

Optimizing Treatment Combinations in Individuals with Multiple Chronic Conditions

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Description

The clinical consequences of most drug-drug interactions (DDIs) are not well understood because they cannot be easily studied in pre-approval trials. This is particularly true for patients with multiple chronic conditions, who are often not included in these trials. Observational studies in large, longitudinal, electronic healthcare databases have emerged as a promising source for investigating outcomes related to DDIs. In this project, the PI will apply a new module to rapidly investigate clinical outcomes related to DDIs in patients with depression and other chronic conditions requiring drug therapy.

Specific Aims

1. Modify existing semi-automated programs for rapid drug-drug interactions (DDI) assessment in electronic healthcare data.
2. Apply DDI programs to rapidly evaluate clinical outcomes related to potential DDIs in three multiple chronic condition settings involving depression.
3. Develop dissemination materials and make DDI programs publicly available for application to other multiple chronic condition settings.

Main Objective

Generate evidence on optimal treatment decisions for patients with multiple chronic conditions involving depression.

Chronic Conditions Considered

Depression, coronary artery disease, atrial fibrillation, and breast cancer

Study Design, Data Sources & Sample Size

Six large secondary sources: Medicare, Medicaid, and Commercial Health Insurance Plans (already built and tested)

Strategies Addressed from the HHS Strategic Framework on Multiple Chronic Conditions

- 4.B. Understand the epidemiology of multiple chronic conditions.
- 4.C. Increase clinical health research.