9 Discussion

9.1 Introduction

Data concerning second opinions so far are few. The main objective of the present study is to gain more insight into the phenomenon. Second opinions may be investigated from two angles: from a medical scientific point of view, with as its centre the question of the assessment of the merits of second opinions as regards medical content, or from the point of view of health services research. The latter is concerned with the social backgrounds of second opinions, the processes involved and the efficiency of second opinions in health care. In the present study, the emphasis is on health services research, but we have also attempted to present a sketch of the medical aspect of second opinions as regards contents.

The questions considered in this study were:

Chapter 2: How do we define a second opinion?
Chapter 3: What proportion of the new patients visits the outpatient clinics of orthopaedics of university hospitals for a second opinion and what are the social-demographic characteristics of these patients (as compared with other patients)?
Chapter 4: Who as a rule takes the initiative for the second opinion and what have been the motives for doing so?
Chapter 5: How often are there differences of opinion of medical relevance between the first and the second opinion specialists?
Chapter 6: Is the patient satisfied with the second opinion, and what has been the ultimate effect of the second opinion?
Chapter 7: What are the social consequences of an increasing number of second opinions?
Chapter 8: What guidelines may be given for requesting and handling second opinions?

To conclude the thesis, this chapter presents a discussion of the results of the study. A summary will be given of the answers to each question studied, and their relevance to the orthopaedic surgeon and to policy will be explained in some detail.

9.2 Definition

In the Netherlands no one, either physicians, patients or insurers has an unequivocal definition of the concept of ‘second opinions’. Before proceeding in this study to making pronouncements about second opinions and developing guidelines for them, it was necessary to arrive at a clear, practical definition.

In our study, a second opinion is defined as follows:

‘A second opinion is a consultation at which a patient within two years after the first consultation is seen for the same complaints by a second specialist of at least the same level of expertise in order to obtain an independent opinion of the diagnosis made or the treatment proposed by a first specialist. The second opinion specialist should have personally interviewed and examined the patient.'
The maximal time interval between last consultation or treatment by the first opinion specialist and the second opinion is put in this study at 2 years, a rather arbitrary period. In studies of the USA the term as a rule is put at one year. There are two reasons to make the term at a little longer than one year. In orthopaedics, second opinion patients frequently suffer from prolonged (pain) symptoms of the locomotor apparatus. In this study the mean duration of symptoms of second opinion patients was 4.5 years. In addition, in the Netherlands there sometimes are fairly long waiting lists for a first visit to an outpatient clinic. In Groningen University Hospital (Academisch Ziekenhuis Groningen, AZG) the waiting period for a first visit to the outpatient clinic at this time of the study amounts to 2 or 3 months.

It was assumed from the beginning that there would be a difference between second opinion patients and patients with a tertiary referral. The latter were defined as patients referred by their first consultant with the objective of having the AZG take over the treatment. Six hundred and twenty-five second opinion patients were compared with 90 tertiary referral patients. Little difference was found between the two groups as regards features of background or diagnosis. In the context of this study the question arises if it is of real importance to distinguish between second opinions and tertiary referrals. Distinguishing between the two groups in practice proved to be not so simple. The main difference between a tertiary referral and a second opinion is whether the first opinion consultant did or did not intend to continue treating the patient, and on this subject the patient and the second opinion consultant in general are more or less in the dark. In all probability, it is mostly the patients themselves who decide by whom they want to be treated further, and this decision is often only taken after the second opinion. In this respect the patients have a free choice of doctors. Consequently, the a priori distinction between the two groups cannot be adequately made, and also has little relevance.

9.3 Volume and composition of the patient group

9.3.1 The results of this study

The first opinion, second opinion and tertiary referral patients proved to be similar with regard to sex, civil status, level of education and profession. A strikingly large proportion (26%) of the second opinion patients had already consulted more than one specialist for the same symptoms.

It was found that most of the symptoms of the total study population were of a chronic nature. The duration of the symptoms varied widely, some patients had had symptoms for 10 to 20 years. Second opinion patients had had their symptoms for a significantly longer time than the other two groups. The total study population had a mean duration of symptoms of 4 years, that of the second opinion patients was found to be 6 months longer. The nature and duration of the symptoms and diagnoses made by the AZG consultants did not justify the conclusion that second opinion patients objectively considered had more severe disorders than the first opinion patients. Accordingly, this study provides no reasons to conclude that the disorders of second opinion patients were more difficult to treat. However, second opinion patients and tertiary referral patients subjectively did experience more physical restrictions than the first opinion patients. Obviously, the sickness behaviour and the wish for a second opinion were influenced by other factors than just the objective disorder, such as the need for certainty or more information, chronic complaining behaviour, a disturbed relationship with the first consultant or a suspicion of complications caused by (mal)practice.

9.3.2 Relevance of the findings to the orthopaedic surgeon

Specialist-initiated second opinions (and tertiary referrals) occurred mostly in the smaller practices (< 3 orthopaedists). This may be due to the fact that in the larger practices there are more possibilities for an 'internal' second opinion. Also, in larger practices orthopaedists will as a rule be more sub-specialized, so that there is less need for second opinion.
9.4     Motives for requesting for a second opinion

9.4.1  The results of this study

Need of certainty and information

Although there is a need for more information and certainty among patients, in our study this
did not turn out to be a clear reason to initiate a second opinion. In other studies of second opinions,
however, it did appear to be a reason: according to Sutherland and Verhoeof (1989) second opinion
patients often felt the need of confirmation of diagnosis and treatment. Takeshi et al. (1999) found
that second opinion patients less often were capable of understanding the explanation of the (primary
care) physician. Mellink et al. (1999) concluded that the patients in the Daniël den Hoed Clinic
mostly wanted a second opinion out of need for more certainty or more information. Of course, this
represents a selected patient population. Oncological patients may feel more need for certainty or
information because the condition diagnosed in them is frequently life threatening.

