

Introduction

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We reviewed the available evidence for the impact of disease management on several outcomes

| Disease | Clinical Processes Adherence to evidence- based guidelines | Health- Related Changes in behaviors | Disease Control Changes in intermediate measures | Clinical Outcomes | Healthcare Utilization Changes in utilization of services | Financial Outcomes | Patient Experience Satisfaction, quality of life, etc. |
|-------------------------------|--|---|--|----------------------|---|-----------------------|--|
| Heart failure | | | | | | | |
| Coronary artery disease | | | | | | | |
| Diabetes | | | | | | | |
| Asthma | | | | | | | |
| Chronic lung disease | | | | | | | |
| Depression | | | | | | | |

For most outcomes, evidence was lacking or inconclusive

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| Chronic lung disease | | | | | | | |
| Depression | | | | | | | |

In cases with sufficient evidence, we often found no effect or even a negative effect

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|-------------------------------|--|---|--|----------------------|---|-----------------------|--|
| Heart failure | | | | | | | |
| Coronary artery disease | | No effect | | No effect | | | |
| Diabetes | | No effect | | | | | |
| Asthma | | | | No effect | | No effect | |
| Chronic lung disease | | | | | | | |
| Depression | | | | | Increased utilization | Increased cost | |

Some improvement was seen in clinical processes and disease control

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|-------------------------------|--|---|--|----------------------|---|-----------------------|--|
| Heart failure | Improved | | Improved | | Reduced hospital admissions | | Improved |
| Coronary artery disease | Improved | No effect | Improved | No effect | | | |
| Diabetes | Improved | No effect | Improved | | | | |
| Asthma | | | | No effect | | No effect | |
| Chronic lung disease | | | | | | | |
| Depression | Improved | | Improved | | Increased utilization | Increased cost | Improved |

But what does this all mean?

- It does NOT mean that disease management does not work
 - Just that it is insufficiently researched
 - This is especially true for large, populationbased DM programs in spite of their rapidly growing market penetration
- There is the potential that disease management can reduce cost and improve health outcomes
 - Most studies have not followed patients long enough
 - Some credible positive results have been reported

So what is a responsible purchaser to do?

- Healthy skepticism is in order
 - Not all programs work and not in all contexts
 - Vendors are selling a service for profit
- Vendor reported results need to be verified
 - This does not mean running clinical trials
 - Intensity of independent evaluation must fit purpose
 - But plausibility checks should be done at a minimum
 - If possible try to find reference groups

