analysis. In this project 25 family physicians from 9 locations participate with a complete registration of all encounters with 45.000 patients on their list during one year. 140.000 Encounters are characterized by the relationships between the patient's reason for encounter, the diagnostic interpretation by the physician and the diagnostic and therapeutic interventions. The participants classify these elements with the International Classification of Primary Care (ICPC).

A measure is developed to distinguish episodes on the amount of diagnostic interdoctorvariation.

The second question is answered by studying different levels of diagnosing according to the structure of the ICPC.

Results
The list of episodes showing a lot of interdoctorvariation will be presented.

A number of family physicians appear to score high or low on all chapters of the ICPC. Substitution between the chapters can never explain all the variation.

It becomes clear that some doctors have a preference for using diagnoses from component 1 (symptoms, complaints) and others for component 7 (diagnoses, diseases). Substitution within a chapter exists.

2.5 Determinants of visits to the GP
An experimental and an observational study compared

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Social science research in general practice often has an observational character. The advantage of such research is that it is conducted in a 'real life' situation; a disadvantage is that it is difficult to determine causal relations. Laboratory experiments can yield complementary information, since an artificial situation allows cause-effect relations to be tested.

In an earlier study we conducted a survey in the waiting rooms of 8 general practices. The objective of the survey was to gain insight into the determinants of visits to the GP, i.e., to know which factors determine whether people will, or will not visit their GP. Results showed, for example, that beliefs about the complaint (severity and susceptibility), and worrying about the complaint are important factors in the decision to consult one's GP.

Because of the correlational results of the survey it cannot be concluded that, for instance, high perceived severity makes people go to the GP; strictly speaking it is equally likely that the visit to the GP causes the higher perceived severity. To investigate causality, we conducted two laboratory experiments.

In the first experiment we presented a story, with slight variations, to 160 students. The story described a person reading an article about a certain disease in the morning paper. The susceptibility of the person to the disease, the seriousness of the disease, the benefit which could be expected from GP care and selfcare were systematically varied between stories. We asked the subjects to imagine themselves in the position of the person in the story, and to indicate how worried they would feel and how strong their inclination would be to see their GP.

In the second experiment we tested, besides the influence of susceptibility and seriousness, whether coincidental information (about a friend who happened to have the disease, and in whom the medical treatment did or did not succeed) influenced worrying and intention to visit the GP.

Results showed that, in general, the laboratory experiments yielded the same results as the field experiment conducted earlier. Thus, for example, high perceived seriousness and susceptibility seemed to cause high intention to visit the GP. However, some discrepancies in results were found as well. In the laboratory we found that coincidental information had a strong influence on worrying and the decision to consult the GP, a result not found in 'real life'. We conclude that, though laboratory and field studies may be complementary methods, laboratory research should not replace field research.

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2.6 Probability of consultation and referral
Locating groups at risk

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Though referral by general practitioners to hospital consultants has been subject of study for about thirty years, it continues to attract attention for several reasons, in particular in health care systems, in which the general practitioner is actually the gate keeper to expensive specialist care, as is the case in The Netherlands and the United Kingdom.

Variables considered to influence referral rate can be classified into three categories: characteristics of patients, general practitioners and health care system. There is no agreement on the relative importance of the characteristics studied and much variation in referral rate is left unexplained. This is mainly caused by the fact that most studies are based on (by sheer necessity) suboptimal data, or that the effects remain hidden in the inter-practice/interdoctor variation because the number of observations is insufficient.

Method
This study is part of a larger project, intended to study the referral phenomenon in greater depth. The analyses are based on the very extensive data set of the National Survey of Morbidity and Interventions in General Practice in The Netherlands, consisting of about 400.000 patient-doctor contacts and 25.000 referrals in 104 practices, by 163 general practitioners.

The referrals are classified into inpatient and outpatient referrals and into referrals for diagnosis and therapy.

Results
In this part of the referral study we will report on the extent to which patient characteristics contribute to the probability of consultation and referral (given the probability of consultation). An actuarial model will be presented, in which the influence of age, sex, social-economical position, type of insurance, region and degree of urbanisation on the number of consultations/referrals are quantified. Population groups with higher probability of consultation/referral (i.e. groups at risk) will be identified on the basis of the specifications of the model.

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