Chronic complaining behaviour

In 15% of our study group, no medical physical explanation could be found of the
symptoms either by the first or by the second opinion physician. In all likelihood, this proportion is
actually larger; this is the consequence of the method of registration. The first and second opinion
specialists will have had the tendency to state a diagnosis on the questionnaires of this study as
often as possible. Furthermore, a number of non-pathophysiological diagnoses such as ‘low back
pain’ have not been counted as medically unexplained physical symptoms, although in a number of
cases the physician will have been unable to explain the physical symptoms.

A large group of the second opinion patients in our study can be counted as ‘chronic
complainers’. Over 25% of the patients in the preceding two years had already consulted more than
one specialist for the same symptoms. Fifteen per cent of the patients had already consulted two
specialists, 5% of the patients three specialists, and 6% of the patients four or more specialists.
After a second opinion in the AZG, 22% of the patients once more required an opinion from another
specialist, while 11% once again asked the opinion of their GP.

Doctor-patient relationship

Our study showed that patients in general do not request a second opinion because they
doubted the first consultant’s medical actions and expertise, but because they were not satisfied
with the communication with him/her. Enquiries among the first opinion consultants showed that
these often were not aware of the communication problems. Apparently, patients fail to make their
lack of satisfaction clear enough to their doctors.

The literature, also, shows that patients often request second opinions because they are dissatisfied
with the communication with the specialist who treated them. Mellink et al. (1999) and
investigated the second opinion patients in the oncological outpatient department of the Daniël den
Hoed clinic reported that approximately one-quarter of the patients were dissatisfied with the first
consultant, mostly about the doctor-patient communication.

Complications due to medical (mal)practice

Thirteen per cent of the patient population attended with complaints that had arisen or
persisted after the medical treatment. The commonest problem was persistent symptoms after an
operation performed because of osteoarthritic symptoms (26%).
9.4.2 RELEVANCE OF THE FINDINGS TO THE ORTHOPAEDIC SURGEON

Need of certainty and information

The majority of the patients in our study wanted more information about the diagnosis (54%) and the treatment (69%).

In the past, not all information was shared with the patient, but nowadays doctors have learned to explain the various possibilities and the uncertainties in medicine to their patients. Also, the Medical Treatment Agreement Act (Wet Geneeskundige Behandelings Overeenkomst, WGBO) obliges physicians to provide information about the nature of the intervention, the prognosis, the possible complications and alternatives before every intervention. However, physicians find it difficult to estimate how much information should be provided and what is the effect of a possible overdose of information. One of the main problems in this respect is that patients vary greatly in their need for information and their decision-making power.

Furthermore, the information given is frequently not well understood by the patient. Ley (1988) compared different studies on this subject, and found that 7 to 47% of the patients visiting a general practitioner failed to understand the explanation of the diagnosis. In addition, 13 to 53% did not understand the explanation of the prognosis. In the hospital, 20 to 60% of the patients did not adequately understand or reproduce the information given. The mediocre understanding and the poor memory for medical information have a number of causes. The patient’s degree of understanding and remembrance is determined by the background knowledge already present, the (selective) attention during the consultation and the emotional charge of the information.

The transfer of information might be more effective if news and advice is not mixed up, and if the physician clearly pays attention to the patient’s emotional reaction, does not provide too much information all at once, structures the conversation and summarizes it. Subsequently, the physician should check whether the information is received, remembered and understood. ‘Medical jargon’ and ‘vague quantitative terms’ such as often, sometimes, rarely, etc. should be avoided as much as possible.

It is emphasized in many studies that the length of consultation time is a weighty factor regarding the patient’s satisfaction with the information given. A longer time for consultation reduces the patient’s stress and enables him to take in the information better. Research has proved that for a good and complete transfer of information a minimum of 19 minutes’ contact time is required. However, owing to the structure and funding of the health care system, this is at present not feasible.

Chronic complaining behaviour

Before raising the question of why a patient requests a second opinion, we must ask ourselves why a patient in general consults a (family) doctor for his complaints. The decision to consult a physician is based not only on the presence or absence of objectively demonstrable physical problems. Other, subjective health considerations also help determine help-seeking behaviour.

A number of models have been elaborated for the explanation of help-seeking behaviour, and one of the most widely used of them is the Health Belief Model. According to the Health Belief Model, the decision to visit a general practitioner can be explained by four factors:

1. the degree to which a patient experiences the symptoms as a threat to her/his health
2. the patient’s capacity to cope with the complaints without help
3. the extent to which the patient believes that a visit to the doctor will be effective in attenuating the health problem
4. ‘stimuli to act’ make the patient decide to visit the doctor. This may be internal stimuli (e.g. symptoms of disease) or external ones (e.g. influences of relatives and friends, television programmes).

Patients consult their physician because of the severity of the complaints as they experience it, not because of the medically defined severity of their complaints. The symptoms experienced depend on many factors, some of which bear little or no relationship to the disease and may have a strong individual and social colouring. For instance, psychological stress may cause people to become concerned or focussed on physical symptoms which in normal conditions they would ignore. The
The subjectively experienced state of health is classified as the best predictor of the medical consumption. The poorer the subjectively experienced state of health, the larger the medical consumption. According to Boelema et al. (1994) and Groenewegen and Delnoy (1997), the general practitioner owing to the central part he plays in health care exerts a distinct influence on the medical consumption. This holds true both of the consumption in the GP’s office and of the consumption in the secondary care (the referral behaviour). The part played by the GP has not been taken into account in our study.

