Disease Management Programmes

A review of systematic reviews for the HEN – Project

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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“

<table>
<thead>
<tr>
<th></th>
<th>Good evidence of Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Mellitus</td>
<td>Monitoring glycated Hemoglobin (GHb)</td>
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<tr>
<td></td>
<td>Screening for complications</td>
</tr>
<tr>
<td></td>
<td>(neuropathy, retinopathy, etc.)</td>
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<tr>
<td>Heart Failure</td>
<td>ACE-inhibitor prescribing</td>
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<tr>
<td>Coronary Heart Disease</td>
<td>Antiplatelet prescribing</td>
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<td></td>
<td>β-blockers prescribing</td>
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<td>Lipid lowering prescribing</td>
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</table>
## Results “Outcomes“

<table>
<thead>
<tr>
<th>Diabetes Mellitus</th>
<th>Glycemic Control (GHb)</th>
<th>Good evidence of improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Failure</td>
<td>Hospitalization rate</td>
<td>Insufficient or lack of evidence of improvement</td>
</tr>
<tr>
<td>Coronary Heart Disease</td>
<td>Hospitalization rate</td>
<td>Weight / BMI Blood Pressure Morbidity / Survival QoL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Survival QoL</td>
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<td></td>
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<td>Re-Infarction rate</td>
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<td></td>
<td></td>
<td>Survival / QoL</td>
</tr>
</tbody>
</table>
Limitations

• Heterogeneity
  – Content of the programmes
  – Component mix of the programmes
  – Comparator („usual care“)
• Imprecise description of DMP
  – difficulties 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