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Is the role as gatekeeper still feasible? A survey among Dutch general practitioners

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Abstract

Introduction. In the 2012 International Health Policy Survey by the Commonwealth Fund, 57% of Dutch GPs indicated that Dutch patients receive too much health care. This is an unexpected finding, given the clear gatekeeper role of Dutch GPs and recent efforts strengthening this role.
Objectives. The study aims to explore where perceived overuse of care prevails and to identify factors associated with too much care at the entry point of Dutch health care.
Method. An American survey exploring perceptions of the amount of care among primary care providers was modified for relevance to the Dutch health system. We further included additional factors possibly related to overuse based on 12 interviews with Dutch GPs. The survey was sent to a random sample of 600 GPs.
Results. Dutch GPs (N = 157; response rate 26.2%) indicated that patients receive (much) too much care in general hospitals, primary care, GP cooperatives as well as private clinics. The Dutch responding GPs showed a relatively demand-satisfying attitude, which contributed to the delivery of too much care, often leading to deviation from guidelines and professional norms. The increasing availability of diagnostic facilities was identified as an additional factor contributing to the provision of unnecessary care. Finally, funding gaps between primary care and hospitals impede cooperation and coordination, provoking unnecessary care.
Conclusion. Our results—most notably regarding the demand-satisfying attitude of responding GPs—call into question the classical view of the guidance and gatekeeper role of GPs in the Dutch health care system.

Key words: Attitude of health personnel, GPs, physician's practice patterns, primary care physicians, primary health care, referral and consultation.

Introduction

Fifty-seven percentage of Dutch GPs believe patients receive (much) too much medical care. This was one of the main findings of the International Health Policy Survey (IHP), a longitudinal international comparative research study in Western countries exploring the experiences of GPs with care. Of the 10 countries, only Germany scored slightly higher (59%), whereas on the contrary in New Zealand 39% of GPs felt that patients actually received too little care (1).

The general consensus is that a well-functioning primary care system provides stepped care: right care at the right place, on the right time, balancing quality and costs. The GP provides care at relatively low cost and avoids costly hospital care (2). For that reason, in various countries policy is aimed at further strengthening the gatekeeper role of primary care. Dutch examples are the introduction of GP cooperatives for after-hours care run by GPs (3), the increased availability of diagnostic facilities

in general practice, and the promotion of integrated care for the chronically ill through bundled payments (4). In Germany, a nationwide primary care-based and physician-sustained disease management program has improved quality of care while also curbing costs (5). In the United States, patient-centred medical homes are considered to be the most popular primary care delivery innovation and capable of improving quality of care while reducing costs (6). Recent research indicates that this model also holds a promise for other countries (7).

Meanwhile, a Dutch health policy study suggested an erosion of the role of the GP: many patients receive specialized medical care without consulting the GP beforehand (8). We have known for some time that large differences exist in care between GP practices, with implications for the effectiveness of GP care (9). A recent study in 31 European countries showed that a strong primary care system is not only associated with better population health, but also with higher health spending (10).

To summarize, many countries are strengthening their primary care system, while at the same time the effectiveness and consistency of these systems is sometimes being questioned. The findings of the aforementioned IHP survey draw attention to a remarkable observation: how do we explain the fact that Dutch GPs experience so much excess care while working in a health care system with a clear gatekeeper? To find out, we conducted an exploratory study among Dutch GPs aiming to (i) understand where this perceived care prevails; (ii) identify factors that are associated with too much care at the entry point of Dutch health care. In doing this, we aim to test assumptions supporting the gatekeeper system and further strengthening of this gatekeeper system. Therefore, we asked the respondents to assess the perceived amount of care by sector and type. Secondly, we used clinical cases to gain information about practice patterns and to identify factors/motivations for choice of policy in that specific clinical case. Furthermore, we used several propositions describing factors possibly related to overuse and asked the respondents for opinion.

