# National standard setting for quality of care in general practice: attitudes of general practitioners and response to a set of standards

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SUMMARY. The Nederlands Huisartsen Genootschap (NHG), the college of general practitioners in the Netherlands, has begun a national programme of standard setting for the quality of care in general practice. When the standards have been drawn up and assessed they are disseminated via the journal Huisarts en Wetenschap. In a survey, carried out among a randomized sample of 10% of all general practitioners, attitudes towards national standard setting in general and to the first set of standards (diabetes care) were studied. The response was 70% (453 doctors). A majority of the respondents said they were well informed about the national standard setting initiatives instigated by the NHG (71%) and about the content of the first standards (77%). The general practitioners had a positive attitude towards the setting of national standards for quality of care, and this was particularly true for doctors who were members of the NHG. Although a large majority of doctors said they agreed with most of the guidelines in the diabetes standards fewer respondents were actually working to the guidelines and some of the standards are certain to meet with a lot of resistance. A better knowledge of the standards and a more positive attitude to the process of national standard setting correlated with a more positive attitude to the guidelines formulated in the diabetes standards. The results could serve as a starting point for an exchange of views about standard setting in general practice in other countries.

# Introduction

THERE is general agreement that it is crucially important to set standards and criteria for the quality of care. Various methods are used to formulate these standards. In some countries (for example the USA and the Netherlands) consensus meetings are organized to develop guidelines for daily practice. Views on standard setting in general practice differ in different countries. In the UK the emphasis is on standard setting in regional groups or on doctors setting objectives and standards for their own practice. The Nederlands Huisartsen Genootschap (NHG), which is the Netherlands college of general practitioners, has chosen to set national standards. These are meant to reflect the 'state of the art' in Dutch family practice and to be used as guidelines for medical audit, quality assurance, evaluation in vocational training and continuing education.

The question remains: how acceptable is national standard setting? From research carried out in the USA and the UK it has been shown that only a minority of care providers actually know about the results of the setting of standards and guidelines and are willing to change their practice. 6-10 The aim of this

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survey among general practitioners in the Netherlands was to answer the following questions: What do general practitioners think of the standard setting activities carried out by the NHG? What is their attitude towards the first set of standards (diabetes)? What are the main factors preventing implementation of this set of standards?

#### Method

Drawing up and dissemination of standards

A standard setting advisory board of the NHG selects topics for standard setting. Small working parties of four to five experienced general practitioners and researchers then develop a draft for each set of standards. This draft document is sent to 50 general practitioners who are asked to comment. After adjustments have been made the standards are evaluated by an independent scientific committee and only 'authorized' if this group gives its seal of approval. The standards are then published in the Dutch scientific journal for family doctors (Huisarts en Wetenschap). The essential features of each set of standards are printed on a small plastic card and are sent with the journal to the doctors. About 55-60% of general practitioners receive the standards in this way. However, the first three sets of standards (for diabetes mellitus type II, oral contraception and the referral letter) were sent in the spring of 1988 to all general practitioners in the Netherlands to attract attention to this new development. The NHG aims to present eight to 10 new sets of standards each year.

#### Survey

A questionnaire was sent to a randomized sample of 10% of all general practitioners in the Netherlands. A mixture of open and closed questions measured: how well informed the respondent was about the national standard setting campaign (selfreport, four point scale ranging from 'very well informed' to 'not at all informed'); how well informed the respondent was about the precise content of the first two standards (self-report, four point scale ranging from 'completely informed' to 'not at all informed'); the respondent's attitude to national standards (seven topics, five point Likert-scale ranging from 'strongly agree' to 'strongly disagree'); the respondent's attitude to the NHG as the provider of the standards (three topics, five point Likertscale ranging from 'strongly agree' to 'strongly disagree'); the respondent's opinion about the standard for diabetes mellitus type II and existing routines in diabetes care ('yes' and 'no'); the respondent's problems with or reasons for not working according to this standard (three point scale ranging from 'yes, this is a problem', through 'this is somewhat a problem', to 'no, this is not a problem'); practice characteristics: age, experience as a general practitioner in years, membership of the NHG, involvement in education and degree of urbanization of practice location.

The questionnaire was sent to the sample of doctors six weeks after the diabetes standards and two weeks after the oral contraception standards had been distributed to all general practitioners in the Netherlands. The response rate was 70% (453 doctors). The age distribution of the respondents was the same as the age distribution of the national population of family doc-

tors. Among the respondents there were more NHG members than among the non-respondents (55% of 453 versus 50% of 197). In order to trace a possible selection bias, 40 doctors were selected at random from the non-respondents. In an interview by telephone they proved to be less well informed about the initiative of the NHG and less positive to the NHG as a source of such standards.

