MAPI CONSULTANCY

A RAPID REVIEW OF ECONOMIC EVIDENCE ON TOBACCO HARM REDUCTION STRATEGIES

FOR CONSIDERATION BY THE NICE PUBLIC HEALTH GUIDANCE DEVELOPMENT GROUP ON TOBACCO HARM REDUCTION

Report NJ6652A

PREPARED BY MAPI CONSULTANCY AND YORK HEALTH ECONOMICS CONSORTIUM FOR NICE

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19 March 2012

November 2021: NICE guidelines PH45 (June 2013) PH48 (November 2013) have been updated and replaced by NG209.
The recommendations labelled [2013] or [2013, amended 2021] in the updated guideline were based on these evidence reviews.
See www.nice.org.uk/guidance/NG209 for all the current recommendations and evidence reviews.

Contents

Abbreviations

CDTQ	Cut-down-to-quit
CPHE	Centre for Public Health Excellence
DALY	Disability-Adjusted-Life Year
HRQoL	Health Related Quality of Life
ICER	Incremental Cost-Effectiveness Ratio
LY	Life year
NRT	Nicotine replacement therapy
OTC	Over the counter
QALY	Quality Adjusted Life Year
RCT	Randomised Controlled Trial

Executive Summary

Aims and objectives

Despite the best efforts of various governmental and non-governmental organisations, a significant number of individuals continue to smoke. In an attempt to address this, the National Institute for Health and Clinical Excellence has produced guidance outlining various approaches to smoking cessation, including information on interventions relevant to particular groups (pregnant women) or in particular settings (workplace). To complement the existing guidance, NICE is in the process of developing recommendations on tobacco harm reduction by means of "cut down to quit" before quitting, or to "cut down or abstain" from smoking, temporarily or indefinitely. This rapid cost-effectiveness review aimed to identify all relevant economic evidence concerning approaches to tobacco harm reduction that fall under the remit of the guidance.

Methods

A range of databases indexing published research were searched, by the York Health Economics Consortium, for studies relating to the cost-effectiveness of tobacco harm-reduction. The databases searched included the majority of the core databases recommended in the NICE methods for public health guidance. The search strategies from the effectiveness reviews (reviews 2-4) formed the basis of the searches, replacing the controlled trials methodological search filter with a filter designed to identify economic and costs studies. To maintain consistency with the effectiveness reviews searches, the following limits were applied: published from 1990 onwards; published in English language. Search results were first selected at title level. Articles were subsequently included or excluded based on the abstract, using the PICOS criteria. Next, full text papers were evaluated for eligibility, and included if eligible. Data in the included papers relating to the research question, study design, data collection, data analysis, population, findings, study limitations and reported gaps in evidence were extracted independently by two reviewers using the extraction form. Extractions were compared between the two reviewers to reach agreement. In addition to extracting key information from the included papers there was consideration of the study quality as per recommended NICE methods.

Main findings (Results)

The systematic search identified two studies that met the inclusion criteria. One study was assessed as being of limited quality and not applicable of use in the development of evidence statements (Marks, 2002). The other study was assessed as being of good quality and applicable for use in the development of evidence statements (Wang, 2008). No evidence of the economic impact of cut-down to quit (CDTQ) was identified in this review and the authors developed their own de novo cost-effectiveness model. The cost-effectiveness model included three CDTQ options, 1) CDTQ with over the counter (OTC) nicotine-replacement therapy (NRT), 2) CDTQ with prescription NRT, and 3) CDTQ with behavioral support (individual counseling or group counseling) and prescription NRT. The outcome of interest in each of these interventions was quit rate at 12 month with the CDTQ interventions being compared with no attempt to quit. All CDTQ with NRT interventions

resulted in incremental cost-effectiveness ratios (ICERs) well within margins generally considered cost-effective, namely between £1,333/QALY and £7,739/QALY, depending on the age at which smoking cessation was achieved.

Conclusions

Smoking harm reduction by "cut-down to quit" seems to be cost-effective compared to no quit attempt. However, no economic evidence was identified on smoking harm reduction strategies that do not aim to quit. Therefore, it is recommended that a de novo cost-effectiveness model is developed to assess the cost-effectiveness of reducing the harm of smoking.

Evidence statement 1:
No studies reported on the cost-effectiveness of pharmacotherapies to cut down to quit.
No studies reported on the cost-effectiveness of pharmacotherapies to cut down smoking.

Evidence statement 2:
Only one study reported on the combination of NRT products to cut down to quit:
Wang et al. (2008) systematic review and economic analysis (Quality ++)
No studies reported on the combination of NRT products to cut down smoking:
Wang et al. (2008) demonstrated cost-effectiveness of cut-down to quit interventions with nicotine replacement therapies compared to no quit attempt.

Evidence statement 3:
No studies reported on the cost-effectiveness of nicotine-containing products to cut down to quit.
No studies reported on the cost-effectiveness of nicotine-containing products to cut down on smoking.

Evidence statement 4:
Only one study reported on the cost-effectiveness of behavioural support, counseling, advice or self-help to cut down to quit:
Wang et al. (2008) systematic review and economic analysis (Quality ++)
No studies reported on the cost-effectiveness of behavioural support, counseling, advice or self-help to cut down smoking
Wang et al. (2008) demonstrated cost-effectiveness of cut-down to quit interventions with behavioural support (individual or group counseling) in combination with NRT compared to no quit attempt.

Evidence statement 5:

No studies reported on tobacco harm-reduction approaches that may have a differential impact on different groups.

1. Introduction

1.1 Context

Significant advances have been made in recent decades to reduce the prevalence of tobacco smoking in the general population. The prevalence of tobacco use in adults aged 16+ in England has fallen from around 39% in 1980 to 21% in 2009(1). These improvements have been made through a combination of changes in social norms, resulting from improved awareness of the harms of tobacco, legislation to limit the availability/use of tobacco and access to smoking cessation treatments.

Whilst a great deal has been achieved, there remains much to be done. In 2009, 21% of adults reported smoking, the same as in 2007 and 2008. One in five adults in Great Britain continues to smoke and smoking remains the UK's single greatest cause of preventable illness and premature death. Estimates put the number of smoking attributable deaths in England at over 80,000 per year and smoking is associated with an increased risk of a number of major morbidities, including cardiovascular disease, respiratory illness and numerous cancers. Smoking related morbidity is a major contributor to health inequalities, due to higher rates of smoking in less affluent populations. Not only does this have implications for the life expectancy of the smoker but it may also affect those around them, including children, as a result of exposure to passive smoking.

The economic burden of tobacco use is well documented. A number of studies have sought to establish the cost to the NHS of treating tobacco related illness. The most recent of these estimated the cost to be in excess of £5bn per annum, or approximately 5% of all NHS expenditure(2). Furthermore, there are significant non-healthcare costs associated with smoking, such as the loss of productivity resulting from increased morbidity and premature mortality. A recent report from the Policy Exchange estimated the total costs of smoking to the UK economy to be in excess of £13bn per annum(3).

The reductions in prevalence reported above, suggest that a combination of social norm change and increased accessibility to treatment has had a significant impact. However, there remain a significant number of individuals who continue to smoke. Qualitative evidence on the attitudes of smokers suggests that the majority would like to quit, with many reporting an unsuccessful quit attempt in the past year. Whilst treatment can be an effective aid to quitting, relapse rates following treatment are known to be significant and it is important that effective strategies are in place to prevent this(4).

In many instances, smokers feel unable to quit abruptly, even with the aid of treatment, or are insufficiently motivated to completely quit smoking. In cases where smokers do not feel able to give up tobacco completely, attempts to reduce the level of consumption are expected to reduce long-term morbidity given what is known about the dose-response relationship associated with tobacco use(5). For some of these individuals, reducing the level of consumption might represent a gradual route to complete cessation, whilst for others it might be seen as an attempt to reduce the harm associated with tobacco consumption.

A number of approaches to tobacco harm reduction are now available, including:

- Pharmacotherapies, which in some cases, are now licensed for cutting down or temporary abstinence;
- Other 'nicotine-containing products', such as 'electronic nicotine delivery systems' (sometimes known as 'electronic cigarettes' or 'e-cigarettes'), topical gels and oral products;
- Behavioural support, counselling or advice for individuals or groups, using similar approaches to those adopted in smoking cessation;
- Self-help approaches to cutting down on cigarettes without any additional support.

Other methods might also be adopted, such as the use of low-tar cigarettes, although evidence on these suggests that smokers often over-compensate for low-tar cigarettes by drawing on cigarettes more aggressively. In some countries, smokeless tobacco products, such as snus, are also popular, and whilst these may reduce some of the risks associated with smoking tobacco, they do not necessarily reduce nicotine consumption and may be associated with other adverse outcomes, such as an increased risk of pancreatic cancer(6). Hence, these will not be considered as approaches to tobacco harm reduction.

The National Institute for Health and Clinical Excellence has been at the forefront of the development of evidence based guidance on the prevention and cessation of tobacco smoking. To date, NICE has produced guidance on multiple approaches to smoking cessation as well as guidance on interventions in particular groups (pregnant women) or particular settings (workplace). To complement the existing guidance, NICE is in the process of developing guidance on tobacco harm reduction. The guidance will make recommendations on approaches to help smokers of all ages who:

- want to quit smoking but feel unable to do so 'abruptly' (that is, they want to cut down before quitting)
- are not willing or able to quit, but want to reduce the harm that smoking is doing to their health (or to the health of those around them)
- want to quit smoking but are not willing or able to stop using nicotine
- want to stop smoking temporarily, for example, while at work.

This report summarises one of a number of rapid reviews that have been developed to inform the guidance. This report considers the economic evidence available on interventions that are designed to help reduce tobacco intake, either as an end in itself or as a step to quitting smoking.

1.2 Aims and objectives of the review

This rapid cost-effectiveness review aims to identify all relevant economic evidence on approaches to tobacco harm reduction that fall under the remit of the guidance.

The evidence presented is intended to inform the development of the guidance by identifying where evidence exists to support the value of these interventions. As a secondary objective the report provides a platform for the development of an economic model commissioned to inform the guidance development, although it is recognised that further data may be needed to develop and populate the model than are presented herein.

1.3 Research questions

1. How cost-effective are pharmacotherapies in helping people to:
    a. Cut down smoking before quitting?
    b. Cut down smoking, temporarily or indefinitely?
2. How cost-effective are different combinations of NRT products?
3. How cost-effective are 'nicotine-containing products' in helping people to:
    a. Cut down smoking before quitting
    b. Cut down smoking, temporarily or indefinitely?
4. Which kinds of behavioural support, counselling, advice or self-help (with or without pharmacotherapy) are cost effective in helping people to:
    a. Cut down smoking before quitting
    b. Cut down smoking, temporarily or indefinitely?
5. Do some tobacco harm-reduction approaches have a differential impact on different groups (for example, people of different ages, gender, socioeconomic status or ethnicity)?

1.4 Operational definitions

Cut-down-to-quit: a reduction in smoking behaviour with the intention to quit.

Nicotine replacement therapies: nicotine-containing products, such as electronic delivery systems, patches, topical gels and oral products.

1.5 Identification of possible equality and equity issues

No equality and equity issues are expected because the systematic search is not focused on a specific population group. There may be some equity issues with ability to pay for products that are sold through pharmacies. However, this is not a specific problem for the identification of evidence in this systematic review.

1.6 Review team

The review team consisted of the following researchers: Paul Truman, Kristel Janssen, Margreet van Eerd, Evelien Bergrath and Catherine Mulvany. Their expertise, roles, and conflicts of interest are described below:

Paul Truman: Senior Lead for this project, with responsibility for overseeing the delivery of the research, ensuring the quality of the deliverables and presenting findings to the PDG. Paul was EU Development Director with Mapi Values and is also a Professor Associate in Health Economics in the Health Economics Research Group at Brunel University. Paul has previously contributed to a number of NICE guidance on smoking cessation, obesity and physical activity. Paul is also the principal investigator on a project to explore the cost effectiveness of comprehensive regional tobacco control strategies, working with the Smoke-Free teams in the North-West, North-East and South-West.

Kristel Janssen: Project Leader for this research, working alongside Paul to ensure the timely delivery of all research and deliverables. She has experience in all stages of systematic literature reviews. Roles in the review process: co-ordinating the research and reporting.

Margreet van Eerd: Experience in systematic literature review: evidence identification and evidence selection (not in smoking cessation). Roles in the review process: evidence selection, reporting. No conflict of interest.

Evelien Bergrath and Catherine Mulvany: Experience in systematic literature review: evidence identification and evidence selection (not in smoking cessation). Roles in the review process: evidence selection, data extraction. No conflict of interest.

In addition to the review team at Mapi, the following individuals assisted in designing the search strategies and conducting the searches:

Julie Glanville: Director Information Services at the York Health Economics Consortium. Julie is recognised for her significant contribution to the field of systematic reviewing, particularly in the context of HTA. Julie has contributed to numerous projects conducted on behalf of NICE.

Steven Duffy: Research Consultant at York Health Economics Consortium. Steven is an experienced researcher having contributed literature searching skills to numerous HTA reports, including reports commissioned by NICE.

Matthew Taylor: Lead for all economic modelling work on this project, with responsibility for designing and building the model, and assessing the quality of data used in the model. Matthew will also present key findings from the model to the PDG. Matthew is Deputy Director of York Health Economics Consortium and leads the economic modelling team within that group. Like Paul Trueman, Matthew has previously contributed to a number of NICE guidance on smoking cessation, obesity and physical activity. He has previously published economics models in the smoking cessation field, including one study published in Health Technology Assessment. Matthew has previously been employed as a key economic advisor for NICE's Scientific Advice programme.

2. Methodology

A range of databases indexing published research were searched, by the York Health Economics Consortium, for studies relating to the cost-effectiveness of tobacco harm-reduction. The databases searched included the majority of the core databases recommended in the NICE methods for public health guidance(7). The search strategies from the effectiveness reviews (reviews 2-4) formed the basis of the searches, replacing the controlled trials methodological search filter with a filter designed to identify economic and costs studies. The tobacco harm search strategies were designed by the Support Unit for Research Evidence, Cardiff University, who are leading the effectiveness reviews in collaboration with Cedar and Bangor University. The economic search filters used by YHEC were developed from those produced by the Centre for Reviews and Dissemination (CRD) to identify economic studies in MEDLINE and EMBASE for inclusion in the NHS Economic Evaluation Database (NHS EED). The MEDLINE/EMBASE economic filters were adapted for use in the other databases searched for this review. The economic searches were undertaken by Steven Duffy, YHEC. To maintain consistency with the effectiveness reviews searches the following limits were applied: published from 1990 onwards; published in English language. Records were downloaded from databases and then imported into Reference Manager/EndNote bibliographic software, and duplicate records were then removed. Full details of the search strategies, databases and resources searched are provided in Appendix 6.1.

2.1 Databases

The following databases and resources were searched:

- NHS EED (Cochrane Library/Wiley)
- HEED (Wiley)
- EconLit (OvidSP)
- Cost-Effectiveness Analysis (CEA) Registry (www.cearegistry.org)
- AMED (Allied and Complementary Medicine) (OvidSP)
- ASSIA (Applied Social Science Index and Abstracts) (CSA Illumina)
- British Nursing Index (BNI) (OvidSP)
- CINAHL (Cumulative Index of Nursing and Allied Health Literature) (EBSCO)
- Cochrane Database of Systematic Reviews (CDSR) (Cochrane Library/Wiley)
- Database of Abstracts of Reviews of Effectiveness (DARE) (Cochrane Library/Wiley)
- Cochrane Central Register of Controlled Trials (CENTRAL) (Cochrane Library/Wiley)
- Health Technology Assessment (HTA) (Cochrane Library/Wiley)

- EMBASE (OvidSP)
- HMIC (Health Management Information Consortium) (OvidSP)
- MEDLINE and MEDLINE In-Process (OvidSP)
- PsycINFO (OvidSP)
- Social Policy and Practice (OvidSP)
- Science Citation Index (SCI) (ISI Web of Science)
- Social Science Citation Index (SSCI) (ISI Web of Science)
- Conference Proceedings Citation Index-Science (CPCI-S) (ISI Web of Science)
- Conference Proceedings Citation Index-Social Science & Humanities (CPCI-SSH) (ISI Web of Science)
- UK Clinical Research Network Portfolio Database (UKCRN) (public.ukcrn.org.uk/)
- CDC Smoking & Health Resource Library database (http://apps.nccd.cdc.gov/shrl/AdvancedSearch.aspx)

2.2 Inclusion/exclusion criteria

Table 1. Title and abstract screening; inclusion and exclusion criteria for article selection

Criteria	Inclusion	Exclusion
POPULATION	Smokers of all ages who: - want to quit smoking[a] or - want to cut down prior to quitting or - want to smoke less, or - want to abstain from smoking temporarily	Pregnant women
INTERVENTION	- Pharmacotherapies that are (or will be) licensed for cutting down, temporary abstinence or harm reduction; - Other non-tobacco 'nicotine-containing products', such as 'electronic nicotine delivery systems' (sometimes known as 'electronic cigarettes' or 'e-cigarettes') and topical gels; - Behavioural support, counselling or advice for individuals or groups; - Self-help.	Other interventions
COMPARATORS	n.a.	n.a.
OUTCOMES	All outcomes of a full economic evaluation	Studies that only report costs in absence of an outcome measure (see comment below)
STUDY DESIGN	cost-effectiveness models cost utility models	Other study designs: report, an editorial, an opinion, the design

	cost minimization models etc: Reports the findings of a full economic evaluation	of an RCT, review Abstracts Studies that do not include sufficient detail on the derivation of cost-effectiveness

a. During the evidence selection phase, this was adjusted to exclude abrupt cessation studies

Please note that studies that report costs in the absence of an outcome measure are flagged. Hence, these studies can be easily identified as potential costing source to populate the cost-effectiveness model that will be developed for this guidance.

2.3 Flow chart

The study selection from the databases consisted of four phases: (1) title screening, (2) abstract screening, (3) narrowing down results by excluding studies that only focused on abrupt cessation, and (4) full text evaluation (see Figure 1).

The title screening was done by two researchers (KJ and MvE). When it was unclear whether to exclude a title, there was discussion. When the discussion did not provide clarification, the study was not excluded. The abstract screening was independently done by two researchers (EB and CM). The data extraction was done independently by the same two researchers. MvE prepared the data extraction template based on the evidence tables presented in appendix L in the NICE 'Methods for the development of NICE public health guidance'.

Inclusion/exclusion criteria were originally applied to all studies identified in the searches. However, following discussion with NICE, it was agreed that studies on interventions designed to promote abrupt cessation (as differentiated from smoking harm reduction, or cut-down to quit) were beyond the scope of the current guidance. Note that the majority of this evidence has been reviewed during the development of previous guidance on smoking cessation. Our intention was to identify studies that reported smoking behaviour as a continuous or categorical outcome allowing for consideration of individuals who reduced their smoking intake or quit completely as a result of interventions that were specifically designed to promote tobacco harm reduction. On this basis, we subsequently excluded 105 of the 109 articles that were originally shortlisted, leaving only four articles for full text evaluation that met with the inclusion criteria. After full text evaluation, only two studies were included.

In addition to the systematic literature search, the titles of the articles published in the journal 'Tobacco Control' were hand-searched from March 2000 until September 2011. Although this journal is referenced in many of the databases included, it was regarded to be a key source of potentially relevant information. This title screening resulted in four potentially relevant studies, which were all picked up by the systematic literature search.

Finally, the group conducting the effectiveness review was asked to put aside potentially relevant articles on cost-effectiveness. One study was selected as such. This study was already picked up by the systematic literature search.

