Summary

Patient Feedback in General Practice Training
Chapter 1. General introduction of the thesis

The first chapter describes the context of the research. The importance of adequate consultation skills for practicing general practitioners is undisputed, but coherent guidelines for implementation of teaching these skills among vocational institutes for general practice seem to be lacking. This has consequences for educational developments, innovations and research on education. It is followed by an explanation of the rationale of the research, in which the choice for a patient feedback intervention is motivated. Patient-centeredness and involvement in GP vocational training, and assessment and feedback within a self-directed study environment, are important principles on which this thesis is based. The studies in this project aim at different aspects of evidence for the effectiveness of patient feedback. The chapter ends with an outline of the thesis, and the general aim of the research: to acquire evidence for the effectiveness of patient feedback in the vocational training for general practice.

Chapter 2. Feasibility of the patient feedback programme: a qualitative approach

In order to develop an attractive and effective patient feedback learning programme for general practice trainees (GPTs), we carried out an exploratory study followed by a feasibility study focusing on first-year GPTs and their patients. In the feasibility study among all first-year GPTs at the VU medical center in Amsterdam, the GPTs collected 878 feedback questionnaires from their patients. The extent to which patient feedback was valuated by GPTs, patients and staff, was qualitatively assessed (group discussions and evaluation questionnaires). Although the GPTs and patients alike considered patient feedback to be a major source for the acquisition of consultation skills, the reported learning experiences were more limited than we had expected because of the flattering answers the patients gave and because it were mainly the challenging consultations that provided the potential for relevant patient feedback. Furthermore, there was a preference that the teachers, and not the researchers, should organise and monitor the programme. These findings
formed the basis for recommendations to enhance the learning potential of the patient feedback programme.

**Chapter 3. Validity and reliability of the Patient Feedback questionnaire on Consultation skills (PFC)**

This study focused on the validation of a patient feedback questionnaire, the PFC, the aim of which was to assess (patient-centered) consultation skills in the subsequent phases of a consultation. An existing questionnaire concerning patient-centeredness (PPPC) was adapted to cover the ‘communicator’ items in the CANMEDS competency profile. The PFC adequately covers the corresponding ‘communicator’ competency (face and content validity), assessed by interviewing patients and GPTs during the developmental process. The content validity of the PFC was determined by experts (n=10). Based on the data from 222 PFCs, factor analysis showed a one-dimensional construct. The internal consistency was high (Cronbach’s alpha 0.89). For the single items, the response rate varied from 89.2% to 100%; and the maximum score (ceiling effect) varied from 45.5% to 89.2%. The PFC appears to be a valid, single-scale, internally consistent instrument, that may be a valuable learning tool with which GPTs, other physicians and medical students can acquire feedback from patients with regard to their consultation skills. It has the potential to contribute to the acquisition of communication skills by GPTs, it is applicable in most consultations, has acceptable ceiling effects, and it takes only a few minutes to complete.

**Chapter 4: A comparison of patients’ and doctors’ views on consultation skills**

In a cross-sectional study based on 888 pairs of patient-doctor combinations, we investigated the agreement between patient and doctor perspectives on components of patient-centeredness: ‘exploring the disease and illness experience’, ‘finding common ground’, and ‘personal context’. Therefore, 48 first-year GPTs and their patients completed the Patient Perception of Patient-Centeredness (PPPC) questionnaire (item-score range: 1-4). The mean item-scores were 3.63 (SD 0.38) and 2.94 (SD 0.49), for patient and GPT
assessments, respectively (p<0.0001). The relatively low scores for ‘finding common ground’ (3.54 [SD 0.54]) and ‘personal context’ (3.17 [SD 0.96]), as compared to ‘exploring the disease and illness experience’ (3.78 [SD 0.34]), indicate that these components should receive more attention in the vocational training of GPTs. Multilevel analysis showed that younger patients, patients of male gender, greater consultation complexity, and Dutch as a ‘second’ language of GPTs, were related to lower patient assessments. Studying the differences in these aspects of consultation skills might form a basis for new learning strategies for GPTs.

