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## Public trust in health care: a performance indicator?

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### ABSTRACT

**Purpose** – If public trust in health care is to be used as a performance indicator for health care systems, its measurement has to be sensitive to changes in the health care system. For this purpose, this study has monitored public trust in health care in The Netherlands over an eight-year period, from 1997 to 2004. The study expected to find a decrease in public trust, with a low point in 2002.

**Design/methodology/approach** – Since 1997, public trust in health care was measured through postal questionnaires to the “health care consumer panel”. This panel consists of approximately 1,500 households and forms a representative sample of the Dutch population.

**Findings** – Trust in health care and trust in hospitals did not show any significant trend. Trust in medical specialists displayed an upward trend. Trust in future health care, trust in five out of six dimensions of health care and trust in general practitioners actually did show a decrease. However, only for trust in macro level policies and trust in professional expertise this trend continued. For the remaining trust objects, after 1999 or 2000, an upward trend set in.

**Research implications/limitations** – No support was found for our overall assumption.

Explanations for the fact that trust did increase after 1999 or 2000 are difficult to find. On the basis of these findings the study questions whether the measure of public trust is sensitive enough to provide information on the performance of the health care system.

**Originality/value** – The aim of this research is to study public trust in health care on its abilities to be used as a performance indicator for health care systems.

### 1. INTRODUCTION.

Research on public trust in health care is relatively scarce. However, measurement of public trust in health care might be important for governments. It could provide them with information on the performance of the health care system from a users’ perspective (Goudge

and Gilson, 2005). To be an effective indicator of performance the measurement of public trust in health care should be liable to change. Therefore, changes in performance of the health care system have to be reflected through the measurement of public trust in the health care system. The aim of this research is to study public trust in health care on its abilities to be used as a performance indicator for health care systems. Therefore we studied its sensitivity to developments in health care and broader society. Our main research question is: can public trust in health care be used as a measure of performance of a health care system? To answer this question, we have monitored public trust in health care in The Netherlands over an eight-year period of time, from 1997 to 2004. We studied levels of trust in the health care system as a whole and in several aspects of care, in a health care organisation (hospitals) and in two health care professions (medical specialists and general practitioners). We studied developments in the Dutch health care system in this period of time and make an assumption on the expected trend of public trust in health care, consistent with the changes in Dutch health care. In order to do so, we firstly introduce the concept of public trust in relation to influential events in the health care system.

## **2. PUBLIC TRUST AND DEVELOPMENTS IN THE NETHERLANDS.**

Definitions of trust abound both in health care research and in general (Goudge and Gilson, 2005). In the field of health care trust is commonly understood as “the optimistic acceptance of a vulnerable situation in which the truster believes the trustee will care for the truster’s interests” (Hall et al., 2001). Two forms of trust can be distinguished, interpersonal trust and public trust. Interpersonal trust is trust placed by one person in another. This corresponds to the definition of Hall and others. Public trust is trust placed by a group or a person in a societal institution or system. It can also be described as “being confident that you will be adequately treated when you are in need of health care” (Straten et al., 2002). Public trust is a generalised attitude. Both types of trust are related, at least in the long run (Parker and Parker, 1993). Public trust is in part influenced by people’s experiences in contacts with representatives of institutions or systems and in part influenced by media images (Mechanic and Schlesinger, 1996).

### **[FIGURE 1]**

Public trust in its turn influences how people enter contacts with health care providers.

Consequently, there is a complex and mutual relationship between interpersonal and public trust. Figure 1 displays a model of this relationship and the way public trust in health care is influenced.