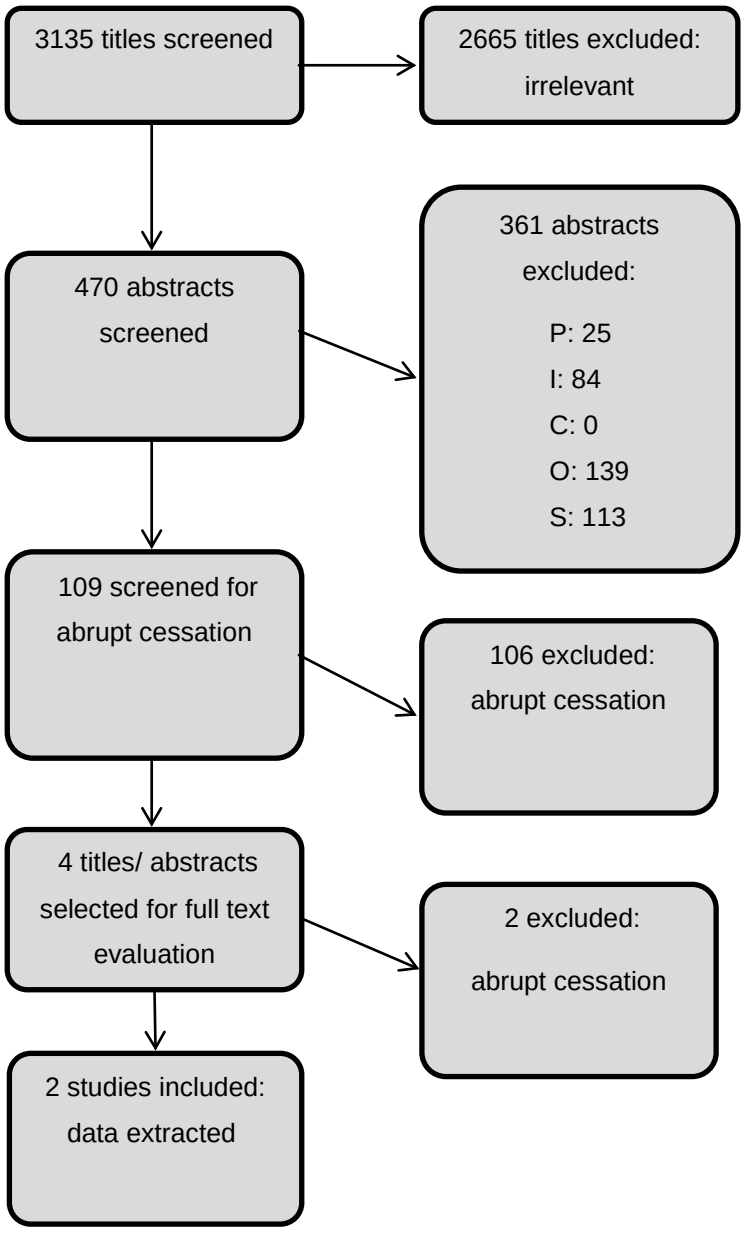

Figure 1. Flow chart of studies

2.4 Quality appraisal

In addition to extracting key information from the included articles, there was consideration of the study quality as per recommended NICE methods(7). Quality assessment of the evidence was done independently by two researchers (EB and CM). The quality appraisal checklist for economic evaluations from appendix I in the

NICE 'Methods for the development of NICE public health guidance' was used(7). The studies were placed in one of three grades based on the methodology checklist. Table 2 presents the criteria for study grading.

Table 2. Quality Appraisal Checklist - Criteria for study grading

Code	Quality criteria
++	All or most of the criteria have been fulfilled. Where they have not been fulfilled the conclusions of the study or review are thought very unlikely to alter.
+	Some of the criteria have not been fulfilled. Those criteria that have not been fulfilled or not adequately described are thought unlikely to affect conclusions.
-	Few or no criteria fulfilled. The conclusions of the study are thought likely or very likely to alter.

2.5 Software used for screening and coding of studies, data extraction, analysis and synthesis, managing the bibliography

The titles and abstracts were printed and screened manually. Results were entered in Microsoft Excel 2010. The references were exported to Reference Manager 12.

2.6 Methods of synthesis and data presentation

Given the limited data, no formal evidence synthesis could be undertaken. Relevant data from the included studies are presented and discussed in Section 3: Findings.

2.7 Additional evidence and background information

In addition to the two included studies, a study by Bertram (2007) was identified as useful in providing recommendations for the structure of the de novo cost-effectiveness model. This economic evaluation study was identified during the systematic literature review but excluded due to the fact that it is a cessation study. It was re-identified during the title search of the Tobacco Control journal, at which time it was recognized that the study might add information to guide the structure of the de novo cost-effectiveness model. Data extraction, quality appraisal and recommendations for the structure of the de novo cost-effectiveness model are presented in Appendix 6.3.

3. Findings

3.1 Quantity of the evidence available

The search identified two articles that met the inclusion criteria: one RCT that also evaluated costs and one HTA report. The latter was a review of cost-effectiveness studies by Wang (2008), in which no cost-effectiveness studies were identified, and a de novo cost-effectiveness model was developed.

3.2 Populations and settings

The study population of the RCT consisted of smokers living in a deprived area of London willing to quit. The study population of the HTA report consisted of smokers who are currently unable or unwilling to quit abruptly. Both studies were done in a country with a public health care system (United Kingdom).

3.3 Quality of the evidence available

The quality rating of the studies is presented in table 3.

Table 3. Quality rating of included studies

	Wang 2008	**Marks 2002**
1.1 Is the study population appropriate for the topic being evaluated?	++	++
1.2 Are the interventions appropriate for the topic being evaluated?	++	++
1.3 Is the system in which the study was conducted sufficiently similar to the current UK context?	++	++
1.4 Was/were the perspective(s) clearly stated and what were they?	++	++
1.5 Are all direct health effects on individuals included, and are all other effects included where they are material?	++	--
1.6 Are all future costs and outcomes discounted appropriately?	++	--
1.7 Is the value of health effects expressed in terms of quality adjusted life years (QALYs)?	++	--
1.8 Are costs and outcomes from other sectors fully and appropriately measured and valued?	+	--
Overall judgement: directly applicable/partially applicable/not applicable (There is no need to complete section 2 of the checklist if the study is considered 'not applicable'.	++	+
2.1 Does the model structure adequately reflect the nature of the topic under evaluation?	++	na
2.2 Is the time horizon sufficiently long to reflect all important differences in costs and outcomes?	+	+
2.3 Are all important and relevant outcomes included?	++	--
2.4 Are the estimates of baseline outcomes from the best available source?	++	na
2.5 Are the estimated of relative 'treatment' effects from the best available source?	++	na

2.6 Are all important and relevant costs included?	++	-
2.7Are the estimates of resource use from the best available source?	++	+
2.8 Are the unit costs of resources from the best available source?	++	+
2.9 Is an appropriate incremental analysis presented or can it be calculated from the data?	++	--
2.10 Are all important parameters whose values are uncertain subjected to appropriate sensitivity analysis?	++	--
2.11 Is there any potential conflict of interest?	n.r	n.r.
2.12 (Overall assessment) Minor limitations/ potentially serious limitations/very serious limitations	++	--

The cost-effectiveness study of Wang showed only minor limitations, while the cost-effectiveness study by Marks showed very serious limitations.

3.4 Intervention/comparators

The interventions in both studies are presented in table 4.

Table 4. Interventions and comparators of included studies.

Paper (first author, year)	Intervention	Applicability	Quality (1.2)
Wang 2008	1) Over-the-counter NRT 2) Brief advice + NRT prescriptions 3) Smokers' clinic with individual or group counselling + repeat NRT	UK	++
Marks et al. 2002	1) The quit for life (QFL) programme uses a spectrum of thirty CBT and other relevant methods in a self-help package (handbook, reduction cards, progress chart and other necessary materials). Participants attend one introductory session, a few days before the participant initiates a programme of systematic reduction. QFL aims at a gradual reduction of cigarette consumption over a period of 7-10 days, towards a daily reduction of 50%.The QFL programme is in two stages: reduction and relapse-prevention, and further sub-divided into ten sections spaced across a period of three months. NRT is an optional adjunct during the initial period of 10-30 days after quitting. In practice NRT is only used by a small minority of QFL participants owing to its high over-the-counter price. 2) Control intervention: Stopping Smoking Made Easier (SSME) is available in many GP surgeries throughout the UK and consists of a small booklet providing smoking cessation advice.	UK	--

Both studies used a cut down to quit approach (CDTQ).

In the RCT described by Marks et al., the participants attend one introductory session, a few days before the participant initiates a programme of systematic reduction. The program aims at a gradual reduction of cigarette consumption over a period of 7-10 days, towards a daily reduction of 50%, and then quit. NRT is an optional adjunct during the initial period of 10-30 days after quitting. The authors state that In practice NRT is only used by a small minority of QFL participants owing to its high over-the-counter price.

The model developed by Wang, the following CDTQ options were included:

- CDTQ with over the counter (OTC) NRT
- CDTQ with prescription NRT
- CDTQ with behavioural support (either individual counselling or group counselling) and prescription NRT.

The outcome of interest of these interventions was quit rate at 12 month. The CDTQ interventions were compared with no attempt to quit.
Please note that there were additional interventions in the Wang model that are not considered in this report. These interventions were 1) abrupt quitting with OTC NRT, 2) abrupt quitting with prescription NRT, and 3) abrupt quitting with behavioral support (either individual counseling or group counseling) and prescription NRT.

The CDTQ interventions are explicitly not compared to the abrupt quitting interventions for two reasons. First, it is more relevant to compare the interventions with continued smoking. Second, the success rates of the abrupt quitting interventions rates are based on studies that included a different type of smoker than the studies that were used for the success rates of the CDTQ interventions. Smokers which are willing to attempt an abrupt quit are in general more motivated than smokers that are willing to attempt a CDTQ attempt. Hence, by comparing the effectiveness of both interventions, one is comparing different types of smokers. As a result, the abrupt quitting interventions will have a better cost-effectiveness as the effectiveness seems higher. For completeness, the additional interventions and the results are presented in Appendix 4.

3.5 Outcomes and methods of analysis

Marks evaluated the cost of delivering each treatment to a sufficient number of self-referred smokers to produce one quitter or reducer. Please note that quitters and reducers are combined.

Wang evaluated the incremental cost per life year saved, and the incremental cost per QALY saved.

3.6 Intervention impact

Marks compared the cost-effectiveness of a CDTQ intervention based on CBT with smoking cessation advice.

Table 5 presents the costs and the success rates of both interventions.

Table 5. Costs and effectiveness of the CDTQ intervention and the smoking cessation advice

Intervention	Cost (£)	Success rate (quitter or reducer)
Smoking cessation advice	13.40	0.058
CDTQ based on CBT	19.40	0.284

The success rate was defined as quitters and reducers, which made a true comparison based on either reducing or quitting impossible. Hence, this outcome is less useful.

The cost per quitter/reducer is £68.30 (95% CI: £51.59 - £94.63) for the CDTQ intervention, and £231.01 (95% CI: £110.74-£638.09) for the control intervention (smoking cessation advice). Hence, the study suggests that CBT is 3.38 (95% CI: 1.17-12.4) times more cost-effective than the control treatment.

Wang evaluated the cost-effectiveness of CDTQ interventions compared to no attempt to quit. Table 6 presents the costs and the success rates of the CDTQ interventions.

Table 6. Costs and effectiveness of the CDTQ interventions and no attempt to quit

Option	Cost (£)	Success rate
No attempt	0	0
CDTQ with NRT OTC	0	0.0155
CDTQ NRT prescription	104.96	0.0137
CDTQ individual counselling (+NRT prescription)	153.79	0.0373
CDTQ group counselling (+NRT prescription)	128.27	0.0373

NRT: Nicotine replacement therapy
ORT: Over the counter

Table 7 presents the cost-effectiveness results when the CDTQ interventions were compared to no attempt to quit. These results suggest that CDTQ with NRT delivers incremental cost-effectiveness ratios (ICERs) ranging from £1,333/QALY to £7,739/QALY depending on the age at which smoking cessation is achieved and the specific CDTQ intervention. This implies that compared with no quit attempt, all CDTQ interventions deliver ICERs well within margins generally considered cost-effective. Please note that because CDTQ with NRT OTC is more effective than no attempt, but without a difference in costs, no ICER could be estimated. In such situations it is stated that CDTQ with NRT OTC dominates no attempt.

Table 7. Cost-effectiveness results of the CDTQ interventions compared to no attempt to quit

Intervention	ICER (£/quit)	ICER (£/QALY) for age groups			
		<35 years	35-44 years	45-54 years	55-64 years
NRT OTC	NRT OTC	NRT OTC	NRT OTC	NRT OTC	NRT OTC
NRT prescription	7,661	3,451	2,970	3,580	7,739
Individual counselling (+NRT prescription)	4,123	1,857	1,598	1,927	4,165
Group counselling (+NRT prescription)	3,439	1,549	1,333	1,607	3,474

NRT: Nicotine replacement therapy
ORT: Over the counter
ICER: Incremental cost-effectiveness ratio

3.7 Evidence statements

Considering the low quality of the study conducted by Marks et al, this study was not used for the evidence statements.

Evidence statement 1:

No studies reported on the cost-effectiveness of pharmacotherapies to cut down to quit.

No studies reported on the cost-effectiveness of pharmacotherapies to cut down smoking.

Evidence statement 2:

Only one study reported on the combination of NRT products to cut down to quit:

Wang et al. (2008) systematic review and economic analysis (Quality ++)

No studies reported on the combination of NRT products to cut down smoking:

Wang et al. (2008) demonstrated cost-effectiveness of cut-down to quit interventions with nicotine replacement therapies compared to no quit attempt.

Evidence statement 3:

No studies reported on the cost-effectiveness of nicotine-containing products to cut down to quit.

No studies reported on the cost-effectiveness of nicotine-containing products to cut down on smoking.

Evidence statement 4:

Only one study reported on the cost-effectiveness of behavioural support, counseling, advice or self-help to

cut down to quit:

Wang et al. (2008) systematic review and economic analysis (Quality ++)

No studies reported on the cost-effectiveness of behavioural support, counseling, advice or self-help to cut down smoking

Wang et al. (2008) demonstrated cost-effectiveness of cut-down to quit interventions with behavioural support (individual or group counseling) in combination with NRT compared to no quit attempt.

Evidence statement 5:

No studies reported on tobacco harm-reduction approaches that may have a differential impact on different groups.

4. Discussion

The review identified two articles that met the inclusion criteria: one RCT (Marks, 2002) and one HTA report (Wang, 2008). In the RCT by Marks et al., the cost-effectiveness of a CDTQ intervention based on CBT was compared with smoking cessation advice. The success rate was defined as quitters and reducers, which made a true comparison based on either reducing or quitting impossible. Also, no long term outcomes or costs were taken into account. As this study showed very serious limitations, this study was not used for the evidence statements.

In the HTA report by Wang, no evidence on the economic impact of CDTQ was identified, and hence a de novo cost-effectiveness model was developed. The cost-effectiveness model included three CDTQ options, 1) CDTQ with over the counter (OTC) NRT, 2) CDTQ with prescription NRT, and 3) CDTQ with behavioral support (either individual counseling or group counseling) and prescription NRT. The outcome of interest of these interventions was quit rate at 12 months, and the CDTQ interventions were compared with no attempt to quit. All CDTQ with NRT interventions resulted in incremental cost-effectiveness ratios (ICERs) well within margins generally considered cost-effective, namely between £1,333/QALY and £7,739/QALY, depending on the age at which smoking cessation was achieved.

No economic evidence was identified on smoking harm reduction interventions that do not aim to quit, or that do not aim to quit abruptly. The economic evidence base is dominated by studies of interventions to promote smoking cessation but fails to address interventions designed to assist those individuals who are insufficiently motivated or unwilling to quit smoking completely or abruptly. After discussion with NICE, we excluded the evidence on abrupt smoking cessation. Theoretically, by excluding studies on abrupt smoking cessation based on the abstract, we may have excluded studies that did in fact present results on smoking reduction (possibly as a subgroup) but that did not identify this in the abstract. However, we conducted an extra round of abstract screening, in which we judged whether there could be (even the smallest) chance that information on the economic effect of smoking reduction could be presented. Consequently, we evaluated the full text of seventeen articles, after which we concluded that no such information was presented. Also, because the review from Wang et al (2008) also did not identify any economic studies on cut-down to quit, this appears to be unlikely. Moreover, smokers that participate in studies with interventions that aim to quit abrupt, are different than smokers that participate in studies that aim to CDTQ, or that aim to reduce smoking. Hence, one may question the generalizability of such results. Furthermore, our searches were restricted on date, language and the choice of databases. As such, there is a possibility that not all relevant evidence was considered as part of this rapid review although it seems unlikely that any pivotal papers remain unidentified as these would be expected to be referenced in studies included for review. As ever, the law of diminishing returns might be expected to apply to any further searching and we consider that the searches carried out for the purpose of this review are robust.

Based on the fact that only two studies assessing the cost-effectiveness of CDTQ was identified, and that no cost-effectiveness studies on smoking reduction (instead of quitting) were identified, we conclude that the economic evidence on these interventions is limited or even non-existent.

5. Conclusion and recommendations

Smoking harm reduction by “cut-down to quit” seems to be cost-effective compared to no quit attempt. However, no economic evidence was identified on smoking harm reduction strategies that do not aim to quit, or that do not aim to quit abruptly. Therefore, it is recommended that a de novo cost-effectiveness model is developed to assess the cost-effectiveness of reducing the harm of smoking.

Statistics on Smoking: England, 2011. The NHS Information Centre, Lifestyles Statistics.

References

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(5) Bjartveit K, Tverdal A. Health consequences of smoking 1-4 cigarettes per day. Tob Control 2005;14(5):315-20.

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(9) Bertram MY, Lim SS, Wallace AL, Vos T. Costs and benefits of smoking cessation aids: making a case for public reimbursement of nicotine replacement therapy in Australia. Tob Control 2007;16:255-60.

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(11) Ahmad S. Estimating the health impacts of tobacco harm reduction policies: a simulation modelling approach. 2005.

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6. Appendices

6.1 Appendix 1 Search strategy

Details of the database searched, database host, date range of the search and date the search was conducted are provided with each search strategy below.

All searches were undertaken by Steven Duffy, YHEC.

The number of records retrieved from each search, total number of records retrieved and number of records remaining after de-duplication are provided in the following table:

Database/Resource	Records identified
NHS EED	44
HEED	100
EconLit	40
CEA Registry	57
AMED	5
ASSIA	72
BNI	11
CINAHL	1493
CDSR	8
DARE	5
CENTRAL	183
HTA	4
EMBASE	1308
HMIC	155
MEDLINE and MEDLINE In-Process	753 (47)
PsycINFO	342
Social Policy and Practice	6
SCI	696

SSCI	622
CPCI-S	46
CPCI-SSH	21
UKCRN	6
CDC Smoking & Health Resource Library database	110
TOTAL	**6134**
TOTAL AFTER DE-DUPLICATION	**3135**

NHS EED (Cochrane Library/Wiley).

1990-2011/Issue 8/3.

Searched 2 September 2011.