Methods

We used a previously conducted American questionnaire exploring perceptions about the amount of care among primary care providers, as a starting point (11). This questionnaire was translated into Dutch by a certified translation company. We subsequently included additional factors possibly related to overuse on the basis of a literature study and interviews with 12 Dutch GPs and adapted the questionnaire to the Dutch situation. The aim of the interviews was to describe cases of overuse and to identify factors possibly related to overuse. The interviews were thematically analysed by two independent researchers, to extract the relevant factors driving overuse in the Dutch health care system. A third researcher was consulted in case of disagreement. Ultimately, 17 questions were taken from the American questionnaire (e.g. a clinical case or questions concerning incidental findings for which we changed the clinical case to be applicable in the Netherlands), whereas the remaining 19 questions were formulated on the findings of our interviews. In short, the questionnaire consisted of items considering perceived amount of care by sector and type, and factors concerning or related to practice policy, the gatekeeper role, referrals, the role of the patient, diagnostics, awareness of costs, the health system, and other factors possibly related to too much care. Most questions were in the form of propositions describing a factor possibly related to overuse (with some in context of a clinical case), with a five-point likert to agree/disagree or alike. The questionnaire was tested for consistency and comprehensibility through cognitive interviewing with a GP.

A random sample of 600 GPs, drawn from the NIVEL database 'Health professions', was invited to participate by means of an invitational letter. This letter was accompanied by a written questionnaire and a postage-paid business reply envelope. Two weeks after the first mailing, non-responding GPs received a reminder in the form of a postcard. Four weeks after the first dispatch, non-responding GPs received a new copy of the questionnaire and again a freepost return envelope. The results of the questionnaires were analysed using SPSS version 20. Respondents who did not reply to some of the questions were still included in the analysis; questions without an answer were considered missing. The most salient results will be presented as in what follows.

Results

Respondent characteristics

A total of 157 GPs (response rate = 26.2%) completed the questionnaire, 100 GPs (16.7%) indicated that they did not want to participate. Our sample was representative for the entire Dutch GP population (Table 1), with a slight over-representation of older male GPs as well as GPs in paid employment. Almost 80% indicated that they are self-employed and about two-thirds of the respondents reported having a working week of >40 hours.

Amount of care by sector and type

A very large majority (81.4%) indicated that in their perception, patients in the Netherlands receive (much) too much care (Table 2, in the rest of the article we do not repeat the adjectives (much) too much, very or strongly used in our five-point likerts). Focusing on type of care, a few highlights can be observed: over 80% of respondents felt that too much care is delivered in private clinics, at GP cooperatives and in hospitals. Moreover, 35.5% and 36.1% of the respondents indicated that patients receive too much care at the GP cooperative and private clinics,

Table 1. Characteristics of respondents and national GP population

		Respondents (N = 157)	Dutch GP population[a] (N = 8831)
Gender	Male	60.5%	57.5%
	Female	39.5%	42.5%
Age (years)	Average	51.2	
		♂ 54.5	♂ 51
		♀ 45.8	♀ 44[b]
	<35	3.9%	6.6%
	35–44	21.4%	29.0%
	45–54	29.9%	32.5%
	55–64	44.2%	30.9%
	65+	0.6%	1.0%
Primary practice setting	Solo practice	22.5%	25.7%
	Two-person practice	29.8%	37.9%
	Group practice	29.1%	36.4%
	Health care centre	17.2%	
	Other[c]	1.4%	
Ownership status	Self-employed	78.8%	88.9%
	Paid employment	21.2%	11.1%
Percentage of patients in the practice >65 years	<10%	7.2%	Unknown
	10–25%	46.4%	Unknown
	26–50%	45.1%	Unknown
	>50%	1.3%	Unknown

[a]*Source*: www.nivel.nl/databank (All Dutch GPs are included in this databank.)
[b]*Source*: Nivel. Cijfers uit de registratie van huisartsen. Peiling 2010.
[c]The results under 'other' usually contained digressions on one of the alternatives.

respectively. More than half of the GPs (58.2%) considered that too much care was delivered by GPs themselves. In contrast, 63.2% of respondents indicated nursing and residential care homes as settings where patients receive too little care. Only the amount of palliative care was relatively often perceived as being just right (67.3%).

Almost all respondents (90.9%) felt that patients received too much diagnostic care. In addition, medical treatment (78.7%) as well as monitoring and follow-up (48.7%) are provided too much according to the participating GPs.

Clinical cases and variation in treatment by GP

Case 1: A patient of yours (60-year-old man) has well-controlled hypertension. This is his only medical problem.

To the question 'In general, how frequently do you schedule routine follow-up visits? Every ... months' the largest group responded every 6 months (42.5%), followed by every 12 months (30.1%) and every 3 months (24.8%) (N = 153).

