# Modelling the costs and outcomes of changing general practitioner behaviours with respect to screening for at-risk drinking

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## Summary

In the ten years 1992 to 2001, it was reported that approximately 31,000 Australians died from alcohol-related disease and injury. Harm from excessive alcohol use consumes expensive health care resources, contributes to lost productivity, and results in costs due to road accidents and legal actions. Early screening and intervention, particularly by GPs, has significant potential to prevent alcohol-related health and social problems.

This study compares four strategies in terms of the Incremental Cost Effectiveness Ratios, which estimate the cost per additional unit of outcome achieved, where the outcome is measured in some "natural unit". In this study the natural unit is a standard drink. Such analysis allows comparison of the efficiency of different interventions that are designed to produce a given outcome. In this study results were assessed on the basis of 'cost per standard drink avoided'.

Academic detailing, consisting of practice-based educational activities, focused on individual GPs and providing short presentations, skills training, performance feedback, and face-to-face discussions. It was found to have a 'cost per standard drink avoided' of $50.

Interactive continuing medical education workshops, which are out-of-practice group education sessions that are highly dependent on structure and content, were found to have a 'cost per standard drink avoided' of $86.

Computerised reminder systems are a well-documented strategy, which show increasing promise with the greater investment in IT by most health systems. They are becoming commonplace with GPs and show a 'cost per standard drink avoided' of $91.

Target payments or fee-for-service are the financial incentive system generally adopted in Australia and have been shown to have a 'cost per standard drink avoided' of $691.

The model incorporated data on screening rates, alcohol consumption, rates of brief intervention by GPs, population that visit a GP, and the effectiveness and costs of implementing the strategies.

## Outcomes

The computerised reminder system and academic detailing appear to be most effective in achieving a decrease in grams of alcohol consumed per year among risky drinkers. The cost differences (from baseline) for each of the various strategies are $4.0 million for academic detailing, $5.0 million for interactive CME, $7.8 million for reminder systems, and $3l.5 million for the target payment strategy.

## References

Shanahan, M, Shakeshaft, A, Fawcett, J, Doran, C, Mattick, R 2005 Modelling the costs and outcomes of changing general practitioner behaviours with respect to screening for at-risk drinking. Technical Report, no. 219, Canberra: NDARC.

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