#1	MeSH descriptor Smoking Cessation, this term only	2345
#2	MeSH descriptor Smoking explode all trees	4526
#3	((Nicotine:ti,ab NEAR/4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)):ti,ab or ((smok* or tobacco or nicotine or cigarette*):ti,ab NEAR/10 NRT:ti,ab))	176
#4	((#1 OR #2) AND #3)	111
#5	MeSH descriptor Harm Reduction, this term only	52
#6	((#1 OR #2) AND #5)	14
#7	(Cigarette* NEAR/2 substitut*)	10
#8	("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig*)	12
#9	(vaping or (personal NEAR/4 (vaporiser or vaporizer)))	0

#10	(Nicotine NEAR/4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)):ti,ab	1367
#11	(Pastille* and (smok* or tobacco or nicotine or cigarette*))	1
#12	(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep or Stubit or super-25):ti,ab	99
#13	((Stoppers or Commit or pharmacotherap*) NEAR/3 (smok* or tobacco or nicotine or cigarette*)):ti,ab	85
#14	MeSH descriptor Drug Therapy explode all trees AND (smok* or tobacco or nicotine or cigarette*):ti,ab	15
#15	(((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) NEAR/4 (smok* or tobacco or cigarette*)) and nicotine):ti,ab	1384
#16	(#4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15)	1957
#17	MeSH descriptor Counseling, this term only	2217
#18	MeSH descriptor Directive Counseling, this term only	151
#19	MeSH descriptor Behavior Therapy, this term only	2988
#20	MeSH descriptor Cognitive Therapy, this term only	3531
#21	MeSH descriptor Self-Help Groups, this term only	488
#22	(advis* or advic* or counsel* or help line* or helpline* or self help or selfhelp):ti,ab	10311
#23	(((mobile or cell*) NEXT ("phone" or "telephone")) or (SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or mailing list*)):ti,ab	11610
#24	MeSH descriptor Internet, this term only	1018

#25	MeSH descriptor Cellular Phone, this term only	158
#26	MeSH descriptor User-Computer Interface, this term only	667
#27	MeSH descriptor Therapy, Computer-Assisted explode all trees	1259
#28	(#17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27)	28355
#29	((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) NEAR/4 (smok* or tobacco or cigarette*)):ti,ab	4673
#30	(#28 AND #29)	1588
#31	(#16 OR #30), from 1990 to 2011	2714

HEED (Wiley interscience).

1990-2011/August.

Searched 12 September 2011.

Ran two searches separately; then removed duplicate records from the results.

#1	AX=smoking and harm	2
#2	AX=(cigarette and substitute) or (cigarette and substitution)	1
#3	AX=('electronic cigarette' or 'electronic cigarettes' or e-cigarette or e-cigarettes or ecigarette or ecigarettes or ecig or ecigs or e-cig or e-cigs or intellcig)	0
#4	AX=(vaping or 'personal vaporizer' within 4 or 'personal vaporiser' within 4)	0
#5	AX='nicotine therapy' within 4 or 'nicotine gum' within 4 or 'nicotine inhaler' within 4 or 'nicotine inhalers' within 4 or 'nicotine replacement' within 4 or 'nicotine lozenge' within 4 or 'nicotine lozenges' within 4	64
#6	AX='nicotine tablet' within 4 or 'nicotine tablets' within 4 or 'nicotine microtablet' within 4 or 'nicotine microtablets' within 4 or 'nicotine spray' within 4 or 'nicotine sprays' within 4 or 'nicotine patch' within 4 or 'nicotine patches' within 4	41
#7	AX='nicotine device' within 4 or 'nicotine devices' within 4 or 'nicotine delivery' within 4 or 'nicotine gel' within 4 or 'nicotine gels' within 4	1

#8	AX=(pastille OR pastilles) AND (smoking or smoker or smokers or tobacco or nicotine or cigarette or cigarettes)	0
#9	AX=(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep or Quickmist or Stubit or super-25)	5
#10	AX=(Stoppers or Commit or pharmacotherapy or pharmacotherapeutic) AND (smoking or smoker or smokers or tobacco or nicotine or cigarette or cigarettes)	17
#11	CS= 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10	101

#1	AX=('advise therapy' or 'advice therapy' or 'counsel therapy' or 'counselling therapy' or 'counseling therapy') AND (smoking or smoker or smokers or tobacco or nicotine or cigarette or cigarettes)	0
#2	AX=('advise support' or 'advice support' or 'counsel support' or 'counselling support' or 'counseling support') AND (smoking or smoker or smokers or tobacco or nicotine or cigarette or cigarettes)	0
#3	AX=('help line' or 'help lines' or helpline or helplines or 'self help' or selfhelp') AND (smoking or smoker or smokers or tobacco or nicotine or cigarette or cigarettes) AND (stop or quit or abstain or abstinence or reduction or reduce or decline or cessation or cease or prequit)	8
#4	AX=('behavior therapy' or 'behaviour therapy' or 'group therapy' or 'cognitive therapy') AND (smoking or smoker or smokers or tobacco or nicotine or cigarette or cigarettes) AND (stop or quit or abstain or abstinence or reduction or reduce or decline or cessation or cease or prequit)	0
#5	AX=('mobile phone' or 'mobile phones' or 'mobile telephone' or 'mobile telephones' or 'cell phone' or 'cell phones') AND (smoking or smoker or smokers or tobacco or nicotine or cigarette or cigarettes) AND (stop or quit or abstain or abstinence or reduction or reduce or decline or cessation or cease or prequit)	0
#6	AX=('cellular phone' or 'cellular phones' or SMS or 'short message service' or 'text message' or 'instant message') AND (smoking or smoker or smokers or tobacco or nicotine or cigarette or cigarettes) AND (stop or quit or abstain or abstinence or reduction or reduce or decline or cessation or cease or prequit)	0
#7	AX=(videomessage or 'video message' or 'multimedia message' or web or internet or computer or computers) AND (smoking or smoker or smokers or tobacco or nicotine or cigarette or cigarettes) AND (stop or quit or abstain or abstinence or reduction or reduce or decline or cessation or cease or prequit)	15
#8	AX=(e-mail or e-mails or email or emails or 'electronic mail' or 'mailing list' or 'mailing lists') AND (smoking or smoker or smokers or tobacco or nicotine or cigarette or cigarettes) AND (stop or quit or abstain or abstinence or reduction or reduce or decline or cessation or cease or prequit)	0
#9	CS=1 or 2 or 3 or 4 or 5 or 6 or 7 or 8	22

EconLit (OvidSP).

1961-2011/July.

Searched 1 September 2011.

#1	smoking.mp.	1049
#2	((nicotine adj4 (therapy or gum$ or inhal$ or replace$ or lozenge$ or tablet$ or microtab$ or nasal spray$ or patch$ or delivery device$ or delivery system$ or gel$)) or ((smok$ or tobacco or nicotine or cigarette$) adj10 NRT)).mp.	11
#3	1 and 2	7
#4	(smoking and harm reduction).mp.	1
#5	(nicotine adj4 (therapy or gum$ or inhal$ or replace$ or lozenge$ or tablet$ or microtab$ or nasal spray$ or patch$ or delivery device$ or delivery system$ or gel$)).mp.	11
#6	(cigarette$ adj2 substitut$).mp.	6
#7	(electronic cigarette$ or e-cigarette$ or ecigarette$ or ecig$ or e-cig$ or Intellcig).mp.	0
#8	(vaping or (personal adj4 vapori?er)).mp.	0
#9	(pastille$ and (smok$ or tobacco or nicotine or cigarette$)).mp.	0
#10	(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep or Quickmist).mp.	1
#11	((Stoppers or Commit or pharmacotherap$) adj3 (smok$ or tobacco or nicotine or cigarette$)).mp.	3
#12	(Stubit or super-25).mp.	0
#13	((pharmacotherapy or drug therapy) and (smok$ or tobacco or nicotine or cigarette$)).mp.	2
#14	(((pre-quit or prequit or "Stop/start" or abstain$ or abstinence or reduc$ or declin$ or quit$ or stop$ or cess$ or cease$ or cut down or giv$ up) adj4 (smok$ or tobacco or cigarette$)) and nicotine).mp.	14
#15	or/3-14	29
#16	(counseling or behavio?r therapy or cognitive therapy or self help).mp.	416
#17	(advis$ or advic$ or counsel$ or help line$ or helpline$ or self help or selfhelp or ((behavio?r$ or group or cognitive) adj (support or therap$))).mp.	4910
#18	(((mobile or cell$) adj (phone$1 or telephone$1)) or (SMS or short message service or text messag$ or instant messag$ or videomessag$ or video messag$ or multimedia messag$ or web or internet or computer$ or e-mail$ or email$ or electronic mail$ or mailing list$)).mp.	17844
#19	or/16-18	22609
#20	(smoking cessation or ((pre-quit or prequit or "Stop/start" or abstain$ or abstinence or reduc$ or declin$ or quit$ or stop$ or cess$ or cease$ or cut down or giv$ up) adj4 (smok$ or tobacco or cigarette$))).mp.	363

#21	19 and 20	11
#22	15 or 21	40
#23	limit 22 to yr="1990 -Current"	40

CEA Registry (https://research.tufts-nemc.org/cear/default.aspx).

1990-2011.

Searched 5 September 2011.

Each line searched separately

Advanced Search:

Smoking
Tobacco
Nicotine

AMED (OvidSP).

1985-2011/August.

Searched 1 September 2011.

#1	exp Smoking/	360
#2	((Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)) or ((smok* or tobacco or nicotine or cigarette*) adj10 NRT)).ti,ab.	17
#3	1 and 2	13
#4	(Cigarette* adj2 substitut*).ti,ab.	0
#5	("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig* or Intellcig).ti,ab.	0
#6	(vaping or (personal adj4 vapori?er)).ti,ab.	0
#7	(Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)).ti,ab.	17

#8	(Pastille* and (smok* or tobacco or nicotine or cigarette*)).ti,ab.	0
#9	(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep or Quickmist).ti,ab.	0
#10	((Stoppers or Commit or pharmacotherap*) adj3 (smok* or tobacco or nicotine or cigarette*)).ti,ab.	2
#11	(Stubit or super-25).ti,ab.	0
#12	(pharmacotherapy/ or drug therapy/) and (smok* or tobacco or nicotine or cigarette*).ti,ab.	64
#13	(((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)) and nicotine).ti,ab.	26
#14	or/3-13	95
#15	exp counseling/ or behavior therapy/ or cognitive therapy/ or Self help groups/	3189
#16	(advis* or advic* or counsel* or help line* or helpline* or self help or selfhelp or ((behavio?r* or group or cognitive) adj (support or therap*))).ti,ab.	4789
#17	(((mobile or cell*) adj (phone*1 or telephone*1)) or (SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or mailing list*)).ti,ab.	4321
#18	exp communications media/ or internet/ or computers/	4096
#19	or/15-18	13256
#20	smoking cessation/ or ((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)).ti,ab.	281
#21	19 and 20	47
#22	14 or 21	133
#23	exp economics/	4411
#24	(economic$ or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic$).ti,ab.	5729
#25	(expenditure$ not energy).ti,ab.	225
#26	(value adj1 money).ti,ab.	18
#27	budget$.ti,ab.	166
#28	or/23-27	8751
#29	22 and 28	5

ASSIA (ProQuest).

1987-2011/August.

Searched 2 September 2011.

3 separate searches were run

(su.EXACT("Economics") OR su.EXACT("Cost analysis" or "Cost benefit analysis" or "Cost effective analysis" or "Cost effectiveness") OR economic* or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic*) AND (((su.EXACT("Cognitive behavioural counselling" or "Peer group counselling" or "self help groups")) or (ab(advise* or advice* or counsel* or help line* or helpline* or self help or selfhelp)) or (ab(behaviour* or behavior* or group or cognitive) and ab(support or therapy*)) or (ab(mobile or cell*) and ab(phone* or telephone*)) or (su.Exact("mobile phones" or "computer assisted counseling" or "computer based support groups" or "computer based selfhelp groups" or "internet")) or ((ab(SMS or short message service or text message* or instant message* or video message* or multimedia message* or web or internet or computer* or email* email* or electronic mail*)))) and ((ab(pre-quit or prequit or "stop/start" or abstain* or abstinence or reduce* or decline* or quit* or stop* or cess* or cease* or cut down or giv* up) and ab(smoke* or tobacco or cigarette*) and nicotine)))

su.EXACT("Economics") OR su.EXACT("Cost analysis" OR "Cost benefit analysis" OR "Cost effective analysis" OR "Cost effectiveness") OR (economic* or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic*) AND (ab(pre-quit or prequit or "stop/start" or abstain* or abstinence or reduce* or decline* or quit* or stop* or cess* or cease* or cut down or giv* up) and ab(smoke* or tobacco or cigarette*) and nicotine) OR (ab(stoppers or commit or pharmacotherap*) and ab(smoke* or tobacco or nicotine or cigarette*)) OR (ab(pastille*) and ab(smoke* or tobacco or nicotine or cigarette*)) OR (ab(Nicotine) and ab(therapy or gum* or inhale* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*))

(su.EXACT("Economics") OR su.EXACT("Cost analysis" or "Cost benefit analysis" or "Cost effective analysis" or "Cost effectiveness") OR (economic* or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic*)) AND ((ab("electronic cigarette*" or "e-cigarette*" or ecigarette* or ecig* or e-cig* or vaping or “personal vaporizer” or “personal vaporiser”)) or (ab(cigarette*) and ab(substitute*)) or (su.EXACT("heavy smoking" or "moderate smoking" or "occasional smoking" or "passive smoking" or "smoking" or "tobacco smoke") and ab(harm reduc*)) or (ab(smok* or tobacco or nicotine or cigarette*) and NRT) or (su.EXACT("occasional smoking" or "passive smoking" or "smoking" or "tobacco smoke") and ab((Nicotine and (therapy or gum* or inhale* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)) or ((smoke* or tobacco or nicotine or cigarette*) and NRT))))

BNI (OvidSP).

1985-2011/August.

Searched 1 September 2011.

#1	exp Smoking/	2410
#2	((Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)) or ((smok* or tobacco or nicotine or cigarette*) adj10 NRT)).ti,ab.	110
#3	1 and 2	109
#4	(Cigarette* adj2 substitut*).ti,ab.	0
#5	("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig* or Intellcig).ti,ab.	0
#6	(vaping or (personal adj4 vapori?er)).ti,ab.	0
#7	(Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)).ti,ab.	109
#8	(Pastille* and (smok* or tobacco or nicotine or cigarette*)).ti,ab.	0
#9	(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep or Quickmist).ti,ab.	1
#10	((Stoppers or Commit or pharmacotherap*) adj3 (smok* or tobacco or nicotine or cigarette*)).ti,ab.	10
#11	(Stubit or super-25).ti,ab.	0
#12	drug therapy/ and (smok* or tobacco or nicotine or cigarette*).ti,ab.	83
#13	(((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)) and nicotine).ti,ab.	117
#14	or/3-13	182
#15	behavior therapy/ or Self help groups/ or Psychotherapy/	2831
#16	(advis* or advic* or counsel* or help line* or helpline* or self help or selfhelp or ((behavio?r* or group or cognitive) adj (support or therap*))).ti,ab.	9244
#17	(((mobile or cell*) adj (phone*1 or telephone*1)) or (SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or mailing list*)).ti,ab.	3533
#18	computer networks/ or "telephone use"/	2329
#19	or/15-18	15389
#20	((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)).ti,ab.	1077
#21	19 and 20	214

#22	14 or 21	358
#23	exp Health Economics/	179
#24	(economic$ or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic$).mp.	4259
#25	23 or 24	4259
#26	22 and 25	12
#27	limit 26 to yr="1990 -Current"	11

CINAHL (EBSCO).

1982-2011/0826.

Searched 2 September 2011.

S39	S27 and S38 Limiters - English Language; Published Date from: 19900101-20111231	1493
S38	S34 or S35 or S36 or S37	100024
S37	TI (cost or costs or economic* or pharmacoeconomic* or price* or pricing*) OR AB (cost or costs or economic* or pharmacoeconomic* or price* or pricing*)	68711
S36	MH "Health Resource Utilization"	7062
S35	MH "Health Resource Allocation"	4823
S34	S28 NOT S33	38689
S33	S29 OR S30 OR S31 OR S32	354375
S32	MH "Business+"	53776
S31	MH "Financing, Organized+"	71712
S30	MH "Financial Support+"	226604
S29	MH "Financial Management+"	28046

S28	MH "Economics+"	359283
S27	S18 or S26	27523
S26	S24 and S25	1939
S25	MH Smoking Cessation or (AB (pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) AND AB (smok* or tobacco or cigarette*))	14194
S24	S19 or S20 or S21 or S22 or S23	101517
S23	MM internet OR MM cellular phone OR MM User-computer interface OR MM Therapy, Computer-assisted	12306
S22	AB (SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or mailing list*)	29031
S21	AB (mobile or cell*) AND AB (phone* or telephone*)	613
S20	AB (advis* or advic* or counsel* or help line* or helpline* or self help or selfhelp or behavior* or behaviour* or group or cognitive) AND AB (support or therap*)	54069
S19	MM counseling or MM directive counseling or MH behavior therapy or MH cognitive therapy or MH Self help groups	14360
S18	S4 or S5 or S6 or S7 or S8 or S9 or S10 or S11 or S12 or S13 or S14 or S15 or S16 or S17	27099
S17	MH smoking cessation AND AB nicotine OR (AB (prequit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) AND AB (smok* or tobacco or cigarette*)) AND AB nicotine	1276
S16	AB (reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) AND AB (smok* or tobacco or cigarette*) AND	1195

	AB nicotine	
S15	MH drug therapy AND AB (smok* or tobacco or nicotine or cigarette*)	39
S14	AB (Stubit or super-25)	0
S13	AB (Stoppers or Commit or pharmacotherap*) AND AB (smok* or tobacco or nicotine or cigarette*)	239
S12	AB (Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep)	21
S11	AB Pastille* AND AB (smok* or tobacco or nicotine or cigarette*)	0
S10	AB (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*) AND AB nicotine	788
S9	AB vaping OR AB (personal N4 vapori?er)	0
S8	AB electronic cigarette* OR AB e-cigarette* OR AB ecigarette* OR AB ecig* OR AB e-cig*	4
S7	AB Cigarette* N2 substitut*	5
S6	MH Nicotine Replacement Therapy	811
S5	MH Smoking+ OR MH Smoking Cessation AND MH Harm Reduction	26708
S4	S1 AND (S2 OR S3)	627
S3	AB (smok* or tobacco or nicotine or cigarette*) AND AB NRT	205
S2	AB (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*) AND AB nicotine	788

S1	MH Smoking+ OR MH Smoking Cessation	26708

CDSR, DARE, HTA and CENTRAL (Cochrane Library/Wiley).

1990-2011/Issue 8/3.

Searched 2 September 2011.

#1	MeSH descriptor Smoking Cessation, this term only	2345
#2	MeSH descriptor Smoking explode all trees	4526
#3	((Nicotine:ti,ab NEAR/4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)):ti,ab or ((smok* or tobacco or nicotine or cigarette*):ti,ab NEAR/10 NRT:ti,ab))	176
#4	((#1 OR #2) AND #3)	111
#5	MeSH descriptor Harm Reduction, this term only	52
#6	((#1 OR #2) AND #5)	14
#7	(Cigarette* NEAR/2 substitut*)	10
#8	("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig*)	12
#9	(vaping or (personal NEAR/4 (vaporiser or vaporizer)))	0
#10	(Nicotine NEAR/4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)):ti,ab	1367
#11	(Pastille* and (smok* or tobacco or nicotine or cigarette*))	1
#12	(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep or Stubit or super-25):ti,ab	99

#13	((Stoppers or Commit or pharmacotherap*) NEAR/3 (smok* or tobacco or nicotine or cigarette*)):ti,ab	85
#14	MeSH descriptor Drug Therapy explode all trees AND (smok* or tobacco or nicotine or cigarette*):ti,ab	15
#15	(((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) NEAR/4 (smok* or tobacco or cigarette*)) and nicotine):ti,ab	1384
#16	(#4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15)	1957
#17	MeSH descriptor Counseling, this term only	2217
#18	MeSH descriptor Directive Counseling, this term only	151
#19	MeSH descriptor Behavior Therapy, this term only	2988
#20	MeSH descriptor Cognitive Therapy, this term only	3531
#21	MeSH descriptor Self-Help Groups, this term only	488
#22	(advis* or advic* or counsel* or help line* or helpline* or self help or selfhelp):ti,ab	10311
#23	(((mobile or cell*) NEXT ("phone" or "telephone")) or (SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or mailing list*)):ti,ab	11610
#24	MeSH descriptor Internet, this term only	1018
#25	MeSH descriptor Cellular Phone, this term only	158
#26	MeSH descriptor User-Computer Interface, this term only	667
#27	MeSH descriptor Therapy, Computer-Assisted explode all trees	1259
#28	(#17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27)	28355
#29	((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or	4673

	declin* or quit* or stop* or cess* or cease* or cut down or giv* up) NEAR/4 (smok* or tobacco or cigarette*)):ti,ab	
#30	(#28 AND #29)	1588
#31	(#16 OR #30), from 1990 to 2011	2714
#32	MeSH descriptor Economics explode all trees	18281
#33	MeSH descriptor Costs and Cost Analysis explode all trees	16891
#34	MeSH descriptor Economics, Dental explode all trees	8
#35	MeSH descriptor Economics, Hospital explode all trees	1277
#36	MeSH descriptor Economics, Medical explode all trees	91
#37	MeSH descriptor Economics, Nursing explode all trees	15
#38	MeSH descriptor Economics, Pharmaceutical explode all trees	201
#39	(economic* or "cost" or "costs" or costly or costing or "price" or "prices" or pricing or pharmacoeconomic*):ti,ab,kw	33575
#40	(budget*):ti,ab,kw	268
#41	(value NEAR/2 money):ti,ab,kw	52
#42	(burden NEAR/3 (illness or disease)):ti,ab,kw	345
#43	(markov model*):ti,ab,kw	606
#44	(#32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43)	34865
#45	(#31 AND #44), from 1990 to 2011	246

EMBASE (OvidSP).

