

Appendix 1

Systematic Review Protocol Example: Smoking Cessation Interventions and Strategies for Hospitalised Patients

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Background

Smoking has been identified as the primary cause of avoidable death and disease when compared with all other drugs used in Australia (NHMRC, 1991). Evidence on the potential risks of smoking was first identified nearly 60 years ago. In 1991 the Federal Court determined that passive exposure to cigarette smoke could cause lung cancer, asthma and respiratory disease. There has also been a significant increase in public support for measures designed to reduce the exposure to tobacco smoke. Despite the increase in public knowledge, and the momentum gained for smoke-exposure reduction, the prevalence of smoking continues to represent a threat to the health and well-being of active and passive smokers alike. Programmes that encourage smokers to quit have been described as the most significant factors in promoting health and reducing the burden of disease related to smoking in Australia. Smoking cessation has a measurable impact on health improvement. Within two to three years of quitting, ex-smokers are at a significantly lower risk of myocardial infarction or stroke.

Despite the significance of the impact of cessation programmes on smoking, many smokers enter and exit the health care system every day without receiving advice about this important health risk. Smoking cessation interventions offer clinicians and health care providers a significant opportunity to improve current and future health-related outcomes. It is essential, therefore, that health care providers, including clinicians, smoking cessation specialists, health care administrators and health care purchasers take an active role in reducing the prevalence of tobacco use. One way to do this is through the support and delivery of effective smoking cessation interventions (Fiore et al., 1996). It is timely and essential, therefore, to provide clinicians with the best available evidence on currently available interventions for hospitalised smokers. There is now clear evidence for the effectiveness of a number of smoking cessation interventions readily available to health care workers, particularly primary health care professionals. There is also good evidence that the use of guidelines for smoking cessation can significantly increase quit rates (Grimshaw et al., 1995; Worrall et al., 1997).

Review questions

This review seeks to establish, through the available literature, what is best practice for smoking cessation. The specific review questions to be addressed are:

- (1) What constitutes current best practice in relation to smoking cessation interventions for hospitalised patients?
- (2) What are the indications for, and the safety and effectiveness of, the range of interventions available for hospitalised patients?

Inclusion criteria

Types of participants

This review will consider all studies that involve human subjects of any age who smoke. Although the review is to be focused on hospitalised patients who smoke, studies using non-hospitalised participants will also be considered where the interventions could be applied in the hospital setting.

Types of intervention

Interventions of interest included those related to the efficacy and/or effectiveness of smoking cessation programmes including screening systems; assessment strategies; intervention programmes; specific clinical interventions; and follow-up assessment strategies.

Types of outcome measure

The primary outcome of interest is smoking cessation. Secondary outcomes include smoking reduction, withdrawal symptoms, weight gain, and intervention-specific side effects.

Types of studies

The review considered all studies evaluating the effectiveness or efficacy of interventions/strategies relating to smoking cessation in the hospitalised patient. In the absence of this type of study, those that evaluate interventions and programmes that may readily be applied to the hospitalised patient will also be considered.

Search strategy

The search strategy will be designed to access both published and unpublished materials and will comprise three stages:

- (1) A limited search of CINAHL and Medline to identify relevant keywords contained in the title, abstract and subject descriptors.
- (2) Terms identified in this way, and the synonyms used by respective databases, will be used in an extensive search of the literature.
- (3) Reference lists and bibliographies of the articles collected from those identified in stage two above will be searched.

The initial search terms will be 'smoking', 'cessation', 'reduction' and 'withdrawal'. Articles published in the last 10 years in English and indexed in the following databases will be searched:

CINAHL	Embase
Medline	Cancerlit
Current Contents	DARE
Cochrane Library	Web search – metacrawler
PsycINFO	

Full copies of articles identified by the search, and considered to meet the inclusion criteria, based on their title, abstract and subject descriptors, will be obtained for data synthesis. Articles identified through reference list and bibliographic searches will also be considered for data collection based on their title. Two reviewers will independently select articles against the inclusion criteria. Discrepancies in reviewer selections will be resolved at a meeting between reviewers prior to selected articles being retrieved.

Critical appraisal

Identified studies that meet the publication criteria will be grouped into one of the following categories: experimental studies, cohort studies, case control studies, interpretive and critical studies, cost minimisation studies and textual/opinion papers. These studies will then be assessed independently for methodological validity by two reviewers, prior to inclusion in the review using the corresponding checklist from the SUMARI suite developed by the Joanna Briggs Institute (Appendix 2). Any disagreements that arise between the reviewers will be resolved through discussion and with the assistance of a third reviewer where required.

Data collection

Following assessment of methodological quality, the papers will be grouped according to whether they are quantitative, qualitative or opinion-based. A data extraction tool has been developed specifically for quantitative research data extraction based on the work of the Cochrane Collaboration and the Centre for Reviews and Dissemination (Appendix 3). Qualitative research data and expert opinion will be extracted using the data extraction tools developed for the

SUMARI software suite (Appendix 3). Two reviewers will independently perform data extraction.

Data synthesis

For quantitative data, where possible, odds ratio (for categorical outcome data) or standardised mean differences (for continuous data) and their 95% confidence intervals will be calculated from the data generated by each included randomised controlled trial. If appropriate with available data, results from comparable groups of studies will be pooled into statistical meta-analysis using Review Manager software from the Cochrane Collaboration. Heterogeneity between combined studies will be tested using standard chi-square test. Where statistical pooling is not possible the findings will be presented in narrative form.

For qualitative data, where meta-synthesis is possible, textual data will be pooled using the Qualitative Assessment and Review Instrument (JBI-QARI) and Narrative, Opinion and Text Assessment and Review Instrument (JBI-NOTARI) package from the SUMARI software suite. Where textual pooling is not possible the findings will be presented in narrative form.

References

- NHMRC (1991) *National Health Policy on Tobacco in Australia and Examples of Strategies for Implementation*, National Health and Medical Research Council, Canberra.
- Fiore, M. C., Bailey, W. C., Cohen, S. J. et al. *Smoking cessation: Clinical Practice Guideline No 18*. Rockville, MD: US Department of Health and Human Services, Public Health Service. Agency for Health Care Policy and Research. AHCPR Publication No. 96-0692. April 1996.
- Grimshaw, J., Freemantle, N. et al. (1995). Developing and implementing clinical practice guidelines. *Quality Health Care* 4: 55–64.
- Worrall, G., Chaulk, P., et al. (1997) The effects of clinical practice guidelines on patient outcomes in primary care: a systematic review [see comments]. *Canadian Medical Association Journal* 156 (12): 1705–12.