Chapter 5. A controlled trial to assess the effectiveness of patient feedback on consultation skills

The aim of this controlled trial was to assess whether an intervention, i.e. an additional patient feedback training programme, leads to better consultation skills of GPTs than regular communication training, and whether process measures (intensity of participation in the programme) predict the effect of the intervention. In 2006, first-year GPTs at the VU medical center were allocated into either an intervention group (n=23) or a control group (n=30). Standardised simulation patients visited the practices and video-taped their consultations at baseline and after three months. The video-tapes were randomly assigned to eight trained staff-members, and assessed by means of the MAAS-Global instrument (range 0-6). Data on 50 GPTs were available for the follow-up analysis (intention-to-treat analysis). GPTs in both the intervention group and the control group improved their consultation skills: the mean MAAS-Global baseline scores were 3.29 (SD 0.75), and the mean follow-up scores were 3.54 (SD 0.66) for all participants (p=.047). The improvement in MAAS-Global scores in the intervention group did not differ significantly from the improvement in the control group. Multilevel, linear mixed model analysis showed a trend that the intensity of participation in the patient feedback programme predicted more improvement in the MAAS-Global scores. Although the baseline scores were already in the high range, consultation skills in both groups showed a moderate improvement. This is reassuring for current teaching methods.
Chapter 6. Systematic review of the learning potential of patient feedback

In the systematic review described in this chapter we analysed the evidence for the educational potential of real-patient feedback on consultation skills of practicing physicians. Therefore, five electronic databases were searched. All empirical studies of all study designs (randomized controlled trials, quasi-experimental, cross-sectional and qualitative designs) were eligible for inclusion. Articles were assessed for level of educational impact (from physicians’ valuation assessment of the learning experience to assessment of actual change). Eighty percent of the 15 studies that were included showed an improved outcome (effect) as a result of patient feedback. However, positive results were more common among studies assessing a lower level of educational impact than among studies assessing actual change in consultation skills (considered the highest level of educational impact). In conclusion, there is evidence for the educational potential of patient feedback on physicians’ consultation skills, however, the evidence for actual improvement is limited.

Chapter 7. Factors influencing the participation of general practice trainees in a patient feedback programme

This study builds further on the evidence from the trial, i.e. that GPTs who actively participated improved their consultation skills more than those who did not. It therefore seems relevant to analyse the participation behaviour of the GPTs, which was defined as the number of patients included for feedback, and showed great diversity. We studied possible determinants (among which baseline consultation skills) of participation in a self-directed learning programme with real patient involvement. Furthermore, semi-structured interviews were held with those GPTs who collected less than five questionnaires. Lower baseline consultation skills of GPTs were not related to a higher rate of participation. Among male GPTs and GPTs with more clinical experience, there was a lower participation rate. The GPTs did not mention vulnerability or awkwardness with regard to patient involvement as a reason for low participation, but they had various motivational and practical reasons for questioning the expected benefits of the programme. It is probable that close
monitoring and coaching of individual GPTs by tutors and research staff are important requirements for self-directed learning from patient feedback. This could enhance the motivation of participants, which might ultimately benefit the imbedding of a patient-centered approach in primary care.

**Chapter 8. Generalisability of MAAS-Global assessments of consultation skills**

The last study described in this thesis focused on aspects of generalisability when teachers, after attending a short training course, assessed the consultation skills of GPTs with the MAAS-Global Instrument. All 176 randomly allocated video-taped consultations (102 with standardised patients and 74 with real patients) were observed by two teachers, independently. The inter-observer variation was the most important component of variance; the difference in MAAS-Global score between the individual assessors was significant. Reliability was estimated with the generalisability coefficient (GC). For reliable assessments (GC>0.7), three assessors and 30 standardised-patient consultations were needed, or two assessors and nine-real-patient consultations. The teachers completed a questionnaire, in which they indicated that they felt sufficiently competent in using the MAAS-Global instrument. Therefore, for reliable assessment of the consultation skills of GPTs, multiple observations are required, as indicated by the results of this study. We recommend the assessment of real-patient consultations instead of consultations with standardised patients.

**Chapter 9. General discussion**

This chapter contains a synthesis of the findings of the studies described in this thesis, focusing on implications for the vocational training for general practice and recommendations for further research. It explains that there are several levels of educational impact of patient feedback, which has consequences for future decisions to implement patient feedback in training programmes. Furthermore, it urges the need for a close collaboration between researchers, teachers and practicing GPs to generate and conduct educational research.