We suppose that the health care system influences public trust in two ways, by the availability of good quality care and institutional guarantees. Institutional guarantees relate on the one hand to basic conditions, such as government regulation of education of health care providers, protection of patients’ rights and independent inspectorates of health care quality. On the other hand, institutional guarantees relate to the way the agency relation between health care providers and patients is organised. In The Netherlands, these guarantees did not change over the past eight years and are therefore not further discussed. However, the availability of good quality care did change. In the past years, the Dutch health care system has lost its reputation as one of the best systems in the world (World Health Organisation, 2000), due to a lack of budget and capacity problems. Both problems have had direct consequences for patients needing treatment. Firstly, in 2002 the Ministry of Health estimated that about 500,000 patients were not able to find a personal general practitioner, due to shortages (Poortvliet et al., 2005). In the Dutch health care system, this is important, while general practitioners have a gate-keeping role, providing patients with access to secondary care if necessary. To fill this gap, in several cities initiatives were taken to provide these patients with alternative sources of primary care (Lutke Schipholt, 2003; Mielekamp, 2004). However, the problems remained. Secondly, patients referred to secondary care could

be confronted with waiting lists. Waiting lists were to a more or lesser extent present in all sectors of health care (Inspectie voor de Gezondheidszorg, 2003). The mentioned budget and capacity problems also influenced interpersonal contact with representatives of the health care system. For example, patients treated in secondary care did not always receive the best care. In a sample of medical specialists, interviewed by telephone in 2002, three quarters stated that there was an increase over the past five years in the frequency of situations where they could not provide patients with the care they thought necessary (Beaujean et al., 2002). According to the medical specialists, as a result patients' health was deteriorating (43 per cent), patients had to wait before treatment (25 per cent) or patients developed complications (25 per cent).

All these problems in the health care system and its consequences for the quality of care might have led to a decline of trust in health care.

From the second part of the 1990s, these problems in health care became common knowledge in the Dutch population. Bad personal experiences in health care might have led to patients spreading awareness on this topic in their own networks. Mechanic (1998) states that public trust or trust in large organisations and institutions tend to be shaped by media attention and public discourse. The media (newspapers, radio and television) reported on problems in health care, informing the Dutch public. However, initially the media reported less extensively on health care problems compared to the beginning of the twenty-first century. Until well in the 1990s, the problems were never fiercely debated in the political arena. Turning point were the pre-election debates of 2001-2002. Pim Fortuijn, a newcomer in Dutch politics, voiced the discontent of segments of the population on several topics, one of which was health care. The media covered his discontent extensively. As a result, his just founded political party (partly as a reaction to his assassination) became the second largest political party in The Netherlands[1]. In the coalition government that came to power after the 2002 elections the Fortuijn Party held the Ministry of Health. One of the new minister's spear points was to shorten the waiting lists in hospitals. However, already after 82 days (in October 2002), under elaborate media attention, the cabinet fell and the minister of health had to resign. Afterwards media attention subsided. The current government has introduced a health insurance reform in January 2006. In 2004 (when we last measured public trust in health care) there was no public debate about this issue yet. It is expected that the media especially in 2002 have had a negative impact on public trust in health care.

Public trust in health care might also be related to the broader social context of public trust in major societal institutions. We found information on public trust in the legal system, the police, the army, political parties and the government[2]. Public trust in these five institutions showed a declining trend with its lowest point in autumn 2003 and spring 2004. Except for trust in the government, in the autumn of 2004 trust was regained in all institutions (Figure 2).

Our overall assumption is that the problems and events that took place in this period of time in Dutch health care and the broader societal context have led to a decrease in public trust in health care, with its lowest point in 2002. In 2004 trust might be regained.

### **3. METHODS.**

#### **3.1 Study population.**

Data on public trust were collected in the Health Care Consumer Panel, consisting of approximately 1,500 members. This panel is a cross-section of the Dutch population and has been used to record users' views on health care and health policy. To provide an ongoing background to the views on policy issues, in 1997 public trust was introduced as a research topic. Every two years, one third of the consumer panel is renewed. This renewal ensures that the panel remains a cross-section of the population, that panel members do not develop specific knowledge of and attention for health care issues and no "questionnaire-fatigue" occurs. Public trust in health care was measured yearly, from 1997 until 2004 in Fall, with

exception of 2003. The response rate differed from year to year, with the highest response rate in 2004 (92.8 per cent) and the lowest in 2001 (67.5 per cent).

### **3.2 Questionnaire.**

The questionnaire consists of three parts. In the first part of the questionnaire, respondents could give a mark (ranging from 1 (no trust at all) to 10 (a lot of trust)) indicating their degree of trust in the health care system at present and in the future.