Chronic complaining behaviour is a concept used in particular in the literature on general practice medicine. The term refers to behaviour of people who ‘somatize’, patients with bodily symptoms explained insufficiently or not at all by a physical disorder. There are also often indications that the symptoms are closely connected to or even determined by the psycho social functioning. Many classifications have been published of the condition of patients with medically unexplained physical symptoms. Some examples are: somatoform pain disorder, somatization disorder, conversion disorder, body dysmorphic disorder. For the sake of clarity, below we shall only discuss medically unexplained physical symptoms, without dwelling in detail on their various forms. Every specialism knows its patients with medically unexplained physical symptoms. Patients with unexplained muscle and joint pains often also have symptoms that point to the chronic fatigue syndrome, tension headache or non-ulcer dyspepsia. Patients with unexplained symptoms have the following symptoms or features in common:

1. physical complaints without abnormal physiological parameters
2. frequent psychological symptoms
3. relatively many obstacles in normal physical functioning

The treating physicians usually have difficulty in making a good diagnosis and prescribing a satisfactory treatment in these patients.

It appeared from a study by Speckens (1995) that over half of all patients attending an outpatient clinic for general internal medicine presented symptoms for which ultimately no medical cause could be found. Other investigations showed that 20 to 40% of the patients who visited medical specialists did not get a classifiable diagnosis. On the whole it appears that three-quarters of these patients spontaneously recover or show distinct improvement. Patients with medically unexplained physical symptoms are often on the look-out for a medical diagnosis they may use to explain and legitimize their complaints. Patients desire a concrete, causal, physically oriented explanation of their complaints. Most explanations doctors offer about the symptoms are regarded by the patient as a denial of their problems. Chronic complaining may have several undesired consequences: the extra burden to be borne by the patient himself, the appeal made to physicians and the growing costs of health care. Various studies have shown that this group of patients in general make a major appeal to health care; the costs of somatizing patients are six to nine times as high as those for non-somatizing patients. This is brought about by extra examinations and a longer average hospital stay. The additional medical consumption is to be attributed more to the patient’s appeal to health care and the defensive medicine in a civilized society than to the medical indications for the treatment. Doctors often feel helpless vis-a-vis patients with chronic complaining behaviour. Doctors want to resolve patients’ problems while the patients on the contrary need their complaints and depend on doctors’ care. Unexplained and/or chronic complaints often discourage both the patient and the doctor. Although in medical circles interest in integration of psychic and somatic models is growing, its implementation in medical practice is still underdeveloped. Specialists in the treatment of this sort of patient often employ the dualistic thought model: in general it is assumed that the symptoms are due to either physical or mental causes, but usually not to both. Owing to technical progress in medicine, the dualistic model threatens to become increasingly popular, because organic pathology can be excluded by multiple supplementary examinations. Patients with unexplained symptoms frequently strongly resist a psychological or a multi factorial explanation of their symptoms, because in their view this would mean that their complaints are not genuine, but ‘all in their imagination’. They feel the ‘genuineness’ of their symptoms is not recognized. Such patients will be inclined to find other physicians to justify their sensation of sickness.
Early detection and treatment of 'somatization' is essential. Delay will only corroborate the patient in the idea that he/she is ill, and it may result in an endless, fruitless quest for an organic aetiology. It is important that the treating physician concludes the diagnostic phase as distinctly as possible, after having explained it clearly to the patient. The patient should be made to realize that a further search for a demonstrable physical pathology is useless. Chronic complainers should be strongly discouraged from consulting other physicians. The treatment amounts (if the explanation given is accepted by the patient) to shifting the responsibility for the physical well-being from external persons (doctors, employers, family) to the patient himself. Subsequent counselling is then best left to the general practitioner or to specialized psychotherapeutic social workers.

**Doctor-patient relationship**

Logistic regression in this investigation revealed that patients often seek a second opinion because they are not satisfied about various aspects in the communication with their physician. Increasing demands are being made on the communicative skills of a doctor, whereas the situation in which these skills have to be practised is of growing complexity. Patients, namely, are becoming more and more emancipated and expect more and more from health care. The doctor and the patient live in two different worlds. To the physician, the medical problem is mostly an intellectual problem: the problem has to be understood and a solution has to be found. The patient, on the other hand, is mostly concerned emotionally with the problem for which he/she is seeking a solution. These two worlds do not always find one another. Doctors define medical information rather in terms of objective data such as nature and stage of the disorder, possibilities of treatment and rational considerations in selecting a treatment, and then they believe they have provided their patient with sufficient information. Some patients feel such a response to be disappointing. What they want is sympathy, and explanation of the origin, the severity and particularly also the implications of the complaints (and their treatment) for everyday life.

**Complications of treatment and medical mistakes**

A complication of a medical treatment may prompt the patient to request a second opinion. A complication is an adverse effect of a mode of treatment which may be unavoidable even if the treatment is administered correctly. This is sometimes called a calculated risk. In practice, the distinction between a mistake and a complication is often difficult to make, at any rate for laymen. Sometimes, a patient may blame the doctor for a mistake which, according to the professional standard, is not a mistake, a so-called alleged mistake. Conversely, the course of events during a therapy may be interpreted as a complication, while in reality a medical mistake is involved. Openness and clear information are crucial if a treatment does not work out as anticipated (by the patient). If the physician does not or not adequately respond to a reproach about an (alleged) medical technical error, this will lead relatively often to a complaint or a second opinion. In such cases, communication problems are also often involved.

