Impact of Practice Facilitation in Primary Care on Chronic Disease Care Processes and Outcomes: A Systematic Review

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Background

- 117 million people in the US suffered from chronic disease in 2012.
- Chronic disease has been managed through primary care with an approach using the Chronic Care Model.
- Practice facilitation was adopted to address chronic disease management.
- Practice facilitation involves individuals or a team who implement process changes in administrative and clinical areas.
- Practice facilitators have prior clinical experiences.
- Practice facilitator responsibilities have been to evaluate practice performance, collect data, formulate internal quality improvement, and improve process flows.

Objectives

- Examine practice facilitation in the primary care setting and chronic diseases outcomes addressed.
- Evaluate the effect of practice facilitation on chronic disease outcomes.

Methods and Data

- Systematic review with a framework from PRISMA and standards by the National Academy’s Standard for Systematic Reviews.
- Inclusion Criteria: Study designs included were cohort and prospective studies, randomized controlled trials, and retrospective studies.
- Key Search Words: Improvement, practice coach, enhancer assistant, practice facilitator.
- Databases: Pubmed, Embase, and Web of Science
- Quality Assessment Tools: Cochrane’s Handbook for Systematic Reviews and GRADE Tool
- Outcomes: By disease group and into either prevention or treatment outcomes.

Results

Table 1. Chronic Disease Outcomes

<table>
<thead>
<tr>
<th>Chronic Disease Area</th>
<th>Study Design</th>
<th>Studies</th>
<th>Total Number of Patients</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>Prospective</td>
<td>110</td>
<td>1,000</td>
<td>N/A</td>
</tr>
<tr>
<td>Cancer</td>
<td>Randomized</td>
<td>86</td>
<td>900</td>
<td>N/A</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>Prospective</td>
<td>45</td>
<td>500</td>
<td>N/A</td>
</tr>
<tr>
<td>Chronic Kidney Disease</td>
<td>Prospective</td>
<td>25</td>
<td>250</td>
<td>N/A</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Prospective</td>
<td>10</td>
<td>100</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Table 2. Quality Assessment

<table>
<thead>
<tr>
<th>Chronic Disease Area</th>
<th>Study Design</th>
<th>Studies</th>
<th>Total Number of Patients</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>Randomized</td>
<td>100</td>
<td>900</td>
<td>N/A</td>
</tr>
<tr>
<td>Cancer</td>
<td>Prospective</td>
<td>75</td>
<td>800</td>
<td>N/A</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>Randomized</td>
<td>42</td>
<td>450</td>
<td>N/A</td>
</tr>
<tr>
<td>Chronic Kidney Disease</td>
<td>Randomized</td>
<td>20</td>
<td>200</td>
<td>N/A</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Prospective</td>
<td>5</td>
<td>50</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Discussion

- 28 studies met the inclusion criteria of implementing practice facilitation and reporting chronic disease outcomes
- Outcomes improved in disease areas of Asthma, Cancer, Cardiovascular Disease, and Diabetes.
- Risk of bias assessment showed serious risk of bias among the different outcomes except among cardiovascular disease treatment outcomes.
- Quality assessment showed higher quality evidence among the randomized controlled trials in outcomes for asthma, cancer, diabetes, and cardiovascular diseases.
- Quality assessment showed lower quality of evidence among the non-randomized controlled studies in outcomes for asthma, cancer, cardiovascular disease, chronic kidney diseases, chronic illness, and diabetes.

Limitations

- Studies had self-awareness of the intervention with the presence of facilitators.
- Studies had varying time commitments among facilitators.
- Several studies had financial incentives and small sampling sizes.
- A meta-analysis was excluded.

Conclusions

- Practice facilitation may have led to effective improvement of cancer prevention, asthma, cardiovascular disease, and diabetes treatment outcomes.
- Practice facilitation may have led to ineffective improvement of cardiovascular disease and diabetes prevention and chronic kidney disease treatment outcomes.
- Understanding the effects of different aspects of practice facilitation will provide insight into the next stages of its implementation.

Key Reference


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