We presented the respondents with the additional cases 2 and 3 (see boxes and Tables 3 and 4). We asked them to what extent specific factors determined their policy. The three cases showed that there is a large variation in practice among the participating GPs. The GPs explained that their choice depended on the degree of anxiety and awareness of the patient and the degree to which the patient accepts the given explanation. Almost all respondents (>80%) indicated that this somewhat or substantially played a role in their choice of policy. Their choice was further motivated by doing what was indicated 'on clinical grounds' (62.4%) and 'doing what the patient expects him to do' (55.6%). It is also notable that there seems to be a division among the participating GPs: 42.9% indicated that the clinical indication largely determined their choice, whereas on the other hand 37.7% stated that the clinical indication did not influence their decision.

Case 2: A mother contacts the practice by phone about her 10-year-old daughter. She has been coughing for 2 days and has a rise in temperature (38.5°) since last night. The daughter does not feel like eating, drinks well but started coughing heavily again last night. Her mother would like to have a consultation this afternoon. The assistant tries to give advice and explain to her that it would not seem to be necessary to visit the practice. Still, the mother continues to ask for a consultation and the assistant would like to confer with you.

Case 3: For many years, your patient has suffered from chronic daily headaches. This worries him considerably. You know the patient well and he often visited your practice for these complaints. You have never been able to find out the cause. The last medication you prescribed also had no effect. The patient is distraught and asks for a CT scan or MRI of the head to be made.

Patient–provider relationship factors

Nearly all (> 90%) respondents indicated that patients experience health care as a right, and that this fact leads to unnecessary care. A comparable proportion indicated that patients have a strong need for an explanation and certainty and that this also leads to unnecessary care. Two-thirds (66.1%) stated that when patients really wanted to be referred, they would go along with this as they prevailed to maintain the relationship with the patient.

Provider decision-making and clinical guideline issues

Pancreatic lipomatosis in an ultrasound for possible cholelithiasis is an example of incidental findings in diagnostics. To the question 'How often are you faced with such incidental findings?', 29.4% of the respondents answered often and 6.5% very often. It is notable that one-third (32.2%) of the respondents usually and 4.6% almost always request additional tests to clarify incidental findings. Only a minority (38.0%) indicated that they do not bother to deviate from the written recommendation of the radiologist when confronted with incidental findings. Most GPs indicated that they felt obliged to follow the recommendation (23.3%) or deviate from the recommendation only in exceptional circumstances (38.7%). In addition, more than two-thirds (70.9%) found that the availability of diagnostic tools (Electrocardiogram/spirometry) at the practice leads to more investigations, as opposed to these investigations having been requested. Moreover, according to 61.6% of the respondents, some guidelines prescribe so many monitoring tests that they feel they request these required tests unnecessarily.

Issues related to the relationship between primary care and other sectors

According to the respondents, a variety of factors may increase or decrease the number of referrals. A lack of time at the moment of referral and fear of making mistakes led to an increased number of referrals (>60% of the respondents). According to 70.9% of the participating GPs, patients are reassured more quickly when he or she refers increasing the number of referrals. More than half (54.1%) indicated that it takes a lot of time and effort

Table 2. Opinion of Dutch GPs on amount of care patients received (by sector and type)

	Much too little	Too little	Just about right	Too much	Much too much
General (IHP-question[a])	0.0%	0.7%	17.9%	71.5%	9.9%
Sector					
Private clinics[b,c]	0.0%	1.6%	13.9%	48.4%	36.1%
GP cooperative[b]	0.0%	1.9%	13.5%	49.0%	35.5%
Hospital[b]	0.0%	4.5%	11.0%	69.5%	14.9%
Primary mental health care[b]	0.0%	34.7%	47.9%	14.6%	2.8%
Secondary mental health care[b,c]	0.7%	40.3%	38.1%	17.2%	3.7%
GP care[b]	0.0%	5.2%	36.6%	56.9%	1.3%
Home care[b]	2.6%	37.3%	50.3%	9.2%	0.7%
Nursing and residential care homes[b]	6.1%	57.1%	30.6%	6.1%	0.0%
Type					
Diagnostics[d]	0.0%	0.6%	8.4%	74.0%	16.9%
Medical treatment[d]	0.0%	0.0%	22.2%	69.9%	7.8%
Monitoring and follow-up[d]	0.0%	9.7%	41.6%	43.5%	5.2%
Prevention[d]	4.6%	48.7%	23.0%	19.7%	3.9%
Rehabilitation[d]	0.7%	43.1%	52.1%	3.5%	0.7%
Nursing and care[d]	2.0%	57.8%	38.8%	1.4%	0.0%
Palliative care[d]	0.0%	32.0%	67.3%	0.7%	0.0%

[a]Question from Commonwealth Fund IHP survey: Thinking about all the medical care your patients receive—not just from you, but from all their providers, including specialists—what is your opinion about the amount of medical care they receive? Is it…?

