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## Cost effectiveness of a general practice chronic disease management plan for coronary heart disease in Australia

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**Background:** Chronic disease management models of care are increasingly being used as an avenue to better implement clinical guideline recommendations, address evidence-management gaps and improve health outcomes. Prior to advocating at a national level for the implementation of such programs, it is important to consider their likely efficacy and cost-effectiveness.

**Purpose:** The cost effectiveness of a proposed general practice-based program for managing coronary heart disease (CHD) patients in Australia was explored using an economic model.

**Methods:** A secondary prevention program based on initial clinical assessment and 3 monthly reviews, optimising pharmacotherapies and lifestyle modification, supported by practice registers, patient recall mechanisms, and financial incentives for quality of care and outcomes achieved, was assessed in terms of incremental cost effectiveness ratio (ICER), in Australian dollars (A\$) per Disability Adjusted Life Year (DALY) prevented.

**Results:** Based on 2006 estimates, 263,487 DALYs were attributable to CHD in Australia. The proposed program would add A\$115.65 million to the annual national health expenditure. Using an estimated 15% reduction in death and disability and a 40% estimated program uptake, the program's ICER was calculated as A\$8,081 per DALY prevented. With more conservative estimates of effectiveness and uptake, estimates of up to A\$38,316 were observed in sensitivity analysis.

**Discussion:** Many strategies proven to reduce CHD morbidity and mortality are currently available. However, there are significant evidence-management gaps in care. A general practice based program for the optimal application of current evidence based management recommendations is likely to be cost-effective and provide substantial health benefits. Recognising the close interrelationships between CHD, other forms of cardiovascular disease and diabetes, there are opportunities for such a program to build on and integrate with other chronic disease management funding and program initiatives in Australian general practice.