te beheersen en de kwaliteit, efficiëntie en toegankelijkheid van de zorg te verbeteren en te waarborgen. Echter, in plaats van actief een zorgaanbieder te kiezen, gaat de meerderheid van de patiënten naar de voordehand liggende zorgaanbieder. Over het algemeen zijn patiënten namelijk helemaal niet bezig met de keuze van een zorgaanbieder. Daar is ook geen reden voor, omdat ze tevreden zijn met en loyaal zijn aan de voordehand liggende zorgaanbieder of hun arts die ze hier naartoe verwijst. Anderen hebben niet eens de mogelijkheid om

een actieve keuze te maken, voornamelijk omdat er voor hen geen duidelijk keuzemoment is tijdens hun zorgtraject. Een aantal barrières voor patiëntenkeuze zal verdwijnen door de maatregelen die genomen worden om patiëntenkeuze mogelijk te maken en te stimuleren. De meesten, echter, zijn inherent aan de zorgsector. Het lijkt er dus op dat, hoewel het kiezen past in vrije markten waar autonome mensen zelfstandig kiezen tussen specifieke, afgebakende producten, het niet past in de zorg. Een andere logica (of discours), namelijk de logica van het zorgen, beschrijft de zorg beter. Dit betekent echter niet dat niemand kiest of kan kiezen of dat het hebben van een keuze niet gewaardeerd wordt. Een kleine groep patiënten vertoont wel degelijk keuzeactiviteit. Daarnaast is het hebben van keuzemogelijkheid geassocieerd met betere patiëntervaringen. Al kiezen de meeste patiënten niet actief voor de zorgaanbieder met de hoogste kwaliteit, ze waarderen het kennelijk toch om vrij te kunnen kiezen voor 'hun' zorgaanbieder, wat overeen komt met patiëntenkeuze als doel op zich. Het is daarom voor patiënten van belang om ze gedurende hun gehele zorgpad keuzemogelijkheid te bieden en ze bewust te maken van hun keuzevrijheid. Omdat patiënten en hun huisartsen samenwerken als een team om de gezondheid van de patiënt te verbeteren, zijn huisartsen wellicht de beste personen om patiënten te helpen een zorgaanbieder te kiezen die past bij hun wensen en behoeften.

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Curriculum Vitae

Aafke Victoor (1984) studied Applied Cognitive Psychology at Utrecht University in the Netherlands. After her graduation, she started working at the Netherlands Institute for Health Services Research (NIVEL) in 2009. From 2009-2011, Aafke was part of a research team that investigated whether preferences of the general population regarding the content of national health insurance plan could be measured with the help of a self-developed stated preference method. In addition, she worked on several projects involving the use of online questionnaires or social media for research purposes. From 2011-2014, she worked as a PhD student at NIVEL. During that time, she worked on her dissertation and published several research articles in international journals. In addition, she presented her work at several national and international conferences and supervised master students. She developed a particular interest in patients' choice behaviour. Aafke is currently working at the Federation of Patients and Consumer Organisations in the Netherlands (Patiëntenfederatie NPCF). As a policy adviser, she is involved in several projects concerning the long-term care sector, such as the development of quality and comparative information on healthcare providers that deliver home care.