**9.4.3 Relevance of the findings for policy**

In the training of medical specialists attention is mainly focussed on the development of medical specialist knowledge and skills. In recent years, patients have been demanding a change in the doctor-patient communication. This makes it important during the training of specialists to pay extra attention to communicative skills. In addition, the preconditions under which a specialist does his work might be improved. The production agreements of the insurance companies with the hospitals and specialists fail to take into account the desirable length of the outpatient contact time. At present, orthopaedic surgeons have an average of 5 to 10 minutes to spend on a new outpatient. Insurance companies should have more appreciation for the of spending time and attention on the patient. Unfortunately, increasing the contact time might in the short term lead to a further growth of the shortage of specialists.
9.4.4 **NOTES ON THE DESIGN AND EXECUTION OF THE STUDY**

The investigation of the *motives that play a part in the request* for a second opinion has been retrospective in our study: the reason to request a second opinion already belongs to the past at the time of inclusion. An optimal form of studying this question might be an observational prospective cohort study of all new outpatients in a number of non-university clinics (the population at risk). However, such a design is difficult to realize, because very large numbers of patients from several clinics should have to be enrolled in the study to provide a sufficient number of second opinion patients.

9.5 **Differences of opinion between the first and the second opinion consultant**

9.5.1 **THE RESULTS OF THIS STUDY**

The commonest diagnoses made in this investigation were osteoarthritis, patellar chondromalacia, low back pain and impingement symptoms of the shoulder. A ‘hard’ diagnosis was not made in all cases. The elusive character of part of the complaints appears from the fact that it was only in 47% of the patients that the second opinion consultant made a diagnosis unmistakably explaining the symptoms (a pathophysiological diagnosis).

The second opinion consultants in 24% of the cases reported their disagreement with the diagnosis of the first opinion consultant. These changes of diagnosis had consequences for the proposed treatment in 65% of the cases. The treatment recommendation changed in 39% in all of the study group. This had three main reasons (the first-named figure is the proportion within the group with a divergent treatment proposal, the number in brackets is the proportion in the *total* group of second opinion patients):

- the result of the first treatment proposal had been disappointing: 33% (14%)
- the second opinion consultant disagreed with the diagnosis: 28% (12%)
- the second opinion consultant disagreed with the treatment proposed: 17% (7%).

The non-confirmation rate in this study varied strongly from one second opinion consultant to another. However, the number of second opinion consultants was too small to allow clear-cut conclusions on this aspect. Poggio et al. (1985) in their study also found differences in non-confirmation rate between physicians. They found that this phenomenon depended on the diagnosis of the patient and on the age, experience or subspecialization of the second opinion consultant 29.

It is to be regretted that patients frequently proved not to understand the implications of the second opinion well. Both patients and second opinion consultants were asked if the recommended treatment had changed in regard to the first opinion consultant; only 55% of the patients proved to agree with the second opinion consultant on this point. Fifteen per cent of the patients, unlike their second opinion physicians, believed that the proposed treatment had remained unchanged. On the other hand, 20% of the patients thought the therapeutic proposal had changed, while the second opinion consultant considered that it was unchanged. Also, 10% of the patients said they did not know if the treatment proposal of the second opinion consultant differed from that of the first opinion consultant.

9.5.2 **RELEVANCE OF THE FINDINGS TO THE ORTHOPAEDIC SURGEON**

A patho physiological diagnosis was made in only 47% of our study group. Patho(physio)logical diagnoses mostly define the patient’s condition with abnormal physiological parameters; they are hard diagnoses that unequivocally explain the patient’s symptoms. There is
little room for inter-doctor variation. The corresponding lege artis diagnostics and treatment can be laid down in a protocol. In over half of the cases (53% in this study), a non-pathophysiological diagnosis was made. This held true of the second opinion as well as of the non-second opinion patients (first opinion and referred patients). Non-pathophysiological diagnoses describe symptoms for which the physician cannot find a patho(physio)logical explanation, or they consist of a certain combination of complaints (or observations) that is defined as a disease on the basis of agreements. Non-pathophysiological diagnoses cannot be established conclusively and objectively. Making such diagnoses has more to do with personal views, there is more room for inter-doctor variation. In contrast to pathophysiological diagnoses, non-pathophysiological diagnoses often do not lend themselves to working according to a protocol. For this reason, non-pathophysiological diagnoses will generally more often lead to differences between the first and the second opinion specialist.

We found that the differences and agreements between the opinions of the first and the second opinion physicians were not always quite clear to the patients. Rosenberg et al. (1989) also concluded that in 12% the advice which the second specialist thought he had given was not similar to the advice which the patient thought he had received\(^{30}\). Some patients erroneously believed that the second specialist was of the same opinion as the first specialist, while others erroneously believed that the second specialist had a different opinion. Rosenberg et al. found a statistically significant relationship between doctor-patient agreement and the communication skills of the (first and second opinion) consultants. In our study, the consultants’ communication skills were not taken into account.

Our results indicate that second opinions may give rise to the same problems of understanding as regular medical consultations.

9.5.3 **The Relevance of the Findings for Policy**

If the first and the second opinion specialists fail to agree, it is not necessarily quite clear to the patient which of the two has made the correct diagnosis, or advised the correct treatment. As a rule, there is no gold standard. A second judgement is nothing more and nothing less than a judgement by a second consultant.