# Analysis

Frequencies of response were calculated; factor analysis was used to study clustering of items in the various questionnaires. Analysis of variance and correlation analysis was carried out to determine the relationship between attitudes to the standards and the characteristics of the general practitioners.

#### Results

# Knowledge about standards

Of the 453 respondents 71% said they were well informed or very well informed about the national standard setting campaigning; only 7% did not know about it. The set of standards for diabetes care was distributed six weeks before the survey: 77% of the respondents said they knew the content of the standards well or very well. In the case of the oral contraception standards, which were distributed only two weeks before, this was true of 62% of the respondents.

# Attitude to national standards and to the NHG

About 80% of the respondents were in favour of national standards for family practice care as a model or as a basis for their daily work and as a way to get doctors to work along the same lines (Table 1). However, 56% thought that such standards should

**Table 1.** General practitioners' attitudes to national standard setting and to the Nederlands Huisartsen Genootschap (NHG) as a source of national standards.

	Percentage of respondents (strongly) agreeing (n = 453)	Principal component analysis (factor loadings)
Attitude to national standard setting		
National standards give a basis for daily work National standards are	82	0.65
important to get doctors working along the same lines	79	0.73
National standards make the tasks of the family doctor		
clear to the community National standards should	61	0.66
not become obligatory Patients are too different for national standards to	56	0.47
be used National standards can be	26	0.75
abused	23	0.47
(explained variance, first fact	tor 41%)	
Attitude to NHG as a source of national standards		
The NHG has the competence to set		
standards The NHG is suitable for	86	0.86
setting standards The NHG is representative	85	0.76
enough to set standards	57	0.89
(explained variance, first fact	tor 70%)	

n =total number of respondents.

not become obligatory. Almost a quarter were afraid that the standards could be abused, for instance by the government, insurance companies or patients.

About 85% thought that the NHG was competent and suitable for developing national standards (Table 1). Only 57%, however, felt that this organization was representative enough in this respect. In particular they mentioned the Landelijke Huisartsen Vereniging (the Netherlands association of family physicians) and the university departments of family medicine as likely candidates for participating in this activity.

Analysis of variance was used to see if there was a relationship between attitude to and knowledge about the standard setting campaign on the one hand and age, experience as a doctor, degree of urbanization of practice location, experience with auditing, membership of the NHG and involvement in education on the other. Only membership of the NHG proved to have a significant influence (Table 2); members of the NHG were better informed and had a more positive attitude to national standards than non-members.

Factor analysis (principal component analysis) showed a clustering of the items in the questionnaires for the attitudes to national standard setting and to the NHG as a source of such standards (Table 1). For every doctor a score for these attitudes was determined to facilitate correlation analysis. A more positive attitude to national standards correlated with a positive attitude to the NHG (Pearson correlation coefficient, 0.25, P < 0.001). Being better informed about the standards showed a significant correlation with a more positive attitude to national standards and to the NHG (Table 3).

**Table 2.** General practitioners' knowledge of and attitudes to national standards according to membership of the Nederlands Huisartsen Genootschap (NHG).

	Percentage of respondents	
Knowledge of and attitudes to standard setting	Members of NHG (n = 236)	Non- members of NHG (n = 217)
Well informed about the national		
standard setting campaign	<i>82</i>	<i>60*</i>
Well informed about content of the		
diabetes standards	83	71*
Well informed about content of the		
contraception standards	69	55 <b>*</b>
Positive attitude to NHG as a source	)	
of standards	68	45*

Difference between groups significant (ANOVA) \*P<0.01. n = total number of respondents.

**Table 3.** Relationship between general practitioners' knowledge of standard setting and attitude to national standards.

	Pearson correlation coefficients	
Knowledge of standard setting	Positive attitude to national standards	Positive attitude to NHG as source of standards
Well informed about the national standard setting		
campaign	0.17***	0.20***
Well informed about content of		
diabetes standards	0.12**	0.28***
Well informed about content of oral contraception standards	0.11*	0.24***

<sup>\*\*\*\*</sup>P<0.001, \*\*P<0.01, \*P<0.05.

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Attitude to diabetes standards and current routines in diabetes care

The aim of the diabetes standards is for the general practitioner to carry out the management and surveillance of diabetes mellitus type II entirely in general practice. Every three months a check-up of blood glucose levels and weight has to be carried out. Every year a more extensive examination of a blood pressure, feet, eyes, and the like is recommended. Implementing a system for the proper surveillance of these patients is also recommended. The doctors in the study were asked about some of these guidelines (Table 4). There was a gap between attitude to the standard and the routines the doctors said they performed. Regular check-ups were not carried out by a number of doctors. Changing the record system to facilitate the surveillance of diabetes patients appeared to be meeting with a great deal of resistance from the profession.

