The number of second opinions in recent years has shown a sharp rise internationally and, many specialists feel, in the Dutch situation as well. So far, however, no Dutch studies have been published about the magnitude of the second opinions phenomenon, its backgrounds and consequences.

The study of second opinions in orthopaedic practice described in this dissertation had as its objective to find answers to the following questions:

1) How should a second opinion be defined?
2) What proportion of the new patients visit the outpatients' clinic of orthopaedics of the university hospitals for a second opinion, and how do these patients compare from the socio-demographic point of view with other patients?
3) Who requested the second opinion and what was the motivation?
4) How often are there medically relevant differences between the first and the second opinion consultant?
5) How satisfied are the patients with the second opinion, and what has been the ultimate effect?
6) What are the social consequences of a rising number of second opinions?
7) What guidelines should be drawn up for the ways in which second opinions should be requested and dealt with?

The (sparse) literature published on this subject shows that patients as a rule initiate a second opinion because they feel a need for more information, and/or because they are not satisfied with the communication with the first consultant.

Insurance companies in the USA developed an extensive second opinion programme (Surgery Second Opinion Programs, SSOPs). A number of these insurance companies request a second opinion from an independent specialist if the treating specialist proposes an elective intervention. Sometimes, this second opinion is obligatory if the patient is to be considered for indemnification of the costs of surgery; in other cases the second opinion is sought voluntarily. Publications from the American SSOPs are difficult to extrapolate to the Dutch situation because they mostly concern obligatory second opinions prior to which the initial counsellor had always proposed an operation and furthermore, the latter was not always a registered specialist. The American literature proves that a large proportion of the therapies proposed are not confirmed at second opinion. However, there are no recorded criteria with which a rejection or confirmation can be defined. These studies show that the proportions of confirmation at second opinion depend on the study design. In addition, a relatively large proportion of the patients (25%) fail to follow their consultants' recommendations, not even when the two opinions are identical.

In Chapter 2, the concept of the second opinion as used in this study is defined more precisely as a consultation at which a patient, within two years after the first consultation, is seen for the same complaints by a second consultant of at least the same level of expertise, in order to give an independent opinion of the first consultant’s diagnosis or proposed treatment. Also, a decision tree was elaborated for the distinction between second opinions and tertiary referrals.

For a period of one year, all new patients in the outpatients clinic of Orthopaedics of Groningen University Hospital who were willing to participate were included in this study. The other new patients in the outpatients clinic, the ‘first opinion patients’, served as a reference group. A different study design, with a (large) group of first outpatients visitors (FOVs) from a number of district hospitals being followed up over time, would have been preferable. Unfortunately, such a study design is not feasible for logistic reasons, since the proportion of patients in district outpatient clinics who ultimately will receive a second opinion is relatively small.

There were three measuring moments for the second opinion patients: at the first outpatient attendance ($T_0$), one month ($T_1$), and one year ($T_2$) after the completion of the second opinion. The results were calculated by means of multivariate analysis. Both the first and the second opinion consultants completed a questionnaire ( at $T_0$ and $T_1$ respectively), which contained questions.
concerning the (confirmation of) diagnosis and therapy, and the motives for the request for a second opinion.

Chapter 3 describes the volume and composition of the group of patients. Thirty per cent of the number of new patients visiting the outpatient clinic for Orthopaedics of Groningen University Hospital proved to come for a second opinion. In the vast majority of the cases the first opinion consultant was an orthopaedic surgeon. Over one-quarter (26%) of the second opinion patients had already consulted more than one specialist for the same complaints during the previous two years. The socio-economic features of the first opinion, second opinion and tertiary referral patients proved to be similar, although there was a slight difference in the age structures of the three groups. In this study, in the age group of 0 to 18 years, second opinions were less frequent than tertiary referrals and first opinions.

It could be demonstrated with the aid of the RAND-36 item Health Survey scores that second opinion and tertiary referral patients subjectively experienced more physical symptoms than first opinion patients. Absenteeism from work also occurred more frequently among second opinion and tertiary referral patients than among first opinion patients. However, no difference could be discerned regarding the severity of the disorders in the three groups.

The practices in district hospitals with more than three orthopaedic surgeons generated relatively more second opinions than the smaller practices. The smaller practices, on the other hand, generated relatively more tertiary referrals.

Chapter 4 surveys the motives of patients to request a second opinion. It was found that patients requested a second opinion not so much because of a lack of confidence in the first opinion consultant, but mostly because unsatisfactory doctor-patient communication. Other motives were: disappointment about the result of the treatment, or a need for more information.

According to the first opinion consultants, communication problems played hardly a part.

In Chapter 5 the differences in diagnosis and treatment between the first and the second opinion consultants are described. Enquiries consisting of simple yes/no questions brought to light a difference in diagnosis in 24% of the cases. In 16% of the total study group this had consequences for the treatment. The therapeutic recommendation was changed in 39% of the study group, mostly because of persistence of pain. Individual second opinion consultants varied greatly in the proportions of the first opinions they didn’t confirm, ranging from 0 to 35%.

The effects the recommendations of the second opinion consultants had on patients’ complaints and satisfaction are described in Chapter 6. Fifty-nine per cent of the patients were satisfied with the second opinion one month after its completion. One year later, this had dropped to 51%.

Dissatisfaction was related to persistent symptoms, receiving no clear orthopaedic diagnosis or patello-femoral complaints. Most patients felt that the symptoms had not been improved by the second opinion. A not inconsiderable proportion (22%) after the second opinion once more sought a different opinion; this proved to be independent of the course of the symptoms.

The present and future claims on capacity of second opinions in the Dutch university hospitals are pictured in Chapter 7. The basis for the calculations was the prior calculation model which was used for the estimation of the number of professionals required in orthopaedics. Given a persistent growth in the number of second opinions, it is to be expected that in the future these will lay a substantial claim on the capacities of the university centres. It is found that even a relatively small rise of the proportion of second opinions generated in the population of orthopaedic FOV in district hospitals will have a considerable effect on the number of second opinions in the university centres. Consequently, future growth of the number FOV to university centres will be determined for an important part by the growth of the number of second opinions. According to our model, in 2010 the country will need four extra full-time qualified academic orthopaedic surgeons, just to meet the increased demand for second opinions.

The rising demand for second opinions might be reduced by taking a number of measures affecting several fields of health care. This matter is discussed in more detail in Chapter 8. Currently, it is probably not possible to influence the growing demand for second opinions structurally by means of measures taken by health insurers. Restricting the basic package at a macro level may lead to discrimination of certain groups of patients and furthermore is difficult to carry out in practice.

Moreover, health insurers are stimulating patients stimulating patients to seek second opinions rather than discouraging them. The increase of the number of second opinions might probably be slowed down by improving the doctor-patient communication, enhancing the information supply, good counselling by the family doctor (elucidation of the reason for the second opinion and transfer of
information from the family doctor and the first opinion consultant), and precisely defining or limiting the indication categories.
Guidelines drawn up by the medical profession are a suitable means to improve the definition of indications.

The aim of this study was to make a first inventory of the phenomenon of second opinions, with a view to determining to what extent second opinions contribute to an appropriate and efficient use of public health care and to the guidance of further deployments. The study described in this thesis does not supply answers to all questions. For instance, owing to the study design chosen, no firm conclusion is possible regarding the extent to which second opinions contribute to the patients’ well-being. In addition, there is a need for more investigation of the questions how the growth of second opinions is evolving and how it might be streamlined better.