#### **[FIGURE 2].**

The second part of the questionnaire consists of a scale on trust in health care aspects (Straten et al., 2002). The trust-scale consists of six subscales, namely trust in the patient centred focus of caregivers, trust in the professional expertise of caregivers, trust that macro level policies will not have negative consequences for patients, trust in quality of care, trust in communication and provision of information, and trust in the quality of cooperation between caregivers. The items pertaining to the scales are described in Table I. All these items were presented on a four-point Likert scale, with response options ranging from very low trust to very high trust. In this part of the questionnaire, the respondents were able to state that they had “no opinion”. This option was added to ensure that questions were only answered when respondents were actually able to express their degree of trust on that specific topic. In the third part, trust in health care professions, such as general practitioners and specialists, and in health care organisations, such as hospitals, was measured. As in the second part of the questionnaire respondents could indicate their level of trust in professions and organisations on a four-point Likert scale. Here again, a “no opinion”-option was added.

#### **[TABLE 1].**

### **3.3 Data analysis.**

All together, we present information on eleven trust objects (six dimension on the public trust in health care scale, trust in health care at present and in future, trust in general practitioners, specialists and hospitals) from 1997 to 2004. Changes over time in these eleven trust objects were analysed by means of multiple linear regression analyses. To describe trends, a time variable (TIME) was constructed. For computational reasons, this time variable was centred around 2000 ( $\frac{1}{4} 0$ ). In order to model a curvilinear trend, a squared time variable (TIME<sub>2</sub>) was added. To optimise the estimation of the trend, TIME<sub>2</sub> was left out of the analysis when not significantly related to the trust object. The ‘no-opinion’-option was left out of the analyses. We controlled for age, sex and education, because the samples slightly differed from year to year on age, sex and education. Because of the regular renewal of panel members, data were analysed as if they constituted independent samples. Tests of significance were based on the 0.05 level. SPSS 11.5 was used.

## **4. RESULTS.**

### **4.1 Public trust in the health care system.**

Respondents were asked to rate their trust in the health care system at present and in future (Figure 3). Looking at the results, trust in the health care system at present is rated consistently higher than trust in health care in future.

Trust in health care at present does significantly change over time (Table II). It shows a positive curvilinear trend. Trust in future health care declines significantly from 1997 to 2004.

The six dimensions of the public trust in health care scale provide a closer view of public trust (Table II).

**[TABLE 2]**

A noticeable finding is the relatively small amount of trust placed in policies on macro-level. Compared to the other dimensions, also trust in the quality of cooperation between caregivers is relatively low. Except for the dimensions trust in communication and quality of cooperation, all dimensions show a significant negative trend. Apart from trust in macro level policies, all dimensions also display a positive curvilinear trend. The raw data indicated that for the dimensions “patient centred focus” and “quality of care”, the lowest point in the curve appeared in 1999; for the dimensions “communication and provision of information” and “quality of cooperation”, this lowest point appeared in 2000. From that moment on, these dimensions show an upward trend.

**4.2 Public trust general practitioners, specialists and hospitals.**

General practitioners and specialists are highly trusted by the public. Trust in hospitals is slightly lower (Figure 4).

The trends are remarkably similar, with a lowest point in 1999 and an increase afterwards (Table II).

**5. DISCUSSION.**

The aim of this research was to study public trust in health care on its abilities to reflect changes within the health care system. Therefore, we studied public trust in health care in relation to important developments in Dutch health care and politics, which could have influenced levels of public trust in health care over the past eight years (from 1997 to 2004). Our overall expectation was to find a decrease in public trust, with a low point in 2002, and a possible regaining of trust in 2004. This pattern of first decreasing and later on increasing public trust was only found in three instances: the dimensions of the public trust in health care scale concerning a patient centred focus of health care providers, professional expertise and quality of care. However, we did not find a lowest point in 2002, but rather in 1999 or 2000. The most common time pattern was a stable level of trust (with small fluctuations) and an increase in 2004.