The authoritative English dictionary Webster defines a ‘judgement’ as the capacity to elicit the real condition from (vaguely, incompletely or inconsistently) observed phenomena. However, most judgements in medicine cannot be made with complete certainty and moreover the result of the treatment chosen can rarely be guaranteed. An operation, for instance, in dependence on a large number of variables may lead to improvement or aggravation of the complaints, and to various complications. The problem of the individual orthopaedic surgeon in this respect is similar to that of the weather forecaster: the future has to be predicted, but owing to the large number of variables it is in practice only possible to pronounce on the probability of a certain result on the population level, made mostly on the basis of personal experience and knowledge.

There is always a potential error in the judgement of the first opinion specialist, both as regards the diagnosis and the therapeutic recommendations. Although requesting a second opinion is often meant to reduce the risk of a possible error of medical judgement, it will actually increase this risk, because errors of judgement will also be made at the second opinion. The errors that can be made with a second opinion are of two kinds: an incorrect diagnosis or treatment may be confirmed (error type 1) or a correct diagnosis and/or treatment may be refuted (error type 2). Further opinions coming after the second opinion serve only to increase the risk of type 1 and type 2 errors further.

The model below demonstrates how the risk of incorrect and/or contradictory opinions increases with a second opinion. We base this model on the assumption that a specialist will provide the correct diagnosis and treatment in 80% of all cases and that the second opinion specialist, if of the same level of expertise as the first opinion specialist, runs the same risk of an erroneous diagnosis and/or treatment. Patients often expect that the second opinion consultant has a higher level of expertise than the first one, but in reality this is certainly not always the case. The 80% in this example is an arbitrarily chosen figure. How high the proportion of correct diagnoses and/or treatments really is, is unknown and varies from one specialist to another.
Accordingly, after the second opinion the group that has exclusively received a correct opinion has grown smaller. Consequently, there is a larger group of patients who have received an incorrect opinion at least once (36 as against 20). The group of patients who have received two conflicting opinions do not know which physician has given the correct diagnosis / treatment. Therefore, a second opinion will not necessarily ensure more clarity or a higher quality of care. If the second opinion consultant is of a higher level of expertise regarding the disorder in question than the first opinion consultant, these figures may turn out more favourable. However, it is only in the extremely hypothetical case that the judgement of the second opinion consultant is correct in 100% of the cases that the group exclusively receiving a correct opinion does not grow smaller. In view of all this, patients should preferably be referred to a specialist who has a higher level of expertise with regard to the complaints in question than the first opinion specialist. Such referrals might for instance come about via a second opinion mediation office that has registered the subspecializations of the specialists for each individual region.

9.5.4 NOTES ON THE DESIGN AND IMPLEMENTATION OF THE STUDY

A difference of opinion on diagnosis and treatment was recorded by means of simple yes/no questions; this study design may strongly influence the non-confirmation rate. Namely, there may be major or minor differences of opinion between the first and the second opinion specialist. This kind of binary questions allows no measurements of more delicate differences between the first and the second opinion specialist. Poggio et al. (1985) and Paris et al. (1979) reported how weak the binary concept was in recording delicate differences in (non)confirmation. In Paris’ study, the discrepancy between the first and the second opinion was four times as high when physicians were asked yes/no questions than when the slight differences in diagnosis and therapeutic suggestions were considered in greater detail. Paris encountered complete rejection of the therapeutic proposal of first opinion specialist in only 8% of the cases. The degree of agreement between the first and second opinion specialists in our study would probably have been higher if the second opinion consultant could have given a more detailed answer.
9.6 Results of second opinions and benefits to patients

9.6.1 The results of this study and the comparison with other studies

(Dis)satisfaction with the second opinion

One month after the second opinion ($T_1$) a small majority of the patients (59%) were satisfied, 28% were partially satisfied or not satisfied and 13% had no opinion or left the question unanswered.

One year after completion of the second opinion ($T_2$), the patients had grown less satisfied: 51% were still satisfied, 46% partially satisfied or dissatisfied and 3% had no opinion or left the question unanswered. We found in our study that patients’ satisfaction was related particularly strongly to the (expectation of) attenuation of the symptoms. The number of satisfied patients decreased with time because of persistent symptoms.

Patients with patello-femoral complaints and patients in whom no orthopaedic diagnosis was made were less often satisfied at $T_2$ than the total patient population. It is often difficult to find a therapeutic solution for these patients at short notice.

Physical symptoms, physical and mental functioning

In this study, the evolution of the complaints and of the physical and mental functioning was measured starting at the first outpatient attendance. The physical complaints were measured in two ways: by directly questioning the patient about the subjective experience of the physical complaints on $T_1$, and with the RAND-36 on $T_2$ and on $T_2$.

The majority of the patients were of the opinion that their complaints had not improved since, or owing to, the second opinion, and this was independent of the diagnosis made at the second opinion. Although 42% of the patients at $T_1$ stated that the symptoms had been reduced, only 13% of the total patient population had the impression that they owed this improvement to the second opinion. How many of these complaints would have resolved spontaneously, i.e. without a second opinion is not known because no control group was used.

Persistent complaints were recorded most often in patients who at $T_2$ had a sceptic attitude regarding physicians, and in patients in whom no classifying diagnosis could be made. The physical functioning at $T_2$ proved to be dependent on the subjective evolution of the complaints: when the complaints attenuated, better physical functioning was recorded. If at the time of the second opinion physical or mental function was poor, this as a rule had not changed after a year. The physical functioning at $T_2$ was independent of the person who had taken the initiative, of the assessment of the first opinion consultant-patient relationship and of background features of the patient. Patients with a high score on the VOEG 13-item list (many functional complaints) scored low on physical functioning at $T_2$.