1980-2011/week 34.

Searched 1 September 2011.

#1	Smoking Cessation/ or exp Smoking/	180449
#2	((Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)) or ((smok* or tobacco or nicotine or cigarette*) adj10 NRT)).ti,ab.	4137
#3	1 and 2	3569
#4	(exp smoking/ or smoking cessation/) and harm reduction/	201
#5	nicotine/th	2
#6	(Cigarette* adj2 substitut*).ti,ab.	42
#7	("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig* or Intellcig).ti,ab.	33
#8	(vaping or (personal adj4 vapori?er)).ti,ab.	5
#9	(Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)).ti,ab.	4119
#10	(Pastille* and (smok* or tobacco or nicotine or cigarette*)).ti,ab.	3
#11	(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep or Quickmist).ti,ab.	255
#12	((Stoppers or Commit or pharmacotherap*) adj3 (smok* or tobacco or nicotine or cigarette*)).ti,ab.	447
#13	(Stubit or super-25).ti,ab.	1
#14	drug therapy/ and (smok* or tobacco or nicotine or cigarette*).ti,ab.	2333
#15	(((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)) and nicotine).ti,ab.	6154
#16	or/3-15	10101
#17	*counseling/ or *directive counseling/ or behavior therapy/ or cognitive therapy/ or Self help/	67079
#18	(advis* or advic* or counsel* or help line* or helpline* or self help or selfhelp or ((behavio?r* or group or cognitive) adj (support or therap*))).ti,ab.	161458
#19	(((mobile or cell*) adj (phone*1 or telephone*1)) or (SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or mailing list*)).ti,ab.	286299
#20	*internet/ or *mobile phone/ or computer interface/ or computer assisted therapy/	37618
#21	or/17-20	500564
#22	smoking cessation/ or ((pre-quit or prequit or "Stop/start" or abstain*	40461

	or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)).ti,ab.	
#23	21 and 22	7056
#24	16 or 23	15088
#25	Health Economics/	30345
#26	exp Economic Evaluation/	169751
#27	exp Health Care Cost/	163503
#28	exp PHARMACOECONOMICS/	138975
#29	(econom$ or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic$).ti,ab.	438368
#30	(expenditure$ not energy).ti,ab.	17464
#31	(value adj2 money).ti,ab.	942
#32	budget$.ti,ab.	18506
#33	or/25-32	687456
#34	(metabolic adj cost).ti,ab.	659
#35	((energy or oxygen) adj cost).ti,ab.	2545
#36	((energy or oxygen) adj expenditure).ti,ab.	15220
#37	or/34-36	17756
#38	exp animal/ or Nonhuman/	5303251
#39	(rat or rats or mouse or mice or hamster or hamsters or animal or animals or dogs or dog or cats or bovine or sheep).ti,ab,sh.	4029006
#40	38 or 39	5786734
#41	exp human/ or exp human experiment/	12454719
#42	40 not (40 and 41)	4557352
#43	(editorial or letter or note).pt.	1556861
#44	33 not (37 or 42 or 43)	568862
#45	24 and 44	1478
#46	limit 45 to (english language and yr="1990 -Current")	1308

HMIC (OvidSP).

1979-2011/July.

Searched 1 September 2011.

#1	Smoking Cessation/ or exp Smoking/	4119
#2	((Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)) or ((smok* or tobacco or nicotine or cigarette*) adj10 NRT)).ti,ab.	237
#3	1 and 2	215
#4	(exp smoking/ or smoking cessation/) and harm reduction/	12
#5	Nicotine Replacement therapy/ or Smoking treatment/	188
#6	(Cigarette* adj2 substitut*).ti,ab.	0
#7	("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig* or Intellcig).ti,ab.	3
#8	(vaping or (personal adj4 vapori?er)).ti,ab.	0
#9	(Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)).ti,ab.	235
#10	(Pastille* and (smok* or tobacco or nicotine or cigarette*)).ti,ab.	0
#11	(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep or Quickmist).ti,ab.	7
#12	((Stoppers or Commit or pharmacotherap*) adj3 (smok* or tobacco or nicotine or cigarette*)).ti,ab.	12
#13	(Stubit or super-25).ti,ab.	0
#14	drug therapy/ and (smok* or tobacco or nicotine or cigarette*).ti,ab.	37
#15	(((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)) and nicotine).ti,ab.	284
#16	or/3-15	415
#17	Counselling/ or counselling services/ or telephone helplines/ or self help groups/ or support groups/ or exp behaviour therapy/	2180
#18	(advis* or advic* or counsel* or help line* or helpline* or self help or selfhelp or ((behavio?r* or group or cognitive) adj (support or therap*))).ti,ab.	14120
#19	(((mobile or cell*) adj (phone*1 or telephone*1)) or (SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or	8156

	mailing list*)).ti,ab.	
#20	internet/ or world wide web/ or mobile telephones/ or telephones/ or personal computers/	1629
#21	or/17-20	22900
#22	smoking cessation/ or ((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)).ti,ab.	2284
#23	21 and 22	479
#24	16 or 23	764
#25	exp health economics/ or "cost of illness studies"/ or treatment costs/	3448
#26	(economic$ or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic$).ti,ab.	28366
#27	25 or 26	29898
#28	24 and 27	157
#29	limit 28 to yr="1990 -Current"	155

MEDLINE and MEDLINE In-Process (OvidSP).
1948-2011/Aug week 4.
Searched 1 September 2011.

#1	Smoking Cessation/ or exp Smoking/	113354
#2	((nicotine adj4 (therapy or gum$ or inhal$ or replace$ or lozenge$ or tablet$ or microtab$ or nasal spray$ or patch$ or delivery device$ or delivery system$ or gel$)) or ((smok$ or tobacco or nicotine or cigarette$) adj10 NRT)).ti,ab.	3484
#3	1 and 2	2811
#4	(exp smoking/ or smoking cessation/) and harm reduction/	156
#5	nicotine/th	2
#6	(cigarette$ adj2 substitut$).ti,ab.	40
#7	(electronic cigarette$ or e-cigarette$ or ecigarette$ or ecig$ or e-cig$ or Intellcig).ti,ab.	28
#8	(vaping or (personal adj4 vapori?er)).ti,ab.	3
#9	(nicotine adj4 (therapy or gum$ or inhal$ or replace$ or lozenge$ or tablet$ or microtab$ or nasal spray$ or patch$ or delivery device$ or delivery system$ or gel$)).ti,ab.	3477
#10	(pastille$ and (smok$ or tobacco or nicotine or cigarette$)).ti,ab.	0

#11	(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep or Quickmist).ti,ab.	195
#12	((Stoppers or Commit or pharmacotherap$) adj3 (smok$ or tobacco or nicotine or cigarette$)).ti,ab.	373
#13	(Stubit or super-25).ti,ab.	0
#14	(pharmacotherapy/ or drug therapy/) and (smok$ or tobacco or nicotine or cigarette$).ti,ab.	198
#15	(((pre-quit or prequit or "Stop/start" or abstain$ or abstinence or reduc$ or declin$ or quit$ or stop$ or cess$ or cease$ or cut down or giv$ up) adj4 (smok$ or tobacco or cigarette$)) and nicotine).ti,ab.	5107
#16	or/3-15	6770
#17	*counseling/ or *directive counseling/ or behavior therapy/ or cognitive therapy/ or Self help groups/	50365
#18	(advis$ or advic$ or counsel$ or help line$ or helpline$ or self help or selfhelp or ((behavio?r$ or group or cognitive) adj (support or therap$))).ti,ab.	129213
#19	(((mobile or cell$) adj (phone$1 or telephone$1)) or (SMS or short message service or text messag$ or instant messag$ or videomessag$ or video messag$ or multimedia messag$ or web or internet or computer$ or e-mail$ or email$ or electronic mail$ or mailing list$)).ti,ab.	239987
#20	*internet/ or *cellular phone/ or *User-computer interface/ or Therapy, Computer-assisted/mt	33426
#21	or/17-20	409630
#22	smoking cessation/ or ((pre-quit or prequit or "Stop/start" or abstain$ or abstinence or reduc$ or declin$ or quit$ or stop$ or cess$ or cease$ or cut down or giv$ up) adj4 (smok$ or tobacco or cigarette$)).ti,ab.	30095
#23	21 and 22	5847
#24	16 or 23	10999
#25	economics/	26139
#26	exp "costs and cost analysis"/	159234
#27	economics, dental/	1829
#28	exp "economics, hospital"/	17386
#29	economics, medical/	8494
#30	economics, nursing/	3851
#31	economics, pharmaceutical/	2263
#32	(economic$ or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic$).ti,ab.	343909

#33	(expenditure$ not energy).ti,ab.	14532
#34	(value adj1 money).ti,ab.	20
#35	budget$.ti,ab.	14700
#36	or/25-35	457625
#37	((energy or oxygen) adj cost).ti,ab.	2342
#38	(metabolic adj cost).ti,ab.	608
#39	((energy or oxygen) adj expenditure).ti,ab.	13438
#40	or/37-39	15763
#41	36 not 40	454047
#42	24 and 41	864
#43	animal/ not (animal/ and human/)	3574216
#44	42 not 43	864
#45	(letter or editorial or historical article).pt.	1273184
#46	44 not 45	850
#47	limit 46 to (english language and yr="1990 -Current")	753

PsycINFO (OvidSP).
1987-2011/Aug week 5.
Searched 1 September 2011.

#1	Smoking Cessation/ or exp Tobacco Smoking/	18440
#2	((Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)) or ((smok* or tobacco or nicotine or cigarette*) adj10 NRT)).ti,ab.	1631
#3	1 and 2	1439
#4	(exp tobacco smoking/ or smoking cessation/) and harm reduction/	116
#5	(Cigarette* adj2 substitut*).ti,ab.	18
#6	("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig* or Intellcig).ti,ab.	11
#7	(vaping or (personal adj4 vapori?er)).ti,ab.	0
#8	(Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)).ti,ab.	1624

#9	(Pastille* and (smok* or tobacco or nicotine or cigarette*)).ti,ab.	2
#10	(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep or Quickmist).ti,ab.	63
#11	((Stoppers or Commit or pharmacotherap*) adj3 (smok* or tobacco or nicotine or cigarette*)).ti,ab.	175
#12	(Stubit or super-25).ti,ab.	0
#13	drug therapy/ and (smok* or tobacco or nicotine or cigarette*).ti,ab.	1556
#14	(((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)) and nicotine).ti,ab.	2766
#15	or/3-14	4384
#16	counseling/ or behavior therapy/ or exp cognitive therapy/ or Support groups/	29497
#17	(advis* or advic* or counsel* or help line* or helpline* or self help or selfhelp or ((behavio?r* or group or cognitive) adj (support or therap*))).ti,ab.	91391
#18	(((mobile or cell*) adj (phone*1 or telephone*1)) or (SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or mailing list*)).ti,ab.	74137
#19	Internet/ or Online Social Networks/ or Computer Mediated Communication/ or Cellular Phones/ or Computer Assisted Therapy/	19030
#20	or/16-19	175586
#21	smoking cessation/ or ((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)).ti,ab.	10567
#22	20 and 21	2312
#23	15 or 22	5912
#24	exp "Costs and Cost Analysis"/	13257
#25	health care costs/	5111
#26	"cost containment"/	407
#27	(econom$ or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic$).ti,ab,id.	97398
#28	(expenditure$ not energy).ti,ab,id.	3431
#29	(value adj2 money).ti,ab,id.	209
#30	budget$.ti,ab,id.	3648
#31	(willingness adj2 pay).ti,ab,id.	676

#32	or/24-31	102937
#33	(task adj2 cost$).ti,ab,id.	248
#34	(switch$ adj2 cost$).ti,ab,id.	561
#35	(metabolic adj cost).ti,ab,id.	30
#36	((energy or oxygen) adj cost).ti,ab,id.	119
#37	((energy or oxygen) adj expenditure).ti,ab,id.	1194
#38	or/33-37	2012
#39	(animal or animals or rat or rats or mouse or mice or hamster or hamsters or dog or dogs or cat or cats or bovine or sheep or ovine or pig or pigs).ab,ti,id,de.	146904
#40	32 not (38 or 39)	99441
#41	23 and 40	354
#42	limit 41 to (english language and yr="1990 -Current")	342

Social Policy & Practice (OvidSP).
1990-2011/07.
Searched 1 September 2011.

#1	(Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)).ti,ab.	31
#2	((smok* or tobacco or nicotine or cigarette*) adj10 NRT).ti,ab.	6
#3	(Cigarette* adj2 substitut*).ti,ab.	0
#4	("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig*).ti,ab.	1
#5	(vaping or (personal adj4 vapori?er)).ti,ab.	0
#6	(Nicotine adj4 (therapy or gum* or inhal* or replace* or lozenge* or tablet* or microtab* or nasal spray* or patch* or delivery device* or delivery system* or gel*)).ti,ab.	31
#7	(Pastille* and (smok* or tobacco or nicotine or cigarette*)).ti,ab.	0
#8	(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep).ti,ab.	0
#9	((Stoppers or Commit or pharmacotherap*) adj3 (smok* or tobacco or nicotine or cigarette*)).ti,ab.	1
#10	(Stubit or super-25).ti,ab.	0
#11	((pharmacotherapy or drug therapy) and (smok* or tobacco or nicotine or cigarette*)).ti,ab.	1

#12	(((reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)) and nicotine).ti,ab.	29
#13	or/3-12	37
#14	(advis* or advic* or counsel* or help line* or helpline* or self help or selfhelp or ((behavio?r* or group or cognitive) adj (support or therap*))).ti,ab.	18987
#15	(((mobile or cell*) adj (phone*1 or telephone*1)) or (SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or mailing list*)).ti,ab.	5221
#16	((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or cut down or giv* up) adj4 (smok* or tobacco or cigarette*)).ti,ab.	398
#17	(14 or 15) and 16	51
#18	13 or 17	79
#19	(economic$ or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic$).ti,ab.	31172
#20	18 and 19	6

SCI (ISI Web of Science).

1899-2011-09-01.

Searched 2 September 2011.

# 20	696	#19 AND #18 *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 19	555,931	(TS= (economic* or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic*)) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 18	6,074	(#11 OR #17) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 17	4,458	(#2 AND #16) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*

# 16	673,239	(#12 OR #13 OR #14 OR #15) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 15	7,627	(TS=((mobile or cell*) NEAR (phone*1 or telephone*1))) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 14	430,774	(TS=(SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or mailing list*)) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 13	151,737	(TS =(motiv* or advis* or advic* or counsel* or "help line" or "help lines" or helpline* or "self help" or selfhelp)) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 12	101,158	(TS= ((behavio?r* or group or cognitive) NEAR (support or therap*))) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 11	2,597	(#3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 10	38	(TS=("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig)) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 9	3	(TS=(Stubit or super-25)) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 8	375	(TS=((Stoppers or Commit or pharmacotherap*) NEAR/3 (smok* or tobacco or nicotine or cigarette*))) AND Language=(English)

		Databases=SCI-EXPANDED Timespan=1990-2011 *Lemmatization=On*
# 7	160	(TS=(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep)) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 6	0	(TS=(Pastille* and (smok* or tobacco or nicotine or cigarette*))) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 5	0	(TS=(vaping or (personal NEAR/4 vapori?er))) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 4	36	(TS=(Cigarette* NEAR/2 substitut*)) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 3	2,232	(#1 and #2) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 2	20,016	((TS=((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or "cut down" or "giv* up") NEAR/4 (smok* or tobacco or cigarette*)))) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*
# 1	3,704	(TS=((Nicotine NEAR/4 therapy) or (Nicotine NEAR/4 gum*) or (Nicotine NEAR/4 inhal*) or (Nicotine NEAR/4 replace*) or (Nicotine NEAR/4 lozenge*) or (Nicotine NEAR/4 tablet*) or (Nicotine NEAR/4 microtab*) or (Nicotine NEAR/4 "nasal spray*") or (Nicotine NEAR/4 patch*) or (Nicotine NEAR/4 "delivery devic") or (Nicotine NEAR/4 "delivery system*") or (Nicotine NEAR/4 gel*) or NRT)) AND Language=(English) *Databases=SCI-EXPANDED Timespan=1990-2011* *Lemmatization=On*

SSCI (ISI Web of Science).

1956-2011-09-01.

Searched 2 September 2011.

# 20	622	(#19 AND #18) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 19	387,935	((TS= (economic* or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic*))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 18	5,228	((#11 OR #17)) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 17	4,124	((#2 AND #16)) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 16	262,277	((#12 OR #13 OR #14 OR #15)) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 15	2,250	((TS=((mobile or cell*) NEAR (phone* or telephone*)))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 14	107,698	((TS=(SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or mailing list*))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 13	120,284	((TS =(motiv* or advis* or advic* or counsel* or "help line" or "help lines" or helpline* or "self help" or selfhelp))) AND Language=(English)

		Databases=SSCI Timespan=All Years *Lemmatization=On*
# 12	46,106	((TS= ((behavio?r* or group or cognitive) NEAR (support or therap*)))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 11	1,977	((#3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10)) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 10	30	((TS=("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 9	0	((TS=(Stubit or super-25))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 8	249	((TS=((Stoppers or Commit or pharmacotherap*) NEAR/3 (smok* or tobacco or nicotine or cigarette*)))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 7	75	((TS=(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 6	0	((TS=(Pastille* and (smok* or tobacco or nicotine or cigarette*)))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 5	1	((TS=(vaping or (personal NEAR/4 vapori?er)))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*

# 4	27	((TS=(Cigarette* NEAR/2 substitut*))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 3	1,763	((#1 and #2)) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 2	12,993	(((TS=((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or "cut down" or "giv* up") NEAR/4 (smok* or tobacco or cigarette*))))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*
# 1	2,158	((TS=((Nicotine NEAR/4 therapy) or (Nicotine NEAR/4 gum*) or (Nicotine NEAR/4 inhal*) or (Nicotine NEAR/4 replace*) or (Nicotine NEAR/4 lozenge*) or (Nicotine NEAR/4 tablet*) or (Nicotine NEAR/4 microtab*) or (Nicotine NEAR/4 "nasal spray*") or (Nicotine NEAR/4 patch*) or (Nicotine NEAR/4 "delivery devic") or (Nicotine NEAR/4 "delivery system*") or (Nicotine NEAR/4 gel*) or NRT))) AND Language=(English) *Databases=SSCI Timespan=All Years* *Lemmatization=On*

CPCI-S (ISI Web of Science).

1990-2011-09-01.

Searched 2 September 2011.