**[FIGURE 4]**

This pattern was found for two dimensions of the public trust in health care scale, for trust in the present state of health care, for trust in general practitioners and for trust in hospitals. Finally, we found two instances of declining trust, viz. trust in the future state of health care and trust that macro level policies will not have negative consequences for patients. There is a widening gap between trust in health care at this moment and in the future. Trust levels increased in only one instance, namely for trust in medical specialists.

All in all, these patterns deviate from what we had expected. The most consistent finding of our trend analysis is that public trust in health care shows small fluctuations but is actually remarkably stable. This stability could either reflect the reality of generalised public attitudes towards health care among the Dutch population or it could reflect lack of sensitivity of the measurement of public trust. There are some arguments in favour of the first position. Health is a very salient subject; it is currently the most important value in Dutch society (Sociaal en Cultureel Planbureau, 1999). One would expect threats in the form of decreasing health care quality to be taken up quickly and translated into changes in public trust. However, apart from issues such as waiting lists decreasing quality might be difficult to observe for lay people.

Alternatively, people may get used to a certain level of quality, especially when changes are not sudden and large. The number of people who regularly use health care services, apart from GP-care, is relatively small. This means that the experience base for changes in public trust is small, but also people might be more susceptible to, e.g. media influences.

Lack of sensitivity of the instrument cannot be excluded. Almost no studies were conducted on the development of trust in health care through time. We only found one study performed by Blendon and Benson (2001). In this study, trust in health professions and institutions showed a declining trend. However, the time span of this study was much larger, 50 year instead of eight years.

In conclusion, problems in health care and the political events were not directly reflected in the levels of trust in health care. We found that fluctuations of trust in health care are relatively small and within the same range. On the basis of these findings we question whether public trust provides usable information on the performance of the health care system. Public trust only slightly changed through the years and changes are difficult to interpret. One can therefore dispute whether our measure of public trust gives policy makers enough insight in trust in health care and will provide them the input they need for their decisions. On the other hand, public trust should possibly be measured over a larger time span to make plausible assumptions on the development of public trust in health care. This should be subject to further investigation.

#### NOTES.

1. Available at: <http://verkiezingen.pagina.nl> (accessed November 2004).
2. Available at: [http://europa.eu.int/comm/public\\_opinion/index\\_en.htm](http://europa.eu.int/comm/public_opinion/index_en.htm) (accessed May 2005).

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FIGURES EN TABLES

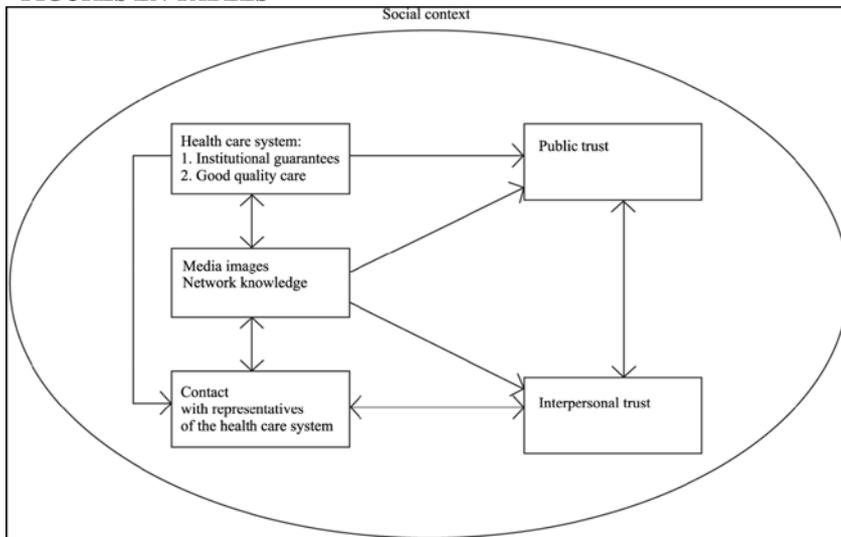
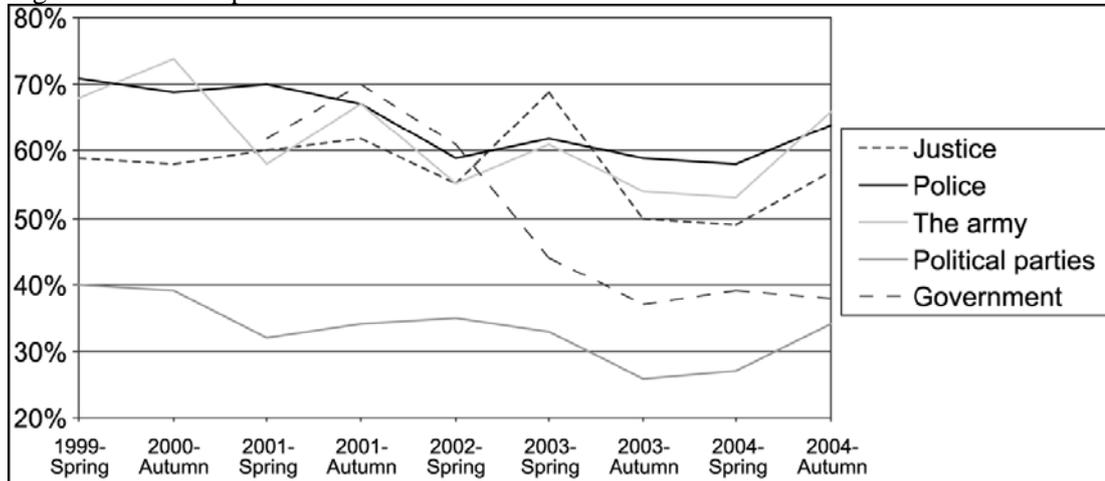


