

Economic Review Analytic Framework Narrative: Tailored Pharmacy-based Interventions to Improve Medication Adherence for Cardiovascular Disease Prevention and Management

The analytic framework postulates that effective tailored interventions delivered to patients with cardiovascular disease (CVD) or risk factors for CVD will reduce or remove medication adherence barriers. This would be expected to improve patient adherence to medications prescribed for hypertension, hyperlipidemia, anti-coagulation, and CVD management. It is postulated this improved adherence would reduce CVD risk by improving blood pressure and lipid control and increasing aspirin use, and ultimately reduce and CVD morbidity and mortality.

The economic review identified the cost of pharmacists' time and the cost of patient education materials and adherence aids as cost drivers. Other intervention costs include patient medical supplies, development of patient materials, patient time, communication technology and devices, and overhead costs (e.g., facilities). Team-based care, case management, or other interventions would be considered cost drivers if added to the medication adherence intervention.

The economic review identified the costs of inpatient stays, emergency department visits, outpatient specialist and primary care provider visits, medications, and labs as cost drivers for the change in healthcare cost. Reduced morbidity and mortality related to CVD are expected to increase the productivity of patients at their worksites and increase both the quality and quantity of additional life years lived.

The framework conceptualizes summary economic outcomes as cost-benefit or cost-effectiveness. Cost-benefit is the ratio of averted healthcare cost and increased productivity to the intervention cost. Cost-effectiveness is net cost per additional quality adjusted life year saved or disability-adjusted life year averted.