

## 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  
Project Period: 09/01/08 – 08/31/11

### 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 models 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 the index condition of type-2 diabetes; and
2. Based on results of these analyses, propose both specific adaptations to existing diabetes care guidelines and alternate care management strategies for complex patients with diabetes, which will be amenable to further investigation.

### Main Objective

To develop a model that describes how new or exacerbated comorbid conditions affect guideline-concordant care for an existing condition.

### Chronic Conditions Considered

Type-2 diabetes (index condition)  
Depression  
Cancer  
Chronic pulmonary disease

### Preventive Services Considered

This project did not address a specific clinical preventive service.

### Study Design & Population

Analytic epidemiological study  
Cohort of 19,000 Kaiser  
Permanente Colorado patients.

### Strategies Addressed from the National MCC Strategic Framework

- 3.C. Address multiple chronic conditions in guidelines
- 4.C. Increase clinical health research