# 20	46	#19 AND #18 *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 19	270,773	(TS= (economic* or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic*)) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 18	413	(#11 OR #17) AND Language=(English)

		Databases=CPCI-S Timespan=1990-2011 *Lemmatization=On*
# 17	305	(#2 AND #16) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 16	321,608	(#12 OR #13 OR #14 OR #15) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 15	0	(TS=((mobile or cell*) NEAR (phone*1 or telephone*1))) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 14	267,475	(TS=(SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer* or e-mail* or email* or electronic mail* or mailing list*)) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 13	46,603	(TS =(motiv* or advis* or advic* or counsel* or "help line" or "help lines" or helpline* or "self help" or selfhelp)) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 12	15,556	(TS= ((behavio?r* or group or cognitive) NEAR (support or therap*))) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 11	165	(#3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 10	2	(TS=("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig)) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*

# 9	1	(TS=(Stubit or super-25)) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 8	24	(TS=((Stoppers or Commit or pharmacotherap*) NEAR/3 (smok* or tobacco or nicotine or cigarette*))) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 7	15	(TS=(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep)) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 6	0	(TS=(Pastille* and (smok* or tobacco or nicotine or cigarette*))) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 5	0	(TS=(vaping or (personal NEAR/4 vapori?er))) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 4	5	(TS=(Cigarette* NEAR/2 substitut*)) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 3	132	(#1 and #2) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 2	1,654	((TS=((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or "cut down" or "giv* up") NEAR/4 (smok* or tobacco or cigarette*)))) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*
# 1	428	(TS=((Nicotine NEAR/4 therapy) or (Nicotine NEAR/4 gum*) or (Nicotine NEAR/4 inhal*) or (Nicotine NEAR/4 replace*) or (Nicotine NEAR/4 lozenge*) or (Nicotine NEAR/4 tablet*) or (Nicotine NEAR/4 microtab*) or (Nicotine NEAR/4 "nasal spray*") or

		(Nicotine NEAR/4 patch*) or (Nicotine NEAR/4 "delivery devic") or (Nicotine NEAR/4 "delivery system*") or (Nicotine NEAR/4 gel*) or NRT)) AND Language=(English) *Databases=CPCI-S Timespan=1990-2011* *Lemmatization=On*

CPCI-SSH (ISI Web of Science).

1990-2011-09-01.

Searched 2 September 2011.

# 20	21	#19 AND #18 *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 19	52,881	(TS= (economic* or cost or costs or costly or costing or price or prices or pricing or pharmacoeconomic*)) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 18	181	(#11 OR #17) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 17	130	(#2 AND #16) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 16	41,047	(#12 OR #13 OR #14 OR #15) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 15	0	(TS=((mobile or cell*) NEAR (phone*1 or telephone*1))) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 14	28,274	(TS=(SMS or short message service or text messag* or instant messag* or videomessag* or video messag* or multimedia messag* or web or internet or computer*

		or e-mail* or email* or electronic mail* or mailing list*)) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 13	11,648	(TS =(motiv* or advis* or advic* or counsel* or "help line" or "help lines" or helpline* or "self help" or selfhelp)) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 12	3,187	(TS= ((behavio?r* or group or cognitive) NEAR (support or therap*))) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 11	88	(#3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 10	0	(TS=("electronic cigarette*" or e-cigarette* or ecigarette* or ecig* or e-cig)) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 9	0	(TS=(Stubit or super-25)) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 8	14	(TS=((Stoppers or Commit or pharmacotherap*) NEAR/3 (smok* or tobacco or nicotine or cigarette*))) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 7	3	(TS=(Nicorette or Nicotinell or Niconil or NiQuitin or Polacrilex or Habitrol or Nicabate or NicoDerm or Nicotex or Nicotrol or ProStep)) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 6	0	(TS=(Pastille* and (smok* or tobacco or nicotine or cigarette*))) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011*

		Lemmatization=On
# 5	0	(TS=(vaping or (personal NEAR/4 vapori?er))) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 4	0	(TS=(Cigarette* NEAR/2 substitut*)) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 3	77	(#1 and #2) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 2	412	((TS=((pre-quit or prequit or "Stop/start" or abstain* or abstinence or reduc* or declin* or quit* or stop* or cess* or cease* or "cut down" or "giv* up") NEAR/4 (smok* or tobacco or cigarette*)))) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*
# 1	92	(TS=((Nicotine NEAR/4 therapy) or (Nicotine NEAR/4 gum*) or (Nicotine NEAR/4 inhal*) or (Nicotine NEAR/4 replace*) or (Nicotine NEAR/4 lozenge*) or (Nicotine NEAR/4 tablet*) or (Nicotine NEAR/4 microtab*) or (Nicotine NEAR/4 "nasal spray*") or (Nicotine NEAR/4 patch*) or (Nicotine NEAR/4 "delivery devic") or (Nicotine NEAR/4 "delivery system*") or (Nicotine NEAR/4 gel*) or NRT)) AND Language=(English) *Databases=CPCI-SSH Timespan=1990-2011* *Lemmatization=On*

UKCRN (public.ukcrn.org.uk/).

Searched 5 September 2011.

Each line searched separately

Title/ Acronym:
smoking cost
smoking costs
smoking economic
smoking economics
tobacco cost
tobacco costs
tobacco economic
tobacco economics
nicotine cost

nicotine costs
nicotine economic
nicotine economics

All words
Research Summary:
smoking cost
smoking costs
smoking economic
smoking economics
tobacco cost
tobacco costs
tobacco economic
tobacco economics
nicotine cost
nicotine costs
nicotine economic
nicotine economics

All words

CDC Smoking & Health Resource Library database.

(http://apps.nccd.cdc.gov/shrl/AdvancedSearch.aspx). 1990-2011. Searched 5 September 2011.

Advanced Search
Keywords: smoking AND harm AND cost
Keywords: smoking AND harm AND economic
Keywords: tobacco AND harm AND cost
Keywords: tobacco AND harm AND economic
Keywords: nicotine AND harm AND cost
Keywords: nicotine AND harm AND economic
Publication Year Between: 1990 and 2011

6.2 Appendix 2 Excluded abstracts

Ref id	Title	Author	Reason for exclusion
30	Reducing tobacco use: a report of the Surgeon General: executive summary	No authors listed	Study design out of scope
112	Positive return on investment for states that invest in quit-smoking treatments.	No authors listed	Outcomes out of scope: costs
149	Closing the youth access gap: the projected health benefits and cost savings of a national policy to raise the legal smoking age to 21 in the United States	Ahmad, S.	Intervention out of scope
150	The cost-effectiveness of raising the legal smoking age in California.	Ahmad, S.	Intervention out of scope
151	Increasing excise taxes on cigarettes in California: a dynamic simulation of health and economic impacts.	Ahmad, S.	Intervention out of scope
152	Limiting youth access to tobacco: comparing the long-term health impacts of increasing cigarette excise taxes and raising the legal smoking age to 21 in the United States.	Ahmad S, Billimek J.	Intervention out of scope
153	Raising taxes to reduce smoking prevalence in the US: a simulation of the anticipated health and economic impacts	Ahmad S, Franz GA.	Intervention out of scope
159	Cost-effectiveness of the use of transdermal Nicorette patches relative to GP counselling and nicotine gum in the prevention of smoking-related diseases.	Akehurst RL, Piercy J.	Outcomes out of scope
160	Cost effectiveness of changing health professionals' behavior: training dental hygienists in brief interventions for smokeless tobacco cessation.	Akers L, Gordon JS, Andrews JA, Barckley M, Lichtenstein E, Severson HH.	Outcomes out of scope

185	Short- and long-term smoking cessation for three levels of intensity of behavioral treatment.	Alterman AI, Gariti P, Mulvaney F.	Outcomes out of scope: costs
193	Dynamic computer simulation models: new methodology for continuing medical education.	Anderson JG, Jay SJ.	Outcomes out of scope
210	Estimating the risks and benefits of nicotine replacement therapy for smoking cessation in the United States.	Apelberg BJ, Onicescu G, Avila-Tang E, Samet JM.	Outcomes out of scope
222	Smoking and how to help people to stop	Ashcroft J.	Study design out of scope
230	The development and implementation of a peer-led intervention to prevent smoking among secondary school students using their established social networks.	Audrey S, Cordall K, Moore L, Cohen D, Campbell R.	Study design out of scope
231	Smokeless Tobacco, Smoking Cessation and Harm Reduction: An Economic Analysis.	Ault RW.	Patient population out of scope
233	An evaluation of health benefit modification in Taft-Hartley health and welfare funds: implications for encouraging tobacco-cessation coverage.	Au-Yeung CM, Weisman SR, Hennrikus DJ, Forster JL, Skoog R, Luneburg W, et al.	Study design out of scope
280	Should one use smokeless tobacco in smoking cessation programs? A rational addiction approach.	Bask M, Melkersson M.	Intervention out of scope
296	Effects of smoking cessation on health care use: is elevated risk of hospitalization among former smokers attributable to smoking-related morbidity?	Baumeister SE, Schumann A, Meyer C, John U, Volzke H, Alte D.	Study design out of scope
332	Costs and benefits of smoking cessation aids: making a case for public reimbursement of nicotine replacement therapy in Australia.	Bertram MY, Lim SS, Wallace AL, Vos T.	Patient population out of scope
340	Smoking cessation pharmacology.	Bhagar HA, Schmetzer AD.	Outcomes out of scope

344	Modeling the effects of combined behavioral and pharmacological treatment on cigarette smoking: behavioral-economic analyses.	Bickel WK, Madden GJ, DeGrandpre RJ.	Study design out of scope
356	The clinical effectiveness and cost-effectiveness of computed tomography screening for lung cancer: systematic reviews.	Black C, Bagust A, Boland A, Walker S, McLeod C, De Verteuil R, et al.	Intervention out of scope
358	Evidence base and strategies for successful smoking cessation.	Black JH, III.	Outcomes out of scope
363	Impact of the UK public smoking ban on the prescribing of smoking cessation therapy in primary care-a thin database study.	Blak B, Hards M, Thompson M, Dattani H.	Outcomes out of scope
371	Nicotine nasal spray with nicotine patch for smoking cessation: randomised trial with six year follow up.	Blondal T, Gudmundsson LJ, Olafsdottir I, Gustavsson G, Westin A.	Outcomes out of scope
382	Smoking, healthcare cost, and loss of productivity in Sweden 2001.	Bolin K, Lindgren B.	Outcomes out of scope: costs
385	Smoking-cessation therapy using varenicline: The cost-utility of an additional 12-week course of varenicline for the maintenance of smoking abstinence.	Bolin K, Mork AC, Wilson K.	Intervention out of scope
409	Does insurance coverage for drug therapy affect smoking cessation?	Boyle RG, Solberg LI, Magnan S, Davidson G, Alesci NL.	Intervention out of scope
418	Efficacy and cost-effectiveness of a minimal intervention to prevent smoking relapse: dismantling the effects of amount of content versus contact.	Brandon TH, Meade CD, Herzog TA, Chirikos TN, Webb MS, Cantor AB.	Intervention out of scope
440	The impact of cost sharing on a patient compliance and persistence for smoking cessation pharmacotherapy.	Brixner D, Kirkness C, Robinson S, Lydick E.	Intervention out of scope
445	Self-help smoking cessation materials.	Brown SL, Owen N.	Study design out of scope
447	Cost effectiveness of coronary heart	Brown AD, Garber AM.	Outcomes out of

	disease prevention strategies in adults.		scope
465	The cost-effectiveness of smoking cessation interventions: what do we know?	Buck D.	Study design out of scope
440	The impact of cost sharing on a patient compliance and persistence for smoking cessation pharmacotherapy.	Brixner D, Kirkness C, Robinson S, Lydick E.	Study design out of scope
445	Self-help smoking cessation materials.	Brown SL, Owen N.	Outcomes out of scope
447	Cost effectiveness of coronary heart disease prevention strategies in adults.	Brown AD, Garber AM.	Intervention out of scope
465	The cost-effectiveness of smoking cessation interventions: what do we know?	Buck D.	Study design out of scope
490	Value to smokers of improved cessation products: Evidence from a willingness-to-pay survey.	Busch SH, Falba TA, Duchovny N, Jofre-Bonet M, O'Malley SS, Sindelar JL.	Study design out of scope
520	Does offering more support calls to smokers influence quit success?	Carlin-Menter S, Cummings KM, Celestino P, Hyland A, Mahoney MC, Willett J, et al.	Outcomes out of scope
527	An evidence synthesis of qualitative and quantitative research on component intervention techniques, effectiveness, cost-effectiveness, equity and acceptability of different versions of health-related lifestyle advisor role in improving health.	Carr SM, Lhussier M, Forster N, Geddes L, Deane K, Pennington M, et al.	Intervention out of scope
528	Pharmacotherapy for smoking cessation.	Carrozzi L, Pistelli F, Viegi G.	Study design out of scope
533	A cost effectiveness analysis of a "self-help" assisted programme of smoking cessation.	Casali L, De RA, Consiglio M, Tenconi MT, Borghi G, Fratti C.	Study design out of scope
571	Short-term cost for long-term benefit: time preference and cancer control.	Chapman GB.	Intervention out of scope
584	Cost-effectiveness analysis of a complementary health intervention: the	Chirikos TN, Herzog TA, Meade CD, Webb MS,	Outcomes out of scope

	case of smoking relapse prevention.	Brandon TH.	
592	Lifetime medical expenditure and life expectancy lost attributable to smoking through major smoking related diseases in Taiwan.	Chung CW, Wang JD, Yu CF, Yang MC.	Study design out of scope
608	Economic implications of smoking cessation therapies: a review of economic appraisals.	Cohen DR, Fowler GH.	Patient population out of scope
618	Relapse prevention in UK Stop Smoking Services: current practice, systematic reviews of effectiveness and cost-effectiveness analysis.	Coleman T, Agboola S, Leonardi-Bee J, Taylor M, McEwen A, McNeill A.	Outcomes out of scope
621	Current strategies for cessation of smoking for head and neck cancer patients.	Collins SL.	Study design out of scope
630	Therapeutic advances in the treatment of cigarette addiction.	Cooke CE.	Study design out of scope
642	Smoking cessation interventions in clinical practice.	Cornuz J.	Study design out of scope
643	Nonpharmacological smoking cessation interventions in clinical practice.	Cornuz J, Willi C.	Study design out of scope
657	Current treatment options in smoking cessation.	Crain D, Bhat A.	Study design out of scope
676	Strategies for smoking cessation: What is new and what works?	Cummings KM, Mahoney MC.	Study design out of scope
678	Costs of giving out free nicotine patches through a telephone quit line.	Cummings KM, Hyland A, Carlin-Menter S, Mahoney MC, Willett J, Juster HR.	Outcomes out of scope; costs
686	Use and cost effectiveness of smoking-cessation services under four insurance plans in a health maintenance organization.	Curry SJ, Grothaus LC, McAfee T, Pabiniak C.	Intervention out of scope
689	Use and Cost Effectiveness of Smoking-Cessation Services Under Four Insurance Plans in a Health Maintenance Organization.	Curry SJ, Grothaus LC, McAfee T, Pabiniak C.	Intervention out of scope
699	Contingency management in the 21st	Dallery J, Raiff BR.	Study design out of

	century: technological innovations to promote smoking cessation.		scope
715	A new model for a smoking cessation program: adding compliance efforts and provider education to the mix.	Davis KL, DeKemper PR.	Study design out of scope
734	Evidence-based, cost-effective risk stratification and management after myocardial infarction California Cardiology Working Group on Post-MI Management.	Deedwania PC, Amsterdam EA, Vagelos RH.	Intervention out of scope
756	Should smoking cessation cost a packet? A pilot randomized controlled trial of the cost-effectiveness of distributing nicotine therapy free of charge.	Dey P, Foy R, Woodman M, Fullard B, Gibbs A.	Study design out of scope
772	New NHS smoking cessation services.	Donaldson L.	Outcomes out of scope: costs
801	Combination pharmacotherapy for stopping smoking: what advantages does it offer?	Ebbert JO, Hays JT, Hurt RD.	Study design out of scope
805	What role for statins? A review and economic model.	Ebrahim S, Davey Smith G, McCabe C, Payne N, Pickin M, Sheldon TA, et al.	Intervention out of scope
811	After the smoke has cleared: evaluation of the impact of a new national smoke-free law in New Zealand.	Edwards R, Thomson G, Wilson N, Waa A, Bullen C, O'Dea D, et al.	Intervention out of scope
812	Hungry for tobacco: an analysis of the economic impact of tobacco consumption on the poor in Bangladesh.	Efroymson D, Ahmed S, Townsend J, Alam SM, Dey AR, Saha R, et al.	Outcomes out of scope: costs
820	The long-term prevention of tobacco use among junior high school students: classroom and telephone interventions.	Elder JP, Wildey M, de Moor C, Sallis JF, Jr., Eckhardt L, Edwards C, et al.	Intervention out of scope
826	Simulated effect of tobacco tax variation on Latino health in California.	Emery S, Ake CF, Navarro AM, Kaplan RM.	Intervention out of scope
833	The cost-effectiveness of worksite wellness programs for hypertension control, weight loss, smoking cessation, and exercise.	Erfurt JC, Foote A, Heirich MA.	Intervention out of scope

841	Pregnancy and medical cost outcomes of a self-help prenatal smoking cessation program in a HMO.	Ershoff DH, Quinn VP, Mullen PD, Lairson DR.	Study design out of scope
866	Effectiveness and cost effectiveness of television, radio and print advertisements in promoting the New York smokers' quitline.	Farrelly MC, Hussin A, Bauer UE.	Intervention out of scope
868	The impact of tobacco control programs on adult smoking.	Farrelly MC, Pechacek TF, Thomas KY, Nelson D.	Intervention out of scope
872	A plan of group therapy for smoking cessation in patients suffering from Buerger's disease: A case series study of Northeast Iran.	Fazeli B, Arshadi H.	Outcomes out of scope
887	Baseline health, socioeconomic status, and 10-year mortality among older middle-aged Americans: findings from the Health and Retirement Study.	Feinglass J, Lin S, Thompson J, Sudano J, Dunlop D, Song J, et al.	Outcomes out of scope: costs
890	The role of public policies in reducing smoking prevalence and deaths: the Argentina Tobacco Policy Simulation Model.	Ferrante D, Levy D, Peruga A, Compton C, Romano E.	Intervention out of scope
920	A review of the evolution of health economic models of smoking cessation.	Fisher MI, Muston D, Knight CJ.	Study design out of scope
938	Nicotine replacement therapy: a proactive intervention.	Ford K.	Outcomes out of scope
950	Smoking cessation interventions among hospitalized patients: What have we learned?	France EK, Glasgow RE, Marcus AC.	Outcomes out of scope
995	Harm reduction policies for tobacco users.	Gartner C, Hall W.	Intervention out of scope
1017	Community-based interventions and alcohol, tobacco and other drugs: foci, outcomes and implications.	Giesbrecht N, Haydon E.	Outcomes out of scope
1052	Pharmacoeconomic considerations in the management of smoking cessation.	Godfrey C, Fowler G.	Study design out of scope
1059	The effect of risk factor reductions between	Goldman L, Phillips KA,	Intervention out of