By means of factor analysis a score per doctor was developed for the attitude to the diabetes standards. A positive attitude to this set of standards correlated with a better understanding of the content of the standards (Table 5), but also with a more positive attitude to national standards in general and the NHG as a source of standards.

# Problems with implementation of diabetes standards

Table 6 shows the problems and barriers which the respondents had with working to the standards for diabetes care set by the NHG. For many family doctors in the Netherlands it will be particularly difficult to adopt an active approach to diabetes patients. In addition, the fact that medical specialists do the check-ups at the moment, and the absence of a financial incentive as a reward for changing practice routines prevented some of the respondents from accepting this standard. The possibility that they might be lacking in knowledge did not seem to pose a problem to the respondents.

## Discussion

Although there was some selection bias in the data and although we assessed opinions and not the actual practice performance of general practitioners, we can conclude that the national standard setting of the Nederlands Huisartsen Genootschap has met with a positive response from the majority of general practitioners in the Netherlands. They knew what was going on and had read the first two standards; they saw national standards as a mainstay in their daily work and a way to keep doctors working along the same lines; they were receptive to the procedure whereby 'expert groups' of family doctors formulate the standards and they accepted most of the guidelines for diabetes care. The conclusion is that setting standards on a national basis should be given serious consideration by professional organizations of general practitioners in various countries. This could also serve as a starting point for the exchange of standards, guidelines and protocols for general practitioner care between these countries.

Nevertheless, the findings present some problems which should be examined seriously. Although doctors in the Netherlands appreciated the importance of national standards, the majority of them did not want them to become 'obligatory' at this stage. A large proportion were afraid of the possible abuse of these standards; for example, patients could start legal proceedings with a standard in their hand. This demands a discussion about the main aim of the system of national standard setting. Are the standards meant to be a basis for training and continuing education or criteria which have to be met to become a certified general practitioner? The professional organizations of family

Table 4. General practitioners' attitudes to standards for and current practice in care of patients with diabetes mellitus type II.

	Percentage of respondents (n = 453)	
Standards for care	Agreeing with standards	Working to standards now
Blood glucose check every 3 months	92	89
Blood glucose value (after fasting):		
>6.7 mM	<i>82</i>	62
Weight check every 3 months	<i>79</i>	<i>62</i>
Inspection of feet every year	84	44
Marking practice records or special		
diabetes record	71	33

n = total number of respondents.

**Table 5.** Relationship between general practitioners' knowledge of and attitude to national standards and their attitude to the diabetes standards.

Knowledge of and attitudes to national standards	Pearson correlation coefficent for positive attitude to diabetes standard
Well informed about the national standard	
setting campaign	0.18***
Well informed about content of diabetes	
standards	0.18***
Positive attitude to national standard setting	0.19***
Positive attitude to NHG as source of	•
standards	0.22***
*** <i>P</i> <0.001.	

Table 6. Problems which general practitioners have with working according to the diabetes standard.

Problems with working to diabetes standards	Percentage of respondents agreeing (n = 453)	
An active approach is obligatory	63	
Every patient is different	59	
Medical specialist does check-up	46	
Routines are too strong to change	44	
No financial reward for changing routines	38	
Takes extra time and energy	33	
Diabetes patients are not used to it and will		
protest	25	
Doubtful whether it will have any effect		
on the patients	24	
Lack the right knowledge/skills	13	

n = total number of respondents.

doctors have not finalized their position on this matter, up to the present moment, although the Landelijke Huisartsen Vereniging has proposed a recertification on the basis of medical audit in the near future.

Another problem is the future distribution and implementation of the standards. Many people had already heard about the standard setting activities some time before they were released and were looking forward to receiving the first set of standards (diabetes). The question is, will the interest in new standards decrease or increase in the future or will this vary with different standards? Regular surveys will be made in order to provide

answers to this question. It would be interesting to see the reaction of family doctors in other countries to this type of standard setting.

Nevertheless, even if there is a good dissemination of the standards and acceptance of them by doctors, there is no guarantee that doctors will change their practice routines. We know from the literature that there is often a big gap between what doctors know and are able to do and what they actually do in reality.11 There may be all kinds of (good and logical) reasons why doctors do not amend their practice habits in response to standards: for example the standard is not feasible in the local situation or working according to the standard leads to problems in the doctor's relationship with patients or colleagues. 12 Every set of standards will cause specific implementation problems, as we saw for the diabetes standard. A careful analysis of these problems should be part of the testing and implementation of each new set of standards. Again, it would be interesting to see if different health care systems indicate different implementation problems. A more general point is that more research should be carried out to answer the crucial question: which interventions are effective in influencing the practice behaviour of the providers of care?

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