

*Technische Universität Berlin*



# Disease Management Programmes

A review of systematic reviews for  
the HEN – Project

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**HEN**  
Health  
Evidence  
Network

EVIDENCE FOR DECISION-MAKERS

## Health Evidence Network

- Online information service, primarily targeting public health and health care decision-makers
- Provides access to different sources of evidence
  - databases, reports, and networks of experts in the field of evidence for public health and health care
- Answers to questions from decision-makers
  - Synthesis Reports (concise and standard)
  - thoroughly reviewed (3-stage review process)

# Background

- Chronic Conditions account for most of the Burden of Disease in the European Region (European Health Report 2002)
- Quality Problems in Care of Chronic Conditions
  - Insufficient transfer of evidence to practice
  - Coordination problems

# Intervention DMP

- Evidence basis
  - guidelines, care protocols, lists of effective drugs, etc.
- Components to implement evidence basis
  - education of providers, reminders, financial incentives, etc.
- Components to improve self-management
  - patient education, reminders, etc.
- Data Collection Systems

# The Question

Are disease management programmes (DMPs) effective in improving the quality of care for people with chronic diseases?

## Measurements

- Process Indicators
  - Adherence to Evidence-based guidelines
- Outcome Indicators
  - Disease Control Measures (physiologic parameters)
  - Survival / Morbidity
  - Quality of Life

# Methods

- Comprehensive Literature Search
  - Medline, EMBASE, Cochrane Library, HTA Database, Campbell Collaboration, ERIC
  - “Disease management program\*”, “comprehensive multidisciplinary program\*”, “comprehensive care”,
  - “chronic illness\*”, “chronic disease\*”
- Inclusion Criteria
  - HTA-Reports, Systematic Reviews, Meta-Analyses
  - Question focusing on DMP

# Results

## Literature Search

*Databases / Handsearch INAHTA*

potentially eligible reviews

(n=12)

### *Excluded (n=8)*

Non-systematic methodology  
(n=3)

Inclusion of studies of  
inadequate design (n=2)

Studies included in other  
reviews (n=2)

Other Intervention (n=1)

### *Included (n=4)*

Several Conditions (Weingarten et al. 2002)

Diabetes Mellitus (Norris et al. 2002)

Chronic Heart Failure (McAlister et al. 2001)

Coronary Heart Dis. (McAlister et al. 2001)

# Results “Process”

	<b>Good evidence of Improvement</b>
Diabetes Mellitus	Monitoring glycated Hemoglobin (GHb) Screening for complications (neuropathy, retinopathy, etc.)
Heart Failure	ACE-inhibitor prescribing
Coronary Heart Disease	Antiplatelet prescribing $\beta$ -blockers prescribing Lipid lowering prescribing



# Results “Outcomes”

	<b>Good evidence of improvement</b>	<b><i>Insufficient</i> or lack of evidence of improvement</b>
Diabetes Mellitus	Glycemic Control (GHb)	Weight / BMI Blood Pressure Morbidity / Survival QoL
Heart Failure	Hospitalization rate	Survival QoL
Coronary Heart Disease	Hospitalization rate	Re-Infarction rate Survival / QoL

# Limitations

- Heterogeneity
  - Content of the programmes
  - Component mix of the programmes
  - Comparator („usual care“)
- Imprecise description of DMP
  - difficult reproduction
- Lack of comparisons of different DMP strategies

# Conclusions

- DMP can improve the quality of care for persons with chronic conditions as measured by
  - Disease Control Indicators
  - Attachment to evidence based recommendations
- Unclear whether they contribute
  - to improve survival
  - to improve QoL
- Ideal mix of components depends on the target condition and the context
- Introduction of DMP should be accompanied with comprehensive evaluative research



Full Synthesis Report available at

<http://www.euro.who.int/HEN>