The Effect of Incident Comorbidities on Guideline-Concordant Chronic Disease Care

Principal Investigator: Elizabeth Bayliss, MD, MSPH
Institution/Partners: Institute for Health Research
Kaiser Permanente Colorado
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Description

Little is known about how the development of a new chronic health condition affects management of existing chronic conditions over time. New conditions might worsen management of existing conditions because of competing demands or improve management of existing conditions because of increased engagement with health care.

As part of research efforts to inform guideline specificity, this study modeled how an event from a comorbid condition (such as an exacerbation of a coexisting chronic illness, or the diagnosis of a new condition) can affect guideline-based care for an underlying condition.

Specific Aims

1. Assess the effect of the comorbidities of new-onset depression, new-onset treatable cancer, and exacerbations of chronic pulmonary disease on control of risk factors for the index condition of type 2 diabetes.

2. Based on results of these analyses, propose specific adaptations to existing diabetes care guidelines and alternate care management strategies for complex patients with diabetes, which will be amenable to further investigation.

Findings

- Among three cohorts of similar age, the mean levels of hemoglobin A1c, systolic blood pressure (SBP), and low density lipoprotein (LDL) did not change significantly over time from before to after the diagnosis of a new comorbidity.

- Despite good individual risk factor control, only a small percentage of individuals were able to achieve and maintain simultaneous guideline concordant values of HbA1c, blood pressure, and LDL:
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9.6% over 12 months, 16.3% over 24 months, and 22.4% over 36 months.

- A qualitative analysis revealed several themes that may potentially differentiate between persons with improving versus static A1c levels, including: social issues creating competing care demands, discordant comorbidities, treatment intensification, and engagement with self-care tasks.

**Implications**

On a population level, A1c, blood pressure, and LDL were not affected by the additional disease burden presented by the new comorbidities studied. However, competing demands for patients and/or clinicians may affect simultaneous control of the multiple cardiac risk factors associated with a diagnosis of diabetes.

**Publications (as of September 2013)**


**Posters and Presentations**


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