Figure 1. Model of public trust in health care



Source: Eurobarometer 51, 54, 55, 56, 57, 59, 60, 61, 62 (web source, 2005)

Figure 2. Percentages of Dutch population who place trust in justice, police and the army over the years

How much do you trust that ...	
Patient centered focus	Doctors will take their patients seriously Doctors will pay sufficient attention to their patients Doctors will listen to their patients Doctors spend enough time on their patients
Macro level policies	Cost-cutting will not be to the disadvantage of patients Patients will be able to meet their own financial contribution requirement Waiting lists will not be at the costs of medical help and care to patients Patient will not be the victim of rising costs of health care Waiting lists will never be too long
Professional expertise	Doctors can do everything Doctors know everything about all sorts of diseases New treatments are put into practice in the health care system The education and training of doctors in this country is one of the world's best
Quality of care	The right dosage will given Doctors will not prescribe medicine too late Patients receive correct medication A lot of care is taken to keep patients' medical information confidential in the health service Doctors will not do too few tests Doctors will give the patients the best treatment Doctors will make the right diagnosis
Communication and provision of information	Patients will get sufficient information about the effects of the treatment Patients will get sufficient information about the treatment options Patients will be given information that they can understand Patients will get sufficient information about the cause of their problems
Quality of cooperation	Doctors will discuss things thoroughly with their patients Health care providers are good at co-operating with each other Doctors will not give conflicting information The tendency towards a high degree of specialization does not cause

