Summary

Background
Generic substitution is a commonly used cost-containment strategy meant to control pharmaceutical expenditure without compromising health objectives. It has been shown effective with regard to lowering the price of medicines, but the practice is still debated as it is found to worry and confuse patients and thereby pose a risk to patient safety. This dichotomy indicates that a policy with one aim, to lower the price of medicines, also has other consequences. Generic substitution is performed in community pharmacies and hence it is there that practice is likely to be influenced by it. This thesis will study community pharmacists’ experiences, patients’ trust in interchangeable medicines, and the influence of generic substitution on patient-pharmacist communication in order to bring about greater understanding of the effects on practice that derive from a pharmaceutical policy. This knowledge can provide a foundation on which a new and improved policy can be built.

Objectives
The overall aim of this Ph.D. thesis is to enhance understanding of how the cost-containment strategy of generic substitution has influenced practice in community pharmacies.

The specific aims of the included studies are as follows:

1. To explore the attitudes and experiences regarding generic medicines and generic substitution among community pharmacists (paper I)
2. To investigate the content of the pharmacist-patient communication in community pharmacy and the influence of generic substitution on dialogue (papers II and III)
3. To assess and analyze how prior experiences, information from pharmacist or doctor, confusion after receiving a generic substitution, view on financial savings, acceptance of generic substitution and socio-demographic factors are associated with patients’ trust in the safety and efficacy of interchangeable medicines (paper IV).

Methods
Semi-structured interviews were used to explore community pharmacists’ experiences and attitudes about generic drugs and generic substitution. The content of pharmacist-patient communication and its influence from generic substitution were investigated through non-participant observations including audio recordings and short-structured questionnaires. Finally, a quantitative questionnaire survey was carried out to study which factors, including
information from the pharmacist, are associated with patient trust in the bioequivalence of substitutable products.

Results
The results are summarized for each research question.

Pharmacists’ attitude to and experience with generic substitution
Although pharmacists acknowledge the financial savings of generic substitution, they worry about patients’ ability to handle the switchover. The pharmacists moreover claimed that generic substitution shifts the focus of patient-pharmacist communication from medicinal content to cost and regulations.

Pharmacist- patient communication and the influence of generic substitution on content
The findings in paper I contributed to the formulation of the research questions in papers II and III. The results show that very little time is spent talking about medicinal issues during dispensing in community pharmacies, irrespective of whether generic substitution is offered or not. After adjustment for number of prescriptions and socio-demographics, more time is spent communicating about non-medical issues during encounters involving generic substitution. The encounter is not, however, longer in total, nor is more time spent on medical issues.

Patients’ trust in interchangeable medicines and factors of importance
Factors seen to significantly increase the odds of a low level of trust in bioequivalence were change in effect or occurrence of side effects whether positive or negative, lower level of education, female gender, and the opinion that changes in drug name and appearance make adherence more complicated. Trust in individual and societal financial savings from generic substitution, and information from doctor and pharmacist were associated with a high level of trust.

Conclusion
The results of this thesis indicate that although pharmacists consider generic substitution to shift the focus of communication with patients from pharmaceutical counseling towards cost and regulations, actual pharmacist-patient dialogue contains little medical communication whether or not generic substitution is involved. Moreover, the results showed that more than
one-third of patients claimed that generic substitution complicates adherence. This is associated with a low level of trust in bioequivalence and confirms pharmacists’ experience that generic substitution introduces challenges with regard to patient safety and adherence. And although pharmacists emphasized the challenge generic substitution presents to patients, they do not seem to spend more time talking about medical issues when generic substitution is involved. This indicates that pharmacists need to further embrace the importance of their role in promoting the rational use of medicines and assuring patient safety. Moreover, patients’ experiences with a change in effect or side effect after generic substitution are associated with a low level of trust in bioequivalence, irrespective of whether the change was positive or negative.