	1981 and 1990 on coronary heart disease incidence, prevalence mortality and cost.	Coxson P, Goldman PA, Williams L, Hunink M, et al.	scope
1060	The benefits of risk factor prevention in Americans aged 51 years and older.	Goldman DP, Zheng Y, Girosi F, Michaud P, Olshansky SJ, Cutler D, et al.	Intervention out of scope
1070	A review of the cost-effectiveness of face-to-face behavioural interventions for smoking, physical activity, diet and alcohol.	Gordon L, Graves N, Hawkes A, Eakin E.	Study design out of scope
1071	Exploring the cost-effectiveness of a smoking-cessation program enhanced with individual genetic feedback on lung cancer risk.	Gordon LG, Hirst NG, Young RP, Brown PM.	Intervention out of scope
1072	Within a smoking-cessation program, what impact does genetic information on lung cancer need to have to demonstrate cost-effectiveness?	Gordon LG, Hirst NG, Young RP, Brown PM.	Intervention out of scope
1097	Efficiency and Cost-Effectiveness of Recruitment Methods for Male Latino Smokers.	Graham AL, Lopez-Class M, Mueller NT, Mota G, Mandelblatt J.	Intervention out of scope
1098	Application of the Synergy Model with the surgical care of smokers.	Graham-Garcia J, George-Gay B, Heater D, Butts A, Heath J.	Outcomes out of scope
1114	Comparing smoking cessation interventions for work-site disease management.	Greenwood T.	Study design out of scope
1125	Design of a RCT evaluating the (cost-) effectiveness of a lifestyle intervention for male construction workers at risk for cardiovascular disease: the health under construction study.	Groeneveld IF, Proper KI, van der Beek AJ, van Duivenbooden C, van Mechelen W.	Intervention out of scope
1166	Tricyclic Antidepressants in the Treatment of Nicotine Dependence. Medication treatments for nicotine dependence.	Hall SM.	Intervention out of scope
1174	Impacts of a smoking cessation benefit among employed populations.	Halpern MT, Dirani R, Schmier JK.	Outcomes out of scope

1176	The costs and effectiveness of different benefit designs for treating tobacco dependence: results from a randomized trial.	Halpin HA, McMenamin SB, Rideout J, Boyce-Smith G.	Outcomes out of scope
1206	Direct health costs of environmental tobacco smoke exposure and indirect health benefits due to smoking ban introduction.	Hauri DD, Lieb CM, Rajkumar S, Kooijman C, Sommer HL, RÃ¶Ã¶sli M.	Intervention out of scope
1213	A methodology for estimating the costs and benefits of health promotion.	Haycox A.	Intervention out of scope
1214	Return on investment from smoking cessation insurance coverage in the workplace: A Canadian employer's perspective.	Haycox A, Raymond V, Mills T, Evans K.	Intervention out of scope
1227	A contingent payment model of smoking cessation: effects on abstinence and withdrawal.	Heil SH, Tidey JW, Holmes HW, Badger GJ, Higgins ST.	Patient population out of scope
1238	Pharmacotherapy for nicotine dependence.	Henningfield JE, Fant RV, Buchhalter AR, Stitzer ML.	Study design out of scope
1243	Cost-effectiveness of pharmacological interventions for smoking cessation: Current evidence and policy implications.	Heredia I, Valencia A, Bertozzi S.	Study design out of scope
1264	Smoking cessation strategies in patients with peripheral arterial disease: an evidence-based approach.	Hobbs SD, Bradbury AW.	Outcomes out of scope
1269	Do school-based tobacco prevention programmes pay off? The cost-effectiveness of the 'Smoke-free Class Competition'.	Hoeflmayr D, Hanewinkel R.	Intervention out of scope
1276	Teen reach: outcomes from a randomized, controlled trial of a tobacco reduction program for teens seen in primary medical care.	Hollis JF, Polen MR, Whitlock EP, Lichtenstein E, Mullooly JP, Velicer WF, et al.	Outcomes out of scope
1280	Cost-utility analysis of the National truth campaign to prevent youth smoking.	Holtgrave DR, Wunderink KA, Vallone DM, Healton CG.	Intervention out of scope

1307	Effect of cost on the self-administration and efficacy of nicotine gum: a preliminary study.	Hughes JR, Wadland WC, Fenwick JW, Lewis J, Bickel WK.	Intervention out of scope
1323	A review of cost-effectiveness analyses.	Hurley S.	Intervention out of scope
1324	Cost-effectiveness of smoking cessation to prevent age-related macular degeneration.	Hurley SF, Matthews JP, Guymer RH.	Outcomes out of scope
1329	The cost-effectiveness of health communication programs: What do we know?	Hutchinson P, Wheeler J.	Study design out of scope
1378	Return on investment of different combinations of bupropion SR dose and behavioral treatment for smoking cessation in a health care setting: an employer's perspective.	Javitz HS, Swan GE, Zbikowski SM, Curry SJ, McAfee TA, Decker D, et al.	Outcomes out of scope: costs
1421	Smoking habits and cessation programme in an Australian teaching hospital.	Jones TE, Crocker H, Ruffin RE.	Outcomes out of scope
1427	National trends in the provision of smoking cessation aids within the Veterans Health Administration.	Jonk YC, Sherman SE, Fu SS, Hamlett-Berry KW, Geraci MC, Joseph AM.	Intervention out of scope
1433	Smoking cessation for patients with cardiovascular disease: What is the best approach?	Joseph AM, Fu SS.	Study design out of scope
1437	Report of two smoking cessation programs: telephone intervention and group sessions.	Joslin KA, Fleszar GJ, Malone NT, Owens SK.	Study design out of scope
1449	A review of economic evaluations of tobacco control programs.	Kahende JW, Loomis BR, Adhikari B, Marshall L.	Study design out of scope
1458	Encouraging smokers to quit: the cost effectiveness of reimbursing the costs of smoking cessation treatment.	Kaper J, Wagena EJ, van Schayck CP, Severens JL.	Intervention out of scope
1461	Simulated effect of tobacco tax variation on population health in California.	Kaplan RM, Ake CF, Emery SL, Navarro AM.	Intervention out of scope
1467	Decision modeling to inform decision making: Seeing the wood for the trees.	Karnon J, Brennan A, Akehurst R.	Study design out of scope
1473	A before-after implementation trial of	Katz D, Vander Weg M, Fu	Patient population

	smoking cessation guidelines in hospitalized veterans.	S, Prochazka A, Grant K, Buchanan L, et al.	out of scope
1481	Pharmacoeconomic spotlight on varenicline as an aid to smoking cessation+.	Keating GM, Lyseng-Williamson KA.	Study design out of scope
1482	Varenicline: a pharmacoeconomic review of its use as an aid to smoking cessation.	Keating GM, Lyseng-Williamson KA.	Study design out of scope
1484	Cost-effectiveness of varenicline for smoking cessation.	Keiding H.	Study design out of scope
1545	Hong Kong: a model of successful tobacco control in China.	Koplan JP, An WK, Lam RM.	Study design out of scope
1564	Patient costs as a barrier to intensive health behavior counseling.	Krist AH, Woolf SH, Johnson RE, Rothemich SF, Cunningham TD, Jones RM, et al.	Outcomes out of scope
1569	Internet-based behavioral change and psychosocial care for patients with cardiovascular disease: A review of cardiac disease-specific applications.	Kuhl EA, Sears SF, Conti JB.	Patient population out of scope
1574	Smoke-free Europe in the year 2000: nongovernmental action (smoking cessation treatment).	Kunze M.	Study design out of scope
1575	Smoke-free cafe in an unregulated European city: highly welcomed and economically successful.	Kunzli N, Mazzoletti P, Adam M, Gotschi T, Mathys P, Monn C, et al.	Intervention out of scope
1577	Cost-Effectiveness Analysis in Heart-Disease .2. Preventive Therapies.	Kupersmith J, Holmesrovner M, Hogan A, Rovner D, Gardiner J. Cost	Patient population out of scope
1579	So you want to quit smoking: have you tried a mobile phone?	Labonne J, Chase RS.	Study design out of scope
1580	So You Want to Quit Smoking: Have You Tried a Mobile Phone?	Labonne J, Chase RS.	Study design out of scope
1589	Adherence to nicotine replacement therapy versus quitting smoking among Chinese smokers: A preliminary investigation.	Lam TH, Abdullah AS, Chan SS, Hedley AJ.	Outcomes out of scope
1594	Readiness to quit and smoking reduction	Lan TH, Chiu HJ, Wu BJ,	Outcomes out of

	outcomes.	Hung TH, Hu TM.	scope
1595	A longitudinal study of medicaid coverage for tobacco dependence treatments in Massachusetts and associated decreases in hospitalizations for cardiovascular disease.	Land T, Rigotti NA, Levy DE, Paskowsky M, Warner D, Kwass JA, et al.	Intervention out of scope
1596	Tobacco industry sociological programs to influence public beliefs about smoking.	Landman A, Cortese DK, Glantz S.	Study design out of scope
1597	Brief supportive telephone outreach as a recruitment and intervention strategy for smoking cessation.	Lando HA, Hellerstedt WL, Pirie PL, McGovern PG.	Study design out of scope
1603	Using a screening questionnaire to reduce non-attendances at first appointments for smoking cessation advice clinics in general practice: A pilot study.	Langley CA, Maggs C, Portman S, Davis J.	Study design out of scope
1613	Smoking and joint replacement: resource consumption and short-term outcome.	Lavernia CJ, Sierra RJ, Gomez-Marin O.	Study design out of scope
1615	An analysis of the effectiveness of interventions intended to help people stop smoking.	Law M, Tang JL.	Study design out of scope
1623	Good reason to fear tobacco's cost.	Laws J.	Outcomes out of scope: costs
1624	A Phase II study of St. John's Wort for smoking cessation.	Lawvere S, Mahoney MC, Cummings KM, Kepner JL, Hyland A, Lawrence DD, et al.	Outcomes out of scope
1625	Tobacco initiation, cessation, and change: evidence from Vietnam.	Laxminarayan R, Deolalikar A.	Intervention out of scope
1626	What works for smoking cessation?	Le Faou AL.	Outcomes out of scope
1629	The smoking advice service: A regional smoking cessation service.	Lee G.	Study design out of scope
1637	Worksite-Based Incentives and Competitions to Reduce Tobacco Use A Systematic Review.	Leeks KD, Hopkins DP, Soler RE, Aten A, Chattopadhyay SK.	Intervention out of scope

1644	The effect of cost on the effectiveness of over-the-counter nicotine gum	Leischow S, Cook G, Muramoto ML.	Study design out of scope
1645	The human and financial costs of smoking.	Leistikow BN.	Outcomes out of scope: costs
1646	Effectiveness of smoking cessation interventions among adults: a systematic review of reviews.	Lemmens V, Oenema A, Knut IK, Brug J.	Study design out of scope
1650	Cost effectiveness of computer tailored and non-tailored smoking cessation letters in general practice: randomised controlled trial.	Lennox AS, Osman LM, Reiter E, Robertson R, Friend J, McCann I, et al.	Outcomes out of scope
1656	Passive smoking: the medical and economic issues.	Lesmes GR.	Study design out of scope
1659	Tobacco use: the impact of prices.	Leverett M, Ashe M, Gerard S, Jenson J, Woollery T.	Intervention out of scope
1660	Reviews of fexofenadine and nicotine nasal spray.	Levien T, Baker DE.	Study design out of scope
1661	Tailored behavioral support for smoking reduction: development and pilot results of an innovative intervention.	Levinson AH, Glasgow RE, Gaglio B, Smith TL, Cahoon J, Marcus AC.	Outcomes out of scope
1662	Implementation and evaluation of a smoking cessation group session program.	Levshin V, Radkevich N, Slepchenko N, Droggachih V.	Outcomes out of scope
1665	A computer simulation model of mass media interventions directed at tobacco use.	Levy DT, Friend K.	Outcomes out of scope
1666	Examining the effects of tobacco treatment policies on smoking rates and smoking related deaths using the SimSmoke computer simulation model.	Levy DT, Friend K.	Outcomes out of scope
1667	A simulation model of policies directed at treating tobacco use and dependence.	Levy DT, Friend K.	Intervention out of scope
1669	The relationship of smoking cessation to sociodemographic characteristics, smoking intensity, and tobacco control policies.	Levy DT, Romano E, Mumford E.	Study design out of scope

1670	Employer-sponsored insurance coverage of smoking cessation treatments.	Levy DE.	Intervention out of scope
1671	The role of public policies in reducing smoking prevalence and deaths caused by smoking in Arizona: results from the Arizona tobacco policy simulation model.	Levy DT, Ross H, Powell L, Bauer JE, Lee Hr.	Intervention out of scope
1672	The role of public policies in reducing smoking prevalence in California: results from the California Tobacco Policy Simulation Model.	Levy DT, Hyland A, Higbee C, Remer L, Compton C.	Intervention out of scope
1675	Quit Attempts and Quit Rates Among Menthol and Nonmenthol Smokers in the United States.	Levy DT, Blackman K, Tauras J, Chaloupka FJ, Villanti AC, Niaura RS, et al.	Study design out of scope
1676	Smoking cessation: what works? What doesn't?	Lewis SF, Fiore MC.	Study design out of scope
1680	Guidance confirms brief interventions by GPs help smokers to give up.	Lewis K.	Outcomes out of scope
1681	Can smokers switch from a hospital-based to a community-based stop smoking service? An open-label, randomized trial comparing three referral schemes.	Lewis KE, Durgan L, Edwards VM, Dixon H, Whitehead C, Sykes RN.	Study design out of scope
1683	The effects of cigarette price and tax on smokers and government revenue.	Li Q.	Intervention out of scope
1686	Prices, policies and youth smoking.	Liang L, Chaloupka F, Nichter M, Clayton R.	Intervention out of scope
1687	Regulating Tobacco to Minimise Harms.	Liberman J, Borland R.	Study design out of scope
1688	Community Intervention Trial for Smoking Cessation (COMMIT): opportunities for community psychologists in chronic disease prevention.	Lichtenstein E, Nettekoven L, Ockene JK.	Outcomes out of scope
1690	Smoking cessation: what have we learned over the past decade?	Lichtenstein E, Glasgow RE.	Study design out of scope
1691	Tobacco cessation interventions in health	Lichtenstein E, Hollis JF,	Outcomes out of

	care settings: rationale, model, outcomes.	Severson HH, Stevens VJ, Vogt TM, Glasgow RE, et al.	scope
1692	Using radon risk to motivate smoking reduction II: randomized evaluation of brief telephone counseling and a targeted video.	Lichtenstein E, Boles SM, Lee ME, Hampson SE, Glasgow RE, Fellows J.	Outcomes out of scope
1693	Smoking cessation quitlines: an underrecognized intervention success story.	Lichtenstein E, Zhu SH, Tedeschi GJ.	Outcomes out of scope
1695	Results of two levels of adjunctive treatment used with the nicotine patch.	Lifrak P, Gariti P, Alterman AI, McKay J, Volpicelli J, Sparkman T, et al.	Outcomes out of scope
1696	Short-term health and economic benefits of smoking cessation: low birth weight.	Lightwood JM, Phibbs CS, Glantz SA.	Patient population out of scope
1697	The economics of smoking and cardiovascular disease.	Lightwood J.	Study design out of scope
1698	Effect of the Arizona tobacco control program on cigarette consumption and healthcare expenditures.	Lightwood J, Glantz S.	Outcomes out of scope: costs
1699	Smoking: the real costs.	Limb M.	Outcomes out of scope: costs
1708	Social capital, institutional (vertical) trust and smoking: a study of daily smoking and smoking cessation among ever smokers.	Lindstrom M, Janzon E.	Study design out of scope
1711	Using tailored interventions to enhance smoking cessation among African-Americans at a community health center.	Lipkus IM, Lyna PR, Rimer BK.	Outcomes out of scope
1721	Point of purchase cigarette promotions before and after the Master Settlement Agreement: exploring retail scanner data.	Loomis BR, Farrelly MC, Nonnemaker JM, Mann NH.	Intervention out of scope
1722	Impact of cigarette advertising on smoking behaviour in Spanish adolescents as measured using recognition of billboard advertising.	Lopez ML, Herrero P, Comas A, Leijs I, Cueto A, Charlton A, et al.	Intervention out of scope
1739	Australian smokers' use of bupropion and	Lutsenko H, Doran CM,	Outcomes out of

	nicotine replacement therapies and their relation to reimbursement,	Hall WD.	scope: costs
1740	Cost analysis of varenicline versus nicotine replacement therapyand unaided cessation in nicaragua.	Lutz M, Lovato P, Cuesta G.	Outcomes out of scope: costs
1743	The inadequacy of using means to compare medical costs of smokers and nonsmokers.	Lynch WD, Teitelbaum HS, Main DS.	Outcomes out of scope: costs
1754	Abstinence and price effects on demand for cigarettes: a behavioral-economic analysis.	Madden GJ, Bickel WK.	Outcomes out of scope
1761	Economic benefits of achieving realistic smoking cessation targets in Australia.	Magnus A, Cadilhac D, Sheppard L, Cumming T, Pearce D, Carter R.	Outcomes out of scope
1767	The effectiveness of self-administered treatments: a practice-friendly review of the research.	Mains JA, Scogin FR.	Study design out of scope
1776	Effectiveness of nicotine patches in a workplace smoking cessation program. An eleven-month follow-up study.	Mankani SK, Garabrant DH, Homa DM.	Outcomes out of scope
1781	Current approaches to smoking cessation: An overview.	Manpreet S, Vijay K, Bikash M.	Study design out of scope
1790	Efficacy of an individualized, motivationally-tailored physical activity intervention.	Marcus BH, Bock BC, Pinto BM, Forsyth LH, Roberts MB, Traficante RM.	Patient population out of scope
1794	Facilitating adherence to the tobacco use treatment guideline with computer-mediated decision support systems: physician and clinic office manager perspectives.	Marcy TW, Skelly J, Shiffman RN, Flynn BS.	Study design out of scope
1797	Randomized controlled trial of cognitive behavioural therapy for smokers living in a deprived are of London: Outcome at one-year follow-up.	Marks DF, Sykes CM.	Outcomes out of scope
1798	Smoking cessation.	Marlow SP, Stoller JK.	Study design out of scope
1799	Epidemiologic and economic research, and the question of smoking bans.	Marlow ML.	Intervention out of scope

1807	Effectiveness of monetary incentives for recruiting adolescents to an intervention trial to reduce smoking.	Martinson BC, Lazovich D, Lando HA, Perry CL, McGovern PG, Boyle RG.	Intervention out of scope
1808	Smoking cessation attempts in relation to prior health care charges: the effect of antecedent smoking-related symptoms?	Martinson BC, O'Connor PJ, Pronk NP, Rolnick SJ.	Study design out of scope
1815	massachusetts tobacco control program: reducing the health and economic burden of tobacco use.	Massachusetts Department of Public Health	Study design out of scope
1819	The Role of Antipsychotics in Smoking and Smoking Cessation.	Matthews AMM, Wilson VB, Mitchell SH.	Intervention out of scope
1823	Randomized controlled trial of a social support ('buddy') intervention for smoking cessation.	May S, West R, Hajek P, McEwen A, McRobbie H.	Outcomes out of scope
1827	Nicotine patches and uninsured quitline callers. A randomized trial of two versus eight weeks.	McAfee TA, Bush T, Deprey TM, Mahoney LD, Zbikowski SM, Fellows JL, et al.	Outcomes out of scope
1830	Use of self-help materials and smoking cessation among proactively recruited and volunteer intervention participants.	McBride CM, Curry SJ, Grothaus LC, Rosner D, Louie D, Wagner EH.	Outcomes out of scope
1841	Internet-based smoking cessation initiatives: Availability, varieties, and likely effects on outcomes.	McDaniel AM, Stratton RM.	Outcomes out of scope
1842	Population-based recruitment for quit-smoking programs: An analytic review of communication variables.	McDonald PW.	Outcomes out of scope
1843	A low-cost, practical method for increasing smokers' interest in smoking cessation programs.	McDonald PW.	Outcomes out of scope
1846	Online recruitment of targeted populations: Lessons learned from a smoking cessation study among Korean Americans.	McDonnell DD, Lee HJ, Kazinets G, Moskowitz JM.	Outcomes out of scope
1849	Smoking cessation: The contribution of community pharmacy.	McElnay JC, Maguire TA, Drummond A, Hughes CM.	Study design out of scope