Table I. Public trust in health care: items sub-scales

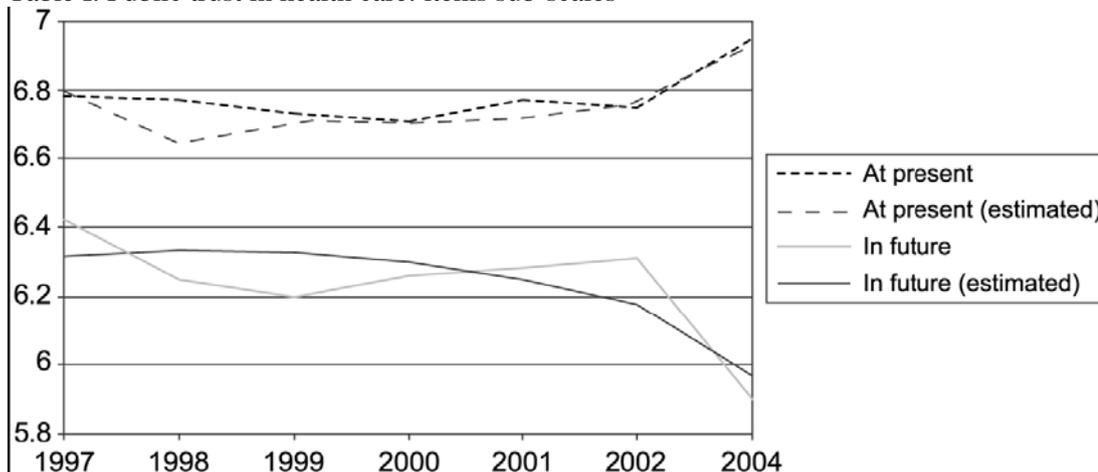


Figure 3. Rating public trust at present and in future (1 no trust at all-10 a lot of trust), raw data and estimated line on basis of regression

	$R^2$	Constant		Time		Time <sup>2</sup>	
		B	(SE)	B	(SE)	B	(SE)
Trust at present	0.014	6.7*	(0.017)	0.005	(0.006)	0.013*	(0.002)
Trust in future	0.005	6.3*	(0.022)	-0.039*	(0.008)	-0.011	(0.003)
A. Patient-centred focus	0.053	2.45*	(0.008)	-0.021*	(0.003)	0.012*	(0.001)
B. Macro level policies	0.019	1.89*	(0.006)	-0.021*	(0.003)		
C. Professional expertise	0.020	2.49*	(0.008)	-0.033*	(0.008)	0.002*	(0.0021)
D. Quality of care	0.089	2.46*	(0.008)	-0.059*	(0.003)	0.0018*	(0.001)
E. Communication and provision of information	0.020	2.50*	(0.008)	0.004	(0.003)	0.005*	(0.001)
F. Quality of cooperation	0.033	2.29*	(0.009)	0.000	(0.003)	0.005*	(0.001)
General practitioner	0.012	3.01*	(0.009)	0.000	(0.003)	0.007*	(0.003)
Specialist	0.012	2.98*	(0.009)	0.011*	(0.003)		
Hospitals	0.020	2.75*	(0.011)	0.007	(0.004)	0.005*	(0.002)

Notes: Controlling for age, sex and education; \* $p < 0.05$

Table II. Trend testing on trust at present and in future

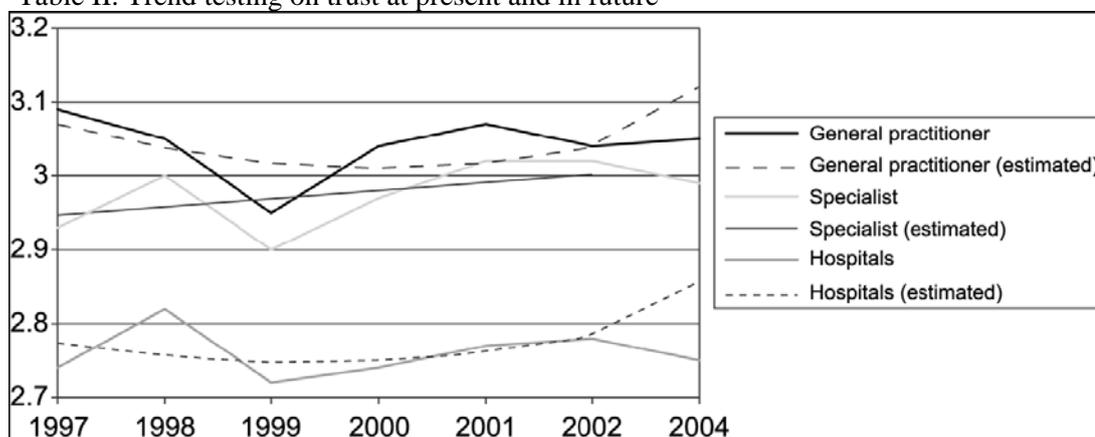


Figure 4. Public trust in general practitioner, specialist and hospital (mean, scale 1-4), raw data and estimated line on basis of regression