[b]Thinking about all the medical care your patients receive, what is your opinion about the amount of care they receive at the ….

[c]Twenty-two and thirty-five respondents chose the option 'Do not know' for secondary mental health care and private clinics respectively.

[d]Thinking about all the medical care your patients receive, what is your opinion about the amount of …….. care they receive.

Table 3. What would be your policy with regard to case 2?

Policy	
Tell the assistant that the proposed policy (the assistant informs the mother that it is not necessary to come to the practice) is all right and that the demand for office visits will not be honored.	5.7%
You ask the assistant to call the mother and ask her to wait for a while. If the fever persists for more than 3 days, she can phone in the morning for an appointment.	35.7%
You offer the mother a consultation by telephone.	22.3%
You let the mother and daughter come to the practice.	36.3%

Table 4. What would be your policy with regard to case 3?

Policy	
You try to calm the patient and explain that a CT s can or MRI for these complaints is not useful.	21.7%
You request a CT scan or MRI for him.	3.9%
You refer the patient to a neurologist.	74.3%

to convince a patient that an additional investigation is not beneficial. This further increased the number of referrals.

The fact that patients easily receive hospital care without a referral from a GP leads to unnecessary care according to 64.3% of the GPs. Almost 80% of respondents indicated that some patients prefer the GP cooperative as an alternative for the regular practice-based primary care and this leads to unnecessary care. Over 80% of respondents considered that insurers reimburse care in hospitals that could be provided by the GP, which provoked unnecessary care. Respondents of 70% thought that insurers could more actively guide providers to reduce unnecessary care. 72.4% of respondents indicated that funding gaps between primary care and hospitals impede cooperation and coordination, which provoked unnecessary care.

Discussion

According to the 26% of invited Dutch GPs who responded to this survey, patients receive too much care in general hospitals, primary care, GP cooperatives as well as private clinics. The Dutch responding GPs' demand-satisfying attitude and the increased availability of diagnostic facilities most saliently contribute to the provision of perceived excess care at the entry point of care in the Netherlands. Furthermore misaligned incentives induce that Dutch responding GPs do not sufficiently pick up the gatekeeper's role. These findings are discussed more elaborately as in what follows.

Our results show that responding practitioners find it difficult to deny demanding patients' access to further care, even if they think treatment is unnecessary from a medical point of view. This creates an image of responding GPs acting in a demand-satisfying way in their referrals and treatment decisions. It is likely that this contributes to the perceived amount of overdiagnosis and overtreatment.

The demand-satisfying attitude of the responding GPs puts into question the classic, possibly simplified, image of the 'gatekeeper' impeding access to expensive unnecessary hospital care. According to 84.1% of the respondents, too much care is provided at hospitals, an indication that the gatekeeper system, originally meant to be a gateway to secondary care, is working suboptimal. A recent Dutch study showed a 3-fold variation in referral rates to medical specialists between GPs. This variation was driven by the physician practice pattern, not by the patient case mix (12). Undoubtedly, this variation leaves ample room for improvement, although the optimal level of referral is unknown. A myriad of policy options is available to reduce referrals, such as tightening or more explicitly defining the criteria for referral, implementing (multidisciplinary) guidelines, increasing conversation and collaboration between primary and secondary care or benchmarking GPs on referral rates (12–15).

The possibility of bypassing the GP in favour of hospital care (for example via the emergency department), as well as budget gaps between primary care and hospitals and the absence of guiding insurers impede GPs in maintaining their role of gatekeeper. Our results show that responding GPs themselves are prepared to avoid perceived unnecessary hospital care—versus reducing perceived unnecessary care in primary care—yet that the preconditions at the level of the health system do not meet. Bundled payments or medical specialist consultation at primary care practice may in theory (partly) overcome this problem (16).