Influence on decision making, subsequent opinions

Forty-one per cent of the patient population held the view that the second opinion had helped them in making a decision about the treatment to be performed from then on. The second opinion had led to uncertainty in 17% and to concern in 9%. Eighteen per cent of the patients found it confusing to obtain two different opinions. These findings agree strongly with the study of Rosenberg et al. (1989) who found that the second opinion had helped in decision making (operation or no operation) in 48%, while in 17% it had created confusion or concern.

It appeared in our study that the second opinion exerted more influence on the patient’s decision making if views in the first and the second opinions differed. In that case, 88% of the patients opted for the treatment of the second opinion consultant, and 7% for that of the first opinion consultant. The remaining group preferred the advice of some other specialist or did not (yet) known which advice to choose.

Patients’ compliance with the therapeutic prescriptions of the second opinion consultant was not investigated further in this study.
Twenty-one per cent of the patients after the second opinion in the AZG once more looked for another specialist for an additional opinion. Patients who, after the second opinion, once again sought a different opinion more frequently had no clear diagnosis, or problems more difficult to treat such as low back pain. These patients also considered themselves to be ‘sicker’ than the average patient. Our findings are in agreement with the study of Takeshi et al. (1999) who found doctor-shopping to be associated with chronic, refractory complaints and psychiatric disorders.

Patients with a sceptical attitude with regard to doctors’ functioning proved less inclined to ‘further shopping’. Surprisingly enough, ‘further shopping’ proved to be independent of the influence of the second opinion on the evolution of the symptoms. Patients whose symptoms improved also looked for subsequent opinions. This finding suggests that other factors also play a part in this form of help-seeking behaviour, factors hardly if at all related to the symptoms. Exactly what factors these are is not known. Confidence in medical care might be such a factor.

**Continuation of treatment by the second opinion consultant**

The second opinion consultant took over the treatment in 36% of the cases while at the time of completing the questionnaire only 25% of them had intended to do so. Confirmation or non-confirmation of diagnosis and treatment by the second opinion consultant proved to influence the question who was to carry out the continued treatment. The treatment was taken over more often if the treatment proposal of the two specialists differed: 51% as against 26%. The taking-over of the treatment depended on the diagnosis made. Patients with symptoms of osteoarthritis were taken over more often. In patients with low back pain, on the other hand, the treatment was never taken over.

The second opinion consultant did not always act in accordance with the wish of the first opinion consultant: sometimes the first opinion specialist wanted to give the patient a tertiary referral, but the second opinion specialist sent the patient back to the first one (15%), or to the GP (41%). In the other cases, the first opinion specialist wanted to continue the treatment himself, but the second opinion specialist took it over (10%).

**Views of the second opinion consultant**

The second opinion physician regarded only one-half of the second opinions as useful. Curiously enough, this was not dependent on the diagnosis of the patient or on the question who had taken the initiative for the second opinion. Consultation was mostly regarded as useful only if there was a difference of opinion with the first opinion physician, if surgical treatment had been advised or iatrogenic complications had occurred. In addition, the second opinion was considered valuable by patients scoring high on the VOEG-13 item list (many functional complaints) and by patients with a higher than average mental functioning (measured with the RAND 36).

The judgement of the specialist about the second opinion was not related to the degree of the patient’s satisfaction.

### 9.6.2 The relevance of the findings to the orthopaedic surgeon

**Dis)satisfaction with the second opinion**

The patient’s satisfaction is an important measure for the degree to which the physician has succeeded in meeting the patient’s expectations. A patient’s satisfaction or dissatisfaction about the second opinion, for that matter, is not dependent on the objective quality of the medical care provided at the first and/or second opinion.

The proportion of dissatisfied patients in the study was fairly high (49 per cent were partially or completely dissatisfied at T2). Enquiries about dissatisfaction with medical services and medical professionals on average shows 15 to 30% of them to be dissatisfied irrespective of place, time or circumstances. According to Verkruisen (1993), there exists a so-called law of conservation of dissatisfaction: ‘The requirements of medical care constantly adjust themselves to the given population in such a way that a constant 15 to 30% of the patients will be dissatisfied about their contacts with medical professionals.’
It was especially the patients for whose symptoms no therapeutic solution could be found who were dissatisfied more often. Patients in general expect more and more that physicians can resolve every complaint. This is in part the fault of medical education programmes on television. The patients' expectations about medical care ought to be damped a little, for instance by means of more realistic information by the media.

**Health gain, physical and mental function**

The majority of the patients thought the treatment of the second opinion consultant not successful. Only 13% of the patients thought that the complaints had abated as a result of the second opinion. In studies of the results of medical interventions, even the placebo effect as a rule gives better results.

The findings suggest that a second opinion probably does not exert much influence on the patient’s symptoms and functioning.

**Influence of decision making, subsequent opinions**

A large proportion of our patient population consulted not one additional physician, but several, either prior to the visit to the AZG or following it. This 'doctor shopping' proved to be independent of the severity and the course of the complaints. As long as the continued shopping is reimbursed from community funds, (general) practitioners should discourage this behaviour after a second opinion.

**Treatment continued by the second opinion physician**

According to the guidelines of the Royal Dutch Medical Association (KNMG), second opinions should lead to the treatment being taken over only in exceptional cases. In practice, however, it appears to occur frequently. Although the reasons for this have not been investigated in this study, it seems obvious that the patient has had an important say in deciding who is to continue the treatment. Possible reasons might be that the relationship with the first opinion consultant had become somewhat perturbed after all, or that a treatment in a university hospital is regarded by the patients with more respect. Furthermore, a certain tendency of second opinion physicians was found to exist to take over the treatment if he/she was of the opinion that there existed an indication for treatment.

