Background:
There is strong evidence supporting that pharmacist involvement strengthens quality of the medication process. There is also evidence indicating that many emergency admissions among the elderly are medicine related. Hillerød Hospital is chosen to perform an implementation study of front-line-clinical pharmacy in an Emergency Department. Hillerød Hospital is a mid-size teaching hospital in the Capitol Region of Denmark.

Purpose:
The purpose of the study is to investigate how front-line clinical pharmacy can be implemented in a Danish Emergency Department.

Materials and method:
The implementation study is designed as an action-research project using “Model for Improvement” as the driver methodology. The task is to implement pharmacist driven medication reconciliation and medication review at admission of patients over 50 years of age receiving more than five prescribed drugs. The pharmacists produce an updated medication status before physicians see the patient. The pharmacists document problem-oriented findings and recommendations in the patient record and inform clinicians directly in urgent cases. The evaluation of implementation will be based on; audits of 10 patient records every fortnight to monitor if the pharmacist’s medication reconciliations are used by the physicians, sequential analysis of recommendations (sample; recommendations made in 14 days recorded every 3 months), qualitative analysis of pharmacist records and finally merging of all PDSA supporting the implementation process.

Conclusion:
A close collaboration between pharmacy managers and clinicians has formed a successful basis for coordinating and evaluating the task. Method triangulation is used to evaluate the implementation process.

Results:
The pharmacists have adjusted known models for medication reconciliation and medication review to the acute care setting. Up to 90 % of pharmacists’ medication reconciliations are used in physicians’ management plan for their patients. On average the pharmacists find 1.3 drug related problems per medication review. The implementation process is continuously supported by PDSA's and input from the ongoing qualitative analysis.