1851	Smoking cessation activities by general practitioners and practice nurses.	McEwen A, West R.	Study design out of scope
1857	Cost of tobacco-related diseases, including passive smoking, in Hong Kong.	McGhee SM, Ho LM, Lapsley HM, Chau J, Cheung WL, Ho SY, et al.	Outcomes out of scope: costs
1864	The price of anti-smoking support?	McKee D.	Outcomes out of scope: costs
1873	Smoking cessation-recent advances.	McNeil JJ, Piccenna L, Ioannides-Demos LL.	Outcomes out of scope
1874	Smoking cessation: An evidence-based approach.	McNeill A, Raw M, West R.	Study design out of scope
1875	A national strategy for smoking cessation treatment in England.	McNeill A, Raw M, Whybrow J, Bailey P.	Study design out of scope
1878	Non-nicotine pharmacotherapies for smoking cessation.	McRobbie H, Lee M, Juniper Z.	Outcomes out of scope
1879	Using nicotine replacement therapy to assist in reducing cigarette consumption before quitting: Another strategy for smoking cessation?	McRobbie H, Whittaker R, Bullen C.	Patient population out of scope
1887	Prevalence, economic, and medical impact of tobacco smoking.	Meltzer EO.	Study design out of scope
1890	Risk perception, addiction, and costs to others: An assessment of cigarette taxes and other anti-smoking policies.	Menzel P.	Intervention out of scope
1895	Web-based support as an adjunct to group-based smoking cessation for adolescents.	Mermelstein R, Turner L.	Outcomes out of scope
1899	The California Tobacco Control Program's effect on adult smokers: (1) Smoking cessation.	Messer K, Pierce JP, Zhu SH, Hartman AM, Al Delaimy WK, Trinidad DR, et al.	Outcomes out of scope
1902	Meyer C, Ulbricht S, Schumann A, Hannover W, Hapke U, Rumpf HJ, et al. Inteventions fostering the motivation to quit for smokers in general practice.	Meyer C, Ulbricht S, Schumann A, Hannover W, Hapke U, Rumpf HJ, et al.	Outcomes out of scope
1903	Proactive interventions for smoking	Meyer C, Ulbricht S,	Outcomes out of

	cessation in general medical practice: a quasi-randomized controlled trial to examine the efficacy of computer-tailored letters and physician-delivered brief advice.	Baumeister SE, Schumann A, Ruge J, Bischof G, et al.	scope
1905	Evaluating the effectiveness of a single telephone contact as an adjunct to a self-help intervention for smoking cessation in a randomized controlled trial.	Miguez MC, Becona E.	Outcomes out of scope
1907	Milani RV, Lavie CJ.	Impact of worksite wellness intervention on cardiac risk factors and one-year health care costs.	Patient population out of scope
1908	Smoking cessation in primary care: a clinical effectiveness trial of two simple interventions.	Milch CE, Edmunson JM, Beshansky JR, Griffith JL, Selker HP.	Outcomes out of scope
1913	Smoking-attributable medical care costs in the USA.	Miller VP, Ernst C, Collin F.	Outcomes out of scope
1914	Effectiveness of smoking cessation interventions: Review of evidence and implications for best practice in Australian health care settings.	Miller M, Wood L.	Outcomes out of scope: costs
1915	Uptake and effectiveness of the Australian telephone Quitline service in the context of a mass media campaign.	Miller CL, Wakefield M, Roberts L.	Study design out of scope
1916	Effectiveness of a large-scale distribution programme of free nicotine patches: a prospective evaluation.	Miller N, Frieden TR, Liu SY, Matte TD, Mostashari F, Deitcher DR, et al.	Outcomes out of scope
1918	Using a quitline plus low-cost nicotine replacement therapy to help disadvantaged smokers to quit.	Miller CL, Sedivy V.	Study design out of scope
1931	Pharmacological approaches to smoking cessation.	Authors not stated.	Study design out of scope
1936	Intensive smoking cessation intervention reduces mortality in high-risk smokers with cardiovascular disease.	Mohiuddin SM, Mooss AN, Hunter CB, Grollmes TL, Cloutier DA, Hilleman DE.	Outcomes out of scope

1939	Utilization of nicotine nasal spray in smoking cessation.	Montalto NJ, Garrett SD.	Outcomes out of scope: costs
1947	Self help smoking cessation in pregnancy: Cluster randomised controlled trial.	Moore L, Campbell R, Whelan A, Mills N, Lupton P, Misselbrook E, et al.	Patient population out of scope
1962	The reach and effectiveness of a national mass media-led smoking cessation campaign in the Netherlands.	Mudde AN, de Vries H.	Outcomes out of scope
1963	The best practices: use of the guidelines by ten state tobacco control programs.	Mueller NB, Luke DA, Herbers SH, Montgomery TP.	Study design out of scope
1964	Modelling future mortality reduction through smoking cessation in the European Union.	Mulder I, Hoogenveen RT, Smit HA, de Mesquita HBB.	Study design out of scope
1966	Smoking and smoking cessation in Latin America: a review of the current situation and available treatments.	Muller F, Wehbe L.	Study design out of scope
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	pregnancy: a systematic review and meta-analysis.	Sutton S.	out of scope
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2026	Smoking cessation: Progress, priorities, and prospectus.	Niaura R, Abrams DB.	Outcomes out of scope
2027	Maximizing smoking cessation in clinical practice: pharmacologic and behavioral interventions.	Nides M, Leischow S, Sarna L, Evans SE.	Outcomes out of scope
2028	Update on Pharmacologic Options for Smoking Cessation Treatment.	Nides M.	Outcomes out of scope
2036	An Interactive Videodisc-Based Smoking Cessation Program - Prototype Development and Pilot Test.	Noell J, Biglan A, Hood D, Britz B.	Outcomes out of scope
2049	Public Health Implications of Smoking Intervention Treatments and Policies (Pro-gen).	Ockene JK.	Intervention out of scope
2050	Relapse and maintenance issues for smoking cessation.	Ockene JK, Emmons KM, Mermelstein RJ, Perkins KA, Bonollo DS, Voorhees CC, et al.	Outcomes out of scope
2065	Minimal-contact quit smoking strategies for medical settings. Nicotine addiction: Principles and management.	Orleans CT, Glynn TJ, Manley MW, Slade JD.	Study design out of scope
2066	Population-based tobacco control: progress and prospects.	Orleans CT, Cummings KM.	Study design out of scope
2068	Increasing the demand for and use of effective smoking-cessation treatments reaping the full health benefits of tobacco-control science and policy gains--in our lifetime.	Orleans CT.	Study design out of scope
2069	Development of the health and economic consequences of smoking interactive model.	Orme ME, Hogue SL, Kennedy LM, Paine AC, Godfrey C.	Study design out of scope

2079	Impact of a telephone helpline for smokers who called during a mass media campaign.	Owen L.	Outcomes out of scope
2083	The effect of removing cost as a barrier to treatment initiation with outpatient tobacco dependence clinics among emergency department patients.	Ozhathil DK, Abar B, Baumann BM, Camargo CA, Jr., Ziedonis D, Boudreaux ED.	Study design out of scope
2090	Nicotine transdermal systems: pharmaceutical and clinical aspects.	Panchagnula R, Jain AK, Pillai O, Jaiswal J.	Outcomes out of scope
2097	Strategies to increase the delivery of smoking cessation treatments in primary care settings: a systematic review and meta-analysis.	Papadakis S, McDonald P, Mullen KA, Reid R, Skulsky K, Pipe A.	Outcomes out of scope
2101	Financing smoke related illness and smoking cessation in the United States: can it be done?	Parish TG.	Outcomes out of scope: costs
2103	Feasibility, cost, and cost-effectiveness of a telephone-based motivational intervention for underserved pregnant smokers.	Parker DR, Windsor RA, Roberts MB, Hecht J, Hardy NV, Strolla LO, et al.	Patient population out of scope
2104	Effect on smoking quit rate of telling patients their lung age: the Step2quit randomised controlled trial.	Parkes G, Greenhalgh T, Griffin M, Dent R.	Intervention out of scope
2106	Guidance for commissioners on the cost effectiveness of smoking cessation interventions.	Parrott S, Godfrey C, Raw M, West R, McNeill A.	Study design out of scope
2107	ABC of smoking cessation: economics of smoking cessation.	Parrott S, Godfrey C.	Outcomes out of scope: costs
2112	Effect of nicotine gum price on medication acquisition and smoking cessation in an over-the-counter setting.	Patel V, Shaw JW, Leischow SJ, Ranger-Moore J, Muramoto M.	Intervention out of scope
2114	Cost of NHS stop smoking services increase	Paton N.	Outcomes out of scope: costs
2115	Trio of surveys highlight cost of smoking to NHS and businesses.	Paton N.	Outcomes out of scope: costs
2117	A critical evaluation of nicotine replacement therapy for teenage smokers.	Patten CA.	Study design out of scope

2122	Long-term engagement in smoking cessation counseling among rural smokers.	Paula Cupertino A, Mahnken JD, Richter K, Cox LS, Casey G, Resnicow K, et al.	Outcomes out of scope
2137	Pharmacological management of smoking cessation.	Percival J, Milner D.	Study design out of scope
2138	The place of pharmacotherapy products in smoking cessation.	Percival J.	Outcomes out of scope
2145	Behavioral economics of tobacco smoking. Reframing health behavior change with behavioral economics.	Perkins KA, Hickcox ME, Grobe JE.	Study design out of scope
2151	The pharmacotherapy of smoking cessation.	Peters MJ, Morgan LC.	Outcomes out of scope
2154	Smoking reduction during pregnancy by a program of self-help and clinical support.	Petersen L, Handel J, Kotch J, Podedworny T, Rosen A.	Patient population out of scope
2155	Medicaid reimbursement for prenatal smoking intervention influences quitting and cessation.	Petersen R, Garrett JM, Melvin CL, Hartmann KE.	Patient population out of scope
2162	The costs of smoking revisited.	Phillips D, Kawachi I, Tilyard M.	Outcomes out of scope: costs
2166	Debunking the claim that abstinence is usually healthier for smokers than switching to a low-risk alternative, and other observations about anti-tobacco-harm-reduction arguments.	Phillips CV.	Outcomes out of scope
2176	Cost-effectiveness analysis of a European primary-care physician training in smoking cessation counseling.	Pinget C, Martin E, Wasserfallen JB, Humair JP, Cornuz J.	Intervention out of scope
2185	Management of pharmaceutical resources for the primary prevention of coronary heart disease in Catalonia (Spain) based on efficiency and equity.	Plans-Rubio P.	Patient population out of scope
2186	Allocation of resources between smoking cessation methods and lovastatin treatment of hypercholesterolaemia: based on cost	Plans-Rubio P.	Study design out of scope

	effectiveness and the social welfare function.		
2191	Smoking cessation counseling: a practice management perspective.	Pohlig C.	Study design out of scope
2192	Hospital-based smoking cessation programs: a statewide survey	Polednak AP.	Outcomes out of scope
2202	Avoidable portion of tobacco-attributable acute care hospital days and its cost due to implementation of different intervention strategies in Canada.	Popova S, Patra J, Rehm J.	Outcomes out of scope: costs, Canada
2204	First toll free helpline for smoking cessation--analysis of results after one year of operation.	Posavec M, Civljak M, Soskic T, Soldo D, Simic Z, Oreskovic S.	Outcomes out of scope
2207	The newest agent for smoking cessation.	Potts LA, Garwood CL.	Outcomes out of scope
2208	Public Health Implications of Adopting a Harm-reduction Approach to Nicotine.	Poulin C.	Study design out of scope
2212	Smoking cessation for the older patient: it is never too late.	Powell D.	Study design out of scope
2222	Adolescent Smoking Cessation Services of School-Based Health Centers.	Price JH, Yingling F, Dake JA, Teiljohann SK.	Patient population out of scope
2227	Family and carer smoking control programmes for reducing children's exposure to environmental tobacco smoke.	Priest N, Roseby R, Waters E, Polnay A, Campbell R, Spencer N, et al.	Study design out of scope
2231	How cost-effective are new preventive strategies for cardiovascular disease?	Probstfield JL.	Patient population out of scope
2232	Counselor and stimulus control enhancements of a stage-matched expert system intervention for smokers in a managed care setting.	Prochaska JO, Velicer WF, Fava JL, Ruggiero L, Laforge RG, Rossi JS, et al.	Outcomes out of scope
2234	Stage-based expert systems to guide a population of primary care patients to quit smoking, eat healthier, prevent skin cancer, and receive regular mammograms.	Prochaska JO, Velicer WF, Redding C, Rossi JS, Goldstein M, DePue J, et al.	Outcomes out of scope
2246	Nurses' role in promoting and supporting	Queally B, Youdan B.	Study design out of

	smoking cessation.		scope
2247	Cessation in the use of tobacco - pharmacologic and non-pharmacologic routines in patients.	Quist-Paulsen P.	Outcomes out of scope
2251	Effects of frequency and duration in telephone counselling for smoking cessation.	Rabius V, Pike KJ, Hunter J, Wiatrek D, McAlister AL.	Outcomes out of scope: costs
2252	Comparing internet assistance for smoking cessation: 13-month follow-up of a six-arm randomized controlled trial.	Rabius V, Pike KJ, Wiatrek D, McAlister AL.	Outcomes out of scope
2268	Systematic review: Smoking cessation intervention strategies for adults and adults in special populations.	Ranney L, Melvin C, Lux L, McClain E, Lohr KN.	Outcomes out of scope
2269	Global and regional estimates of the effectiveness and cost-effectiveness of price increases and other tobacco control policies.	Ranson MK, Jha P, Chaloupka FJ, Nguyen SN.	Intervention out of scope
2273	Pharmacotherapy for smoking cessation: current advances and research topics.	Raupach T, van Schayck CP.	Study design out of scope
2276	Smoking cessation guidelines and their cost effectiveness.	Raw M, McNeill A, West R, Parrott S, Godfrey C.	Study design out of scope
2277	National smoking cessation services at risk: They are effective and cost effective and must be made permanent.	Raw M, McNeill A, Watt J, Raw D.	Study design out of scope
2278	Lessons from the English smoking treatment services.	Raw M, McNeill A, Coleman T.	Study design out of scope
2282	Smokers' burden on society: myth and reality in Canada.	Raynauld A.	Outcomes out of scope: costs
2286	Healthcare financing systems for increasing the use of tobacco dependence treatment.	Reda AA, Kaper J, Fikretler H, Severens JL, van Schayck CP.	Intervention out of scope
2289	The effect of cigarette price increases on smoking cessation in California.	Reed MB, Anderson CM, Vaughn JW, Burns DM.	Intervention out of scope
2291	An interactive voice response system to continue a hospital-based smoking	Regan S, Reyen M, Lockhart AC, Richards AE,	Outcomes out of scope

	cessation intervention after discharge.	Rigotti NA.	
2292	Increasing the price of tobacco: economically regressive today and probably ineffective tomorrow.	Regidor E, Pascual C, Gutierrez-Fisac JL.	Intervention out of scope
2296	Tobacco control: overview.	Reid D.	Study design out of scope
2297	Stepped care approach to smoking cessation in patients hospitalized for coronary artery disease.	Reid R, Pipe A, Higginson L, Johnson K, D'Angelo MS, Cooke D, et al.	Outcomes out of scope
2299	Systematic approaches to smoking cessation in the cardiac setting.	Reid RD, Mullen KA, Pipe AL.	Study design out of scope
2300	The clinical and economic impact of a secondary heart disease prevention clinic jointly implemented by a practice nurse and pharmacist.	Reilly V, Cavanagh M.	Intervention out of scope
2305	Progress, setbacks, and future needs Poor smokers, poor quitters, and cigarette tax regressivity.	Remler DK.	Intervention out of scope
2307	Smoking cessation.	Rennard SI, Daugton DM.	Study design out of scope
2312	Rice VH, Fotouhi F, Burn E, Hoyer P, Ayers M.	Exemplary program development: hypermedia interactive smoking cessation intervention program for pregnant women including commentary by Budin WC.	Patient population out of scope
2319	Richter K, Faseru B, Ellerbeck EF.	UKanQuit, a hospital inpatient tobacco treatment program. 2009;Conference: 2007 AMERSA National Meeting.	Outcomes out of scope
2322	Systematic review of the effectiveness of stage based interventions to promote smoking cessation.	Riemsma RP, Pattenden J, Bridle C, Sowden AJ, Mather L, Watt IS, et al.	Outcomes out of scope

2323	Cigarette smoking and coronary heart disease: risks and management.	Rigotti NA, Pasternak RC.	Patient population out of scope
2336	A review of the efficacy and effectiveness of harm reduction strategies for alcohol, tobacco and illicit drugs.	Ritter A, Cameron J.	Outcomes out of scope
2341	Prevention of smoking-related deaths in the United States.	Rivara FP, Ebel BE, Garrison MM, Christakis DA, Wiehe SE, Levy DT.	Intervention out of scope
2354	Which contribution can pharmacotherapy provide to the smoking cessation?	Rodrigues HL.	Study design out of scope
2356	Tobacco harm reduction: An alternative cessation strategy for inveterate smokers.	Rodu B, Godshall WT.	Outcomes out of scope
2366	Nicotine replacement therapy in a group model HMO.	Rolnick SJ, Klevan D, Cherney L, Lando HA.	Outcomes out of scope
2369	Computer-delivered interventions for alcohol and tobacco use: a meta-analysis.	Rooke S, Thorsteinsson E, Karpin A, Copeland J, Allsop D.	Outcomes out of scope
2374	The impact of financial incentives and a patient registry on preventive care quality: increasing provider adherence to evidence-based smoking cessation practice guidelines.	Roski J, Jeddeloh R, An L, Lando H, Hannan P, Hall C, et al.	Intervention out of scope
2376	Bupropion: Risks and benefits.	Ross S, Williams D.	Study design out of scope
2389	The economic impact of smoking in Germany.	Ruff LK, Volmer T, Nowak D, Meyer A.	Outcomes out of scope: costs
2410	A mobile screening programme for the cardiovascular and microvascular complications of Type 2 diabetes in primary care.	Sampson MJ, Barrie P, Dozio N, Flatman M, Hadley-Brown M, Harvey I, et al.	Patient population out of scope
2429	Outcomes and cost-effectiveness of two nicotine replacement treatment delivery models for a tobacco quitline.	Saul JE, Lien R, Schillo B, Kavanaugh A, Wendling A, Luxenberg M, et al.	Outcomes out of scope
2431	Savitz DA, Meyer RE, Tanzer JM, Mirvish	Public Health Implications	Study design out of