The expectations of the first opinion consultant about who is to take charge of the continuing treatment, are often not known to the second opinion consultant, and they are often not met. More clarity on the subject is needed.

**9.6.3 RELEVANCE OF THE FINDINGS TO POLICY**

A large proportion of the population of second opinion patients have chronic complaints, difficult to treat. In this group, a second opinion appears to provide little added value with regard to improvement of symptoms or better physical functioning.

Second opinions apparently are in particular a suitable instrument for the supply of information, acceptation of physical defects and support in the choice of medical treatment.

**9.6.4 NOTES ON THE DESIGN AND IMPLEMENTATION OF THE STUDY**

Apart from the possible cost-saving aspects of second opinions (SSOPs) and the non-confirmation rate between the first and the second opinion in diagnosis and/or treatment, hardly any other outcomes of second opinions have been investigated by others. Other aspects of second opinions, such as patient satisfaction, health gain and influence on the decision-making of doctor and patient are mostly still virgin territory. The present study is a first step on the road to further investigation of these aspects.
The search for the results of second opinions in this study has been prospective. Various outcomes, for instance patients' satisfaction with the second opinion and the agreement between the first and second opinion physicians may be measured reliably in this manner. However, to study the effects of the second opinion on a number of results requires a reliable control group. One example is the net health gain that might be reaped. Our study allows no conclusions in this respect. There exist no prospective studies from which the health gain could be deduced. The health gain might consist of a longer life, less disease, a smaller risk of recurrence or a better quality of life. This requires a case control study. Ideally, the control group should be taken at random from the population requesting a second opinion, and should not be given a second opinion during the period of a study. Such a study design would in general be regarded as unacceptable, and therefore it will be difficult, in the future as well, to measure results of this nature in a reliable manner.

Findings regarding patient satisfaction should be considered with some reserve. In this study, there are a number of biases that might cause quite some distortion of the ultimate results. Several biases may be involved: 1) a non-respondent bias, 2) a withdrawal bias, 3) a ‘Hawthorne effect’.

Sub 1) Owing to the nature of the study we possess only a few data about the non-respondents and about the patients who withdrew from the study.

Sub 2) Relatively many young patients dropped out of this study; possible causes are the mobility of this group, or the fact that young people are less satisfied with the second opinion. In many studies, the dropouts are counted among the poor results. Conceivably, in our study, also, the dropouts included a large group of dissatisfied patients. Were we to count the dropouts with the dissatisfied group, the proportion of patients dissatisfied with the second opinion would be 32% at T₁, and 59% on T₂.

Sub 3) By the Hawthorne effect is meant the measured effect resulting from the attention paid to the study subjects. This might cause some patients to be more satisfied. The proportion of dissatisfied patients might be larger, assumed that the fact that the attention paid to the patients in this study could have led to improvement of the results.

9.7 Social consequences

9.7.1 The results of this study

Although most specialists have the impression that second opinions take up a lot of time, this study showed in practice that this time was less than anticipated. The contact time during the first visit to the outpatient clinic admittedly is somewhat longer, but the total time required for second opinion patients proved finally to be less than that of first opinion patients (on average 81.5 minutes against 104 minutes). This is mostly due to the fact that the outpatient repeat factor and the proportion of admissions of second opinion patients are lower. Nevertheless, for the academic centres the length of time required will increase markedly in the future. As we calculated in Chapter 7, in the next ten years the growth of the number of new patients of university centres will almost double due to the growth of the number of second opinions, and here our estimate of the increase of the number of second opinions is still conservative.

9.7.2 Relevance of the findings to the orthopaedic surgeon

If we are to continue to meet the demand for second opinions in the future, extra orthopaedic surgeons will have to be trained. In 2010, the university clinics alone will need four extra full-time orthopaedic surgeons, just because of the extras capacity required of these clinics for the second opinions.
9.7.3 **Relevance of the Findings for Policy**

Even our conservative estimate of the rise of the number of second opinions has measurable effects on the claim on capacity. In the United States, where second opinions have been very popular for somewhat longer, it was found that approximately one patient in five has sought a second opinion in the previous year in university or district hospitals \(^1\). Were this trend to manifest itself in the Netherlands as well, this might have major effects on the functioning of Dutch health care. It may markedly affect both the costs of health care and the claim on capacity. Because of production agreements of health insurers with the hospitals, the rising number of second opinions will lead to longer waiting periods and consequently reduce the accessibility of office hours in hospitals. A second opinion patient, namely, is counted as a new patient in the hospital where the second opinion is given, but the quota of new patients will not be permitted to increase in proportion to the number of second opinion patients. In this way, every second opinion patient reduces the (financial) accommodation in health care for patients who have not yet received medical care. For this reason, also, it is astonishing that up to now, second opinions mostly are reimbursed without restrictions. To make certain that needs can be met and will continue to be met, health insurers will have to see to a balance in the uses made of the available capacity. Attention will have to be paid to the efficiency aspect of the assignment of consultations. The health insurer will have to evaluate their appropriateness and efficiency. The authorities should anticipate the epidemiological developments and adjust requirements of means and facilities to it.

9.8 **Guidelines for Medical Action**

9.8.1 **Relevance to Orthopaedic Surgeons**

If the second opinions are to be paid for from collective means, their indications should be monitored accurately. In testing an indication, a generally accepted standard should be applied. A standard in this connection is an idea accepted jointly by all parties involved about the extent of the insured persons’ rights. The general standard determines the volume and as a derivative of it, the contents and level of the care in formulating standards, the purpose and the function of the supply of care should be established beforehand. One of the crucial aspects in this connection is the question what is a justified level of care, in relation to the means that may reasonably be used to honour the claims?

