

# Summary: CDRM Study

## Study on computer-assisted diabetes risk management



The CDRM study will evaluate a newly developed approach to improve management and secondary prevention of type 2 diabetes in outpatient care. The research will explore the impact of an intervention via a computer-assisted diabetes risk management system (CDRMS) in combination with the use of an electronic health record. The focus will be on the effect on medical effectiveness, patients' cardiovascular risk profiles and patients' self reported outcomes (e.g. health related quality of life).

**Title:** Computer-assisted Diabetes Risk Management Study - Evaluation of an integrated care approach to prevent and treat diabetes mellitus

**Background:** Diabetes mellitus is a major burden for health systems all over Europe. The costs of diabetes are high both for the affected individual and for society. Hospitalisation costs resulting from diabetes associated complications are responsible for more than 50% of the total health care expenditures. Thus, efficient management and secondary prevention to delay or avoid the onset of major complications is very important for further improvement of ambulatory diabetes care.

**Objectives:** The project goal is to evaluate the potential of a newly developed computer-assisted and evidence based diabetes risk management approach. The impact of the intervention on process and utilisation of care, development of costs, patient knowledge and behaviour, clinical effectiveness, influencing factors and health related quality of life shall be under examination.

**Research Design and Methods:** To gain this information we use a prospective, cluster randomised, longitudinal, controlled trial design with baseline measurement and one and a half years follow-up on relevant outcome measures. Approximately 24 general practitioners and 1200 of their outpatient, type 2 diabetes patients will be enrolled. GPs of the intervention group will use CDRM reports during consultations. A multilevel analysis will be used to evaluate the effect of the intervention.

**Expected Results:** Although the average diabetes care standard in Germany is very high - compared with other European regions - we expect that there will be a significant positive effect on short-term cardiovascular risk, medical outcomes and on health related quality of life using a CDRMS in outpatient practices.

### Researchers:

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Guideline based recommendations DMS  
Diabetes Mellitus individualised  
Prevention Metabolic Syndrome treatment  
Disease Management Programmes  
Patient Education Individual  
Therapy HMS OBESITY risk calculation  
Sustained behavioural change  
New Technologies Health Management  
Motivation doctor-patient-relationship  
Patient empowerment Ageing Society  
Compliance early diagnosis MEDICAL  
Decision Support INTERVENTION  
Systems EbM Statistical models

### Timing:

The fieldwork of the empirical study started winter 2008 and will take 23 months. On the basis of the data gained within the 6 months data measurement intervals we will publish progress reports.

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### Project Homepage:

www.study-on-diabetes-management-systems.de