The three cases illustrate that there is probably a large variation in practice among Dutch responding GPs. Such variation suggests that some patients receive suboptimal care and there is ample room for improvement. Our findings indicate that Dutch responding GPs are not determined to their role of commissioners of care. Moreover, responding GPs admit to providing a lot of unnecessary care themselves. The combination of a demand-satisfying attitude of the Dutch responding GPs, with consumerism among patients (patients perceive health care as their right), drives this perception. Shared decision making may be a feasible strategy to address both factors. The evidence-based source clinical evidence estimates that only a minority of treatments is 'beneficial' (11%) or 'likely to be beneficial' (24%). The remaining treatments were classified at best as 'a trade-off between benefits and harms' (7%) to having an 'unknown effectiveness' (50%) (17).

Thus, in many instances, an evidence base may not be able to provide the best alternative. Rather, two or more medically acceptable alternatives may exist, whereby the choice should be dependent on the patients' preferences and the possible harms and benefits of each alternative (18). Research shows that when patients are better informed they tend to opt for a more conservative approach (19). An example of this is the study done by Fleuren *et al.* (20) who showed that the implementation of a shared care guideline for lumbosacral radicular syndrome reduces unnecessary early referrals.

According to responding GPs, the availability of (access to) new diagnostic facilities in primary care leads not only to added risk of accidental discoveries and follow-up treatments, but also to unnecessary diagnostics itself. Therefore, this seems to contribute to perceived unnecessary care. Our findings raise the question of how to combine the increased possibilities for diagnosis and treatment at primary care with a prudent use. Owing to the increasing possibilities for diagnosis and treatments, supply-induced demand might become a major theme in primary care as well.

Remarkably, our study showed that responding GPs sometimes question the necessity of care provided and requested at GP cooperatives (which is actually care delivered by responding GPs themselves). In 2006, Giesen *et al.* (21) found that more than three quarters of all contacts at GP cooperatives did not concern urgent problems, which may explain the perceived amount of excess care we found. Both our study and the study by Giesen *et al.* raise the question how to practically shape the GP cooperatives. Both observations concerning diagnostic facilities and GP cooperatives are relevant, since these are actively encouraged in the Netherlands and in many OECD countries, one of their objectives being the reduction of unnecessary care.

Finally, we confirmed the finding of Sirovich *et al.* (11) that due to a lack of time responding GPs practice in a more active style concerning ordering diagnostic tests and referrals, although malpractice concern and clinical performance measures play a less prominent role in the Netherlands, as opposed to the United States. In the Netherlands the average numbers of inhabitants per GP is 2300, which is relatively high. This may explain the working pressure and active practice style.

Limitations

The participating GPs were slightly older, did less frequently work in a solo practice and were more often than the national average in paid employment. Given the difference in score on the IHP question [81% in our study when compared with 57% in the IHP survey (1)], response bias may have played a role in this study in the sense that more critical GPs may have been more likely to respond. Even so, this will not necessarily affect the validity of the identified factors that we found to be related to excess or unnecessary care. Moreover, non-response studies among physicians have shown no or minimal amounts of response bias, suggesting that physician surveys are more resilient to non-response than other types of surveys (22). Overall, we conclude that the low response rate may represent some response bias but given the explorative nature of the study and the bold statements made by a substantial group of GPs, the results justify further research.

Conclusion

This study shows that, according to Dutch responding GPs, a lot of unnecessary care is delivered in hospitals, GP cooperatives and private clinics. According to the responding GPs the demand-satisfying attitude of GPs contributes to perceived unnecessary care, as does the increased availability of diagnostics. The assumption that the costs of additional investments in primary care will be automatically paid back by reducing unnecessary care at hospitals needs to be further investigated. The various roles of the GP—gatekeeper, patient navigator, therapist and navigator—are of interest in this. Shared decision making has most potential in addressing both the demand-satisfying attitude of GPs and consumerism among patients. However, questions remain regarding the potential impact of such a strategy, and more research on shared decision making and alternatives is needed, because it is still in stage of infancy/a novel phenomenon. Our results indicate that further discussion and exploration by GPs and policy makers about the complicated and sometimes unintended effects of strengthening primary care and its interactions with unnecessary care may be fruitful. Supply-induced demand does not stop beyond medical specialists; primary care doctors are 'vulnerable' to it as well.

Declaration

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