The position of science contributes to an important extent to a generally accepted standard. The position of science is a resultant of knowledge regarding what learning and experience of professionals have proved to be an effective, safe, reliable and appropriate provision of assistance. So far, no generally accepted standard for second opinions has been developed in the Netherlands.

9.8.2 **Relevance for Policy**

It is virtually certain that a basic health insurance will come into being, only its contents still have to be specified \(^36\). The committee ‘Choices in Health Care’ (commission Dunning) in 1991 issued a recommendation to the authorities about what health care provisions should be included in the basic package \(^36\). According to the report ‘Choose and Share’ its provisions should satisfy four criteria:

- C is the provision in question necessary?
- C has its efficacy been demonstrated?
- C is the care appropriate?
- C should the care be a subject of collective insurance or should it be at the patient’s own expense and risk?

The committee ‘choices in Health Care’ specified three forms of necessary care:
1 Provisions that guarantee a normal functioning as a member of the community or that simply protect the existence as a member of the community, such as nursing home care, psycho geriatric care and the care of the mentally handicapped.

2 Provisions aimed in the first place at the preservation or restoration of the capacities needed to participate in social intercourse, such as postnatal care, acute psychiatry, infectious diseases and prevention of severe chronic diseases.

3 In the third group, the need of care is estimated by plotting the severity of the condition requiring the care against the number of patients suffering from the condition.

Second opinions are not necessarily indispensable elements of the basic package. Indispensable care might be considered to include those referrals at which the first opinion consultant after a reasonable effort has been unable to find a satisfactory solution for the diagnostic and/or therapeutic problem involved. This applies mainly to those cases in which no chronic complaining behaviour is suspected. Another coercive reason for seeking a second opinion might be: additional support for patients who have to make a decision about radical forms of treatment. A severely impaired doctor-patient relationship or communication problems between doctor and patient will usually lead to the treatment being taken over.

Still and all, in practice it will not be easy to distinguish the correctly indicated second opinion from the incorrectly indicated one, because there is a large grey area in between. And then, who is to judge the correctness of the indication? Should it be judged by the treating physician, or would it have to be a written judgement by the insurance companies? Both alternatives are undesired developments which will mostly stimulate the bureaucracy in health care.

The appropriateness of second opinions cannot be investigated adequately with the current study design. This would require an experimental study design or a prospective study on a much larger scale. Even so, it may be concluded from this study that second opinions probably do not contribute much to the abatement of the physical complaints.

Effective means literally ‘successful in producing the desired result’. A patient wants a second opinion from a different physician, and gets it. Strictly speaking, therefore, second opinions are effective. However, if we also take into account the patient’s expectations, second opinions are not very effective. Patients, namely, want to know what is wrong, and in what way it may be remedied. If we can compare: orthopaedic surgeons will never recommend an elective (surgical) treatment with such a low success rate.

Second opinions at the patient’s own expense or in the supplementary insurance?

The motives for certain provisions having been included in the basic package are not always clear. The commission ‘Choices in Care’ has stated not clear-cut criteria for the inclusion or non-inclusion of a provision in the basic package. Consequently, this report does not justify a clear opinion about whether or not the second opinion should be included in the collective insurance. Admittedly, the expenditure of public funds is tested against necessity, efficacy and appropriateness, but this cannot always be made to fit individual patients’ choices and care made to measure. Given frugal budgets and lack of available staff, the right to care cannot always be implemented from the collective funds.

For the second opinion to be paid for from the social insurance, it would be necessary for the effect of the second opinion to justify the claim on common means. The expense and the capacity used should be acceptably proportional to the medical effects to be expected. The results of the present study do not show this to be case. A restrictive policy concerning second opinions would be advisable.
9.9 The future

In this century, health care will probably no longer be regulated by the supply but by the demand. Increasingly, users of care will decide themselves (whether or not in consultation with their treating physician) what care they procure and where. Health insurers will more and more bear their own responsibility for the money they spend, and purchase the care (on behalf of the consumer) with the best quality-price ratio and the shortest waiting times. More and more often, consumers of care will want to learn the opinions of different physicians. For this purpose, the consumers of care (whether or not together with their treating physician) start to use modern techniques such as telecommunication or internet consultation. Teleconsultations are remote consultations, for instance by telephone or computer. They are to be regarded as a telemetric equivalent of second opinions. As a consequence, specific specialistic knowledge will be ever easier and faster to obtain, by the physician as well as by the patient. Telemedicine is currently developing fast, headed by the specialism of teleradiology and telecardiology. Sophisticated techniques such as digitalization of X-rays and the electronic patient file will make an important contribution to good transfer of information to the consultant. The internet will bring about great changes in the availability of information to patients, doctors and paramedics. The patient himself can go on a ‘shopping trip’, the doctor can make a ‘house call’ via the internet.

All these developments may greatly change the motivation and volume of the current type of second opinion. It will be structurally possible for patients to obtain second opinions quickly and easily via the internet. In this way, the patient will be able to find an expert for his symptoms in a much more specific manner. It may even become possible routinely to request a second opinion via the internet.

Physicians also, will make more and more use of the above-named techniques. Doctors will go further in commercializing second opinions via the internet. Even now there are many sites where consumers of care can obtain a second opinion (usually for a fee). It will also become easier for physicians to consult colleagues on difficult problems. Owing to the development of evidence-based medicine and the fact that doctors will be able to consult one another more often and better, interdoctor variation hopefully will decrease further.
33. Verkruisen WG. Dissatisfied patients: their experiences, interpretations and actions. 1993;