	SS, Lewin F.	of Smokeless Tobacco Use as a Harm Reduction Strategy.	scope
2440	Integrating smoking control policies into employee benefits: a survey of large California corporations.	Schauffler HH.	Intervention out of scope
2458	The nicotine inhaler clinical pharmacokinetics and comparison with other nicotine treatments.	Schneider NG, Olmstead RE, Franzon MA, Lunell E.	Outcomes out of scope
2466	Effectiveness of extended-duration transdermal nicotine therapy: a randomized trial.	Schnoll RA, Patterson F, Wileyto EP, Heitjan DF, Shields AE, Asch DA, et al.	Outcomes out of scope
2493	Evaluating two self-help interventions for smokeless tobacco cessation.	Severson HH, Akers L, Andrews JA, Lichtenstein E, Jerome A.	Outcomes out of scope
2494	A self-help cessation program for smokeless tobacco users: comparison of two interventions.	Severson HH, Andrews JA, Lichtenstein E, Gordon JS, Barckley M, Akers L.	Outcomes out of scope
2496	Self-help cessation programs for smokeless tobacco users: long-term follow-up of a randomized trial.	Severson HH, Andrews JA, Lichtenstein E, Danaher BG, Akers L.	Outcomes out of scope
2500	Nicotine gum as a substitute for cigarettes: a behavioral economic analysis.	Shahan TA, Odum AL, Bickel WK.	Intervention out of scope
2541	Treatment for Tobacco Dependence for Rural, Lower-Income Smokers: Outcomes, Predictors, and Measurement Considerations.	Sheffer CE, Stitzer M, Payne TJ, Applegate BW, Bourne D, Wheeler JG.	Outcomes out of scope
2551	An intervention to stop smoking among patients suspected of TB - evaluation of an integrated approach.	Siddiqi K, Khan A, Ahmad M, Shafiq ur R.	Study design out of scope
2590	Application of a nurse-managed inpatient smoking cessation program.	Smith PM, Reilly KR, Houston Miller N, DeBusk RF, Taylor CB.	Outcomes out of scope
2592	Smith PM, Cameron R, McDonald PW, Kawash B, Madill C, Brown KS.	Telephone counseling for population-based smoking	Outcomes out of scope

		cessation.	
2608	Repeated tobacco-use screening and intervention in clinical practice: health impact and cost effectiveness.	Solberg LI, Maciosek MV, Edwards NM, Khanchandani HS, Goodman MJ.	Outcomes out of scope
2628	Behavioral intervention to promote smoking cessation and prevent weight gain: a systematic review and meta-analysis.	Spring B, Howe D, Berendsen M, McFadden HG, Hitchcock K, Rademaker AW, et al.	Intervention out of scope
2637	Treating heavy smokers in primary care with the nicotine nasal spray: randomized placebo-controlled trial.	Stapleton JA, Sutherland G.	Outcomes out of scope
2641	Group behaviour therapy programmes for smoking cessation.	Stead Lindsay F, Lancaster T.	Outcomes out of scope
2654	A smoking-cessation intervention for hospital patients.	Stevens VJ, Glasgow RE, Hollis JF, Lichtenstein E, Vogt TM.	Outcomes out of scope
2655	Implementation and effectiveness of a brief smoking-cessation intervention for hospital patients.	Stevens VJ, Glasgow RE, Hollis JF, Mount K.	Outcomes out of scope
2747	Budgetary impact of varenicline in smoking cessation in the United Kingdom.	Taylor DC, Chu P, Rosen VM, Baker CL, Thompson D.	Outcomes out of scope: costs
2764	Community-based programs for smoking cessation.	Thompson B, Hopp HP.	Study design out of scope
2785	Review of epidemiologic data on the debate over smokeless tobacco's role in harm reduction.	Timberlake DS, Zell JA.	Study design out of scope
2788	Offering free NRT through a tobacco quitline: Impact on utilisation and quit rates.	Tinkelman D, Wilson SM, Willett J, Sweeney CT.	Outcomes out of scope
2865	The cost-effectiveness of antidepressants for smoking cessation in chronic obstructive pulmonary disease (COPD) patients.	van Schayck CP, Kaper J, Wagena EJ, Wouters EFM, Severens JL.	Intervention out of scope
2929	'Cut down to quit' with nicotine replacement therapies in smoking cessation: a	Wang D, Connock M, Barton P, Fry-Smith A,	Study design out of scope

	systematic review of effectiveness and economic analysis.	Aveyard P, Moore D.	
2942	Cost effectiveness of smoking-cessation therapies. Interpretation of the evidence- and implications for coverage.	Warner KE.	Study design out of scope
2962	Cost-benefit analysis involving addictive goods: contingent valuation to estimate willingness-to-pay for smoking cessation.	Weimer DL, Vining AR, Thomas RK.	Intervention out of scope
2966	A cost-effectiveness analysis of genetic testing of the DRD2 Taq1A polymorphism to aid treatment choice for smoking cessation.	Welton NJ, Johnstone EC, David SP, Munafo MR.	Intervention out of scope
2984	Contemporary smoking cessation.	Westmaas JL, Nath V, Brandon TH.	Outcomes out of scope
3055	The clinical effectiveness and cost-effectiveness of bupropion and nicotine replacement therapy for smoking cessation: a systematic review and economic evaluation.	Woolacott NF, Jones L, Forbes CA, Mather LC, Sowden AJ, Song FJ, et al.	Study design out of scope
3087	Smoking cessation benefits in HMOs.	Zapka JG, Merriam P, Ockene J.	Study design out of scope
3091	The impact of benefit restrictions on initiating smoking cessation therapy: An analysis of rejected varenicline claims.	Zeng F, Chen C, Mastey V, Zou KH, Harnett J, Patel BV.	Intervention out of scope
3092	Utilization management for smoking cessation pharmacotherapy: Varenicline rejected claims analysis.	Zeng F, Chen CI, Mastey V, Zou KH, Harnett J, Patel BV.	Intervention out of scope
3093	Effects of copayment on initiation of smoking cessation pharmacotherapy: an analysis of varenicline reversed claims.	Zeng F, Chen C, Mastey V, Zou KH, Harnett J, Patel BV.	Intervention out of scope
3104	A review of cost-effectiveness of varenicline and comparison of cost-effectiveness of treatments for major smoking-related morbidities.	Zimovetz EA, Wilson K, Samuel M, Beard SM.	Study design out of scope
3110	A concise review of the cost-effectiveness	Brown AID, Garber AM.	Study design out of

	of coronary heart disease prevention.		scope
3114	Competing practice guidelines: using cost-effectiveness analysis to make optimal decisions.	Granata AV, Hillman AL.	Study design out of scope
3120	The Financial Impact of Smoking on health-related costs: a review of the literature.	Max W.	Outcomes out of scope: costs
3127	Cost-effectiveness analysis of treatments to reduce cholesterol levels, blood pressure and smoking for the prevention of coronary heart disease; evaluative study carried out in Spain.	Plans-Rubio P.	Intervention out of scope
3128	Cost-effectiveness of cardiovascular prevention programs in Spain.	Plans-Rubio P.	Patient population out of scope
3131	The cost-effectiveness of a cardiovascular risk reduction program in general practice.	Salkeld G, Phongsavan P, Oldenburg B, Johannesson M, Convery P, Graham-Clarke P, et al.	Patient population out of scope
3132	The economics of primary prevention of cardiovascular disease: a systematic review of economic evaluations.	Schwappach DLB, Boluarte TA, Suhrcke M.	Patient population out of scope

6.3 Appendix 3 Evidence used for recommendations for the structure of the de novo cost-effectiveness model

In addition to the study by Wang and colleagues (2008), a study by Bertram (2007) was identified as useful in providing recommendations for the structure of the de novo cost-effectiveness model. This economic evaluation study was identified during the systematic literature review but excluded due to the fact that it is a cessation study. It was re-identified during the title search of the Tobacco Control journal, at which time it was recognized that the study might add information to guide the structure of the de novo cost-effectiveness model, and the decision was taken to include it. Data extraction and a critical review of the quality of this study were conducted and are described below.

The study population consisted of current smokers who are willing to quit and was done in a country with a public health care system (Australia). The study was evaluated as highly applicable and with minor limitations. The quality rating per item is presented in table 1.

Table 1. Quality rating of the Bertram study

	Bertram 2007
1.1 Is the study population appropriate for the topic being evaluated?	++
1.2 Are the interventions appropriate for the topic being evaluated?	++
1.3 Is the system in which the study was conducted sufficiently similar to the current UK context?	+
1.4 Was/were the perspective(s) clearly stated and what were they?	++
1.5 Are all direct health effects on individuals included, and are all other effects included where they are material?	+
1.6 Are all future costs and outcomes discounted appropriately?	+
1.7 Is the value of health effects expressed in terms of quality adjusted life years (QALYs)?	-
1.8 Are costs and outcomes from other sectors fully and appropriately measured and valued?	-
Overall judgement: directly applicable/partially applicable/not applicable (There is no need to complete section 2 of the checklist if the study is considered 'not applicable'.	++
2.1 Does the model structure adequately reflect the nature of the topic under evaluation?	++
2.2 Is the time horizon sufficiently long to reflect all important differences in costs and outcomes?	++
2.3 Are all important and relevant outcomes included?	+
2.4 Are the estimates of baseline outcomes from the best available source?	++
2.5 Are the estimated of relative 'treatment' effects from the best available source?	++
2.6 Are all important and relevant costs included?	++

2.7Are the estimates of resource use from the best available source?	++
2.8 Are the unit costs of resources from the best available source?	++
2.9 Is an appropriate incremental analysis presented or can it be calculated from the data?	++
2.10 Are all important parameters whose values are uncertain subjected to appropriate sensitivity analysis?	++
2.11 Is there any potential conflict of interest?	++
2.12 (Overall assessment) Minor limitations/ potentially serious limitations/very serious limitations	++

Bertram et al. evaluated the cost-effectiveness of treatment with NRT (patches) for 6-12 weeks against treatment with bupropion for 7 weeks, and against NRT as second line treatment when bupropion has failed. They reported costs per DALY adjusted over a life time, DALYs saved, the costs of the interventions, and potential cost-savings. The study showed that bupropion, with an ICER of A$7900 (95% uncertainty intervals A$6000 to A$11 000) per DALY averted was more cost effective than NRT, at A$17 000 (95% uncertainty interval A$9000 to A$28 000) per DALY averted. Cost-effectiveness was the same when using NRT as a second-line treatment for those who fail to quit smoking using bupropion.

Recommendations for the structure of the de novo cost-effectiveness model

Based on the Bertram study and the Wang study, recommendations could be formulated for the structure of the do novo cost-effectiveness model. It is recognised that estimating the economic impact of reduced tobacco intake is likely to raise a number of challenges, not least of which is how to quantify the health gains that might result from continued smoking albeit at a lower level. Further considerations for the de novo cost-effectiveness model that will be developed are outlined below:

- The model population is recommended to include UK smokers who want to quit, or cut down smoking.
- The availability of efficacy data should drive the economic structure, i.e. which efficacy data is available for the various smoking reduction interventions and its comparators.
- The following health states are recommended: current smoker, reduced smoker (1 to 5 cigarettes per day), former smoker, and dead. Depending on the amount of detail required in the modelling results, the health states for diseases as a result of smoking could be included as well.
- When health states for disease are modelled, utility values associated with the disease stated are needed.
- A Markov model can be used to predict the long-term impact of smoking reduction.
- We recommend that the evaluation be performed from both the NHS perspective (including all government and patient contributions to drugs and medical visits) and a societal perspective, (including indirect costs).
- To capture all costs and benefits the time horizon should be life-long.
- Future costs and benefits should be discounted appropriately according to NICE guidelines.

- It is recommended that the model input data include information on the cost of the interventions, as well as resource use associated with smoking-related disease.

- It is recommended that the outcomes are measured in QALYs and ICERs.

6.4 Appendix 4 Additional results from the Wang study

Although for the merit of this review, not all results of the Wang study (Wang, 2008) were considered relevant, the committee expressed their interest in all results from the Wang study. Therefore, the complete economic analysis from the Wang study is described in this appendix.

Introduction

The aim of the Wang study was to explore the cost-effectiveness of CDTQ with NRT. For this purpose they developed a novel decision-analytic model. The cost-effectiveness analysis was expressed in terms of cost per life-year and per QALY. They used an NHS/Personal Social Services (PSS) perspective for the reference case model.

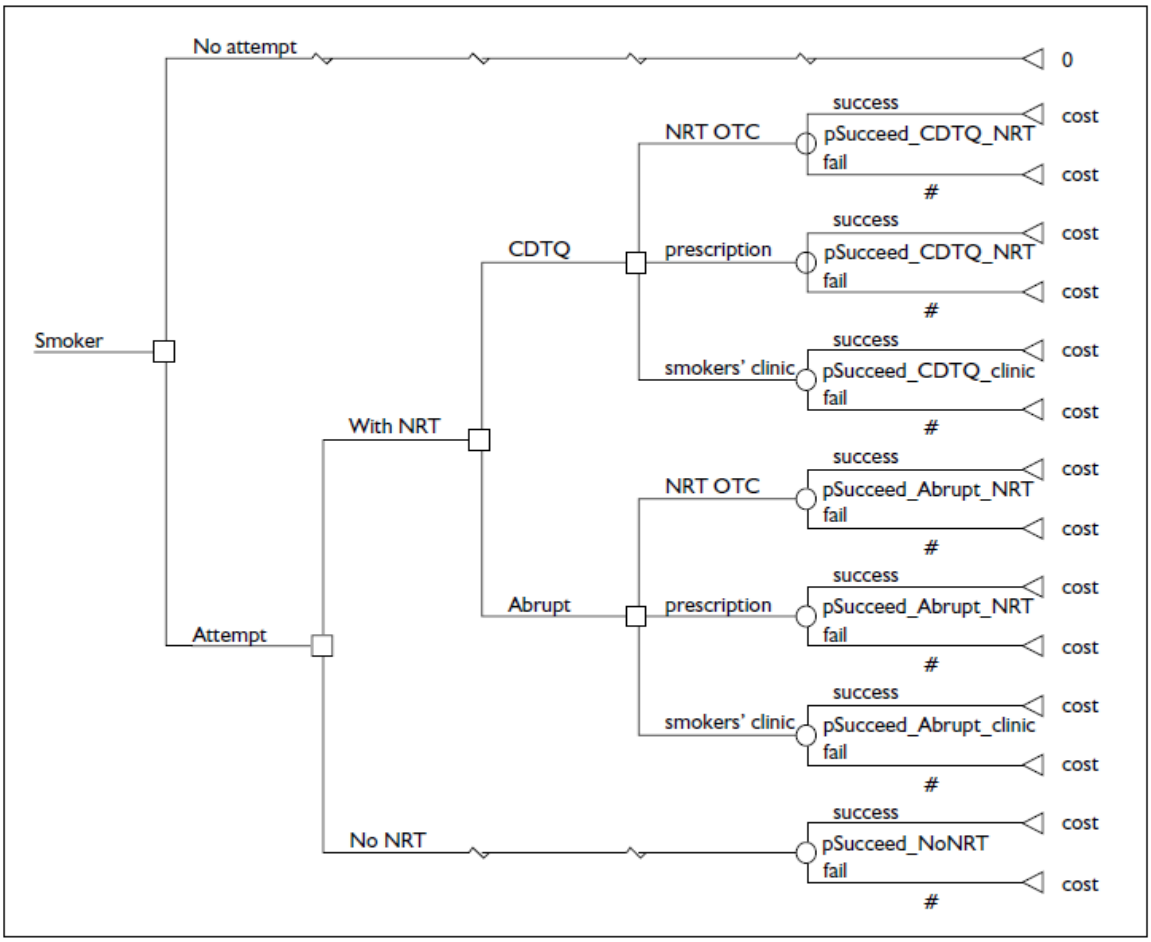
Model specification

The model was designed to assess the cost-effectiveness of making NRT available as part of a CDTQ programme. The only therapy modeled was NRT. A smoker entering the model had several options that are presented in figure 1. A smoker could make an attempt to quit smoking or decide to continue smoking. If a smoker decided to make an attempt to quit smoking that could be with or without NRT. For attempts made with NRT, they may be abrupt or CDTQ. Regardless of whether the attempt was abrupt or CDTQ the attempt could be one of (1) OTC NRT, (2) prescription NRT, or (3) a smokers' clinic (prescription NRT plus behavioural support).

The outcome measure of the model was expected lifetime QALYs. This was largely determined by whether an individual was successful in long-term quitting. Successful long-term quitting was determined as 12 months sustained abstinence of smoking. Short-term gains associated with smoking reduction were excluded because of the difficulties involved in trying to define and measure those.

The Wang study included three levels of analysis. The simplest analysis considered a single smoker considering joining a CDTQ programme. This was compared with any other programme within the model. The next level was a mixed analysis, considering smokers who may join a single CDTQ programme. In this case, the comparator consisted of some smokers who attempt to quit using the equivalent quit programme and some smokers who make no attempt to quit. The choices of individual smokers in the comparator arm were modeled as a chance node because this version of the model was run at a policy level. The full model compared five policy options according to which forms of CDTQ are made available. Similar to the mixed analysis, the full model was run at policy level, which means that the choices of individual smokers were modeled as chance outcomes.

Figure 1. Decision tree for CDTQ at individual smoker level



Estimation of cost-effectiveness

The results of the cost-effectiveness evaluation done by Wang and colleagues were presented per analyses type as described above. For each type of analysis two main cases were considered: (1) the base case, which assumed that the lower success rate for CDTQ compared with abrupt quit applies to all CDTQ attempts and (2) the alternative case, which assumed that smokers who would have tried abrupt quit in the absence of CDTQ retain the success rate for abrupt quit.

Simple analysis – base case

In this analysis, the effect of a single smoker changing intended pattern of smoking was considered. As the Wang model considered various CDTQ strategies, there were several possible changes from a non CDTQ option to a CDTQ option. These changes are considered below.

Change to CDTQ with NRT OTC

Results for this analysis are shown in table 1.

Table 1. Change to CTDQ with NRT OTC

From	Difference in cost	Difference in success rate	ICER (£/quit)[a]	ICER (£/QALY) for age group[a]			
				<35 years	35–44 years	45–54 years	55–64 years
Abrupt prescription only	–54.88	–0.0255	*2152*	*969*	*834*	*1006*	*2174*
Abrupt individual counselling	–112.11	–0.0964	*1163*	*524*	*451*	*543*	*1175*
Abrupt group counselling	–97.04	–0.0964	*1007*	*453*	*390*	*470*	*1017*

[a] ICER in italics indicates point in the south-west quadrant of the cost-effectiveness plane. This means reductions in both cost and effectiveness. A low ICER means that the saving in money is not worth making.

This is a change without costs for the NHS. A change to this option from 'no attempt' meant increased success with no extra costs and therefore would be preferable from a NHS perspective. Changes from abrupt options with NHS costs to CDTQ with NRT OTC involved a reduction in NHS costs with a reduction in effectiveness. The ICERS were well below standard thresholds, which meant that the saving in money would not be worth making, given the reduction in effectiveness.

Change to CDTQ prescription only

The results for this change are shown in table 2.

Table 2. Change to CDTQ prescription only

From	Difference in cost	Difference in success rate	ICER (£/quit)[a]	ICER (£/QALY) for age group[a]			
				<35 years	35–44 years	45–54 years	55–64 years
No attempt	104.96	0.0137	7661	3451	2970	3580	7739
Abrupt with NRT OTC	104.96	–0.0327			Abrupt dominates CDTQ		
Abrupt prescription only	50.08	–0.0273			Abrupt dominates CDTQ		
Abrupt individual counselling	–7.15	–0.0982	*73*	*33*	*28*	*34*	*74*
Abrupt group counselling	7.92	–0.0982			Abrupt dominates CDTQ		
Attempt with no NRT	104.96	–0.0143			No NRT dominates CDTQ		

[a] ICER in italics indicates a point in the south-west quadrant of the cost-effectiveness plane. This means reductions in both cost and effectiveness. A low ICER means that the saving in money is not worth making.

Changes from no attempt involved an increase in costs with a corresponding increase in success, which lead to ICERS suggesting this was a cost-effective change. Changes from abrupt with individual counselling involved a small decrease in costs but not enough to compensate for the QALY loss. All other changes are clearly not worthwhile as they involved increased costs with decreased success rates.

Change to CDTQ individual counselling

The results for this analysis are shown in table 3.

Table 3. Change to CDTQ individual counselling

From	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
No attempt	153.79	0.0373	4.123	1,857	1,598	1,927	4,165
Abrupt with NRT OTC	153.79	–0.0091			Abrupt dominates CDTQ		
Abrupt prescription only	98.91	–0.0037			Abrupt dominates CDTQ		
Abrupt individual counselling	41.68	–0.0746			Abrupt dominates CDTQ		
Abrupt group counselling	56.75	–0.0746			Abrupt dominates CDTQ		
Attempt with no NRT	153.79	0.0093	16.537	7,449	6,410	7,727	16,704

Changes from no attempt or attempt without NRT resulted in ICERS that suggested that these were cost-effective changes. Changes from abrupt attempts with NRT involved increased costs and reduced success.

Change to CDTQ group counselling

The results of this change are presented in table 4

Table 4. Change to CDTQ group counseling

From	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
No attempt	128.27	0.0373	3,439	1,549	1,333	1,607	3,474
Abrupt with NRT OTC	128.27	–0.0091			Abrupt dominates CDTQ		
Abrupt prescription only	73.39	–0.0037			Abrupt dominates CDTQ		
Abrupt individual counselling	16.16	–0.0746			Abrupt dominates CDTQ		
Abrupt group counselling	31.23	–0.0746			Abrupt dominates CDTQ		
Attempt with no NRT	128.27	0.0093	13,792	6,213	5,346	6,445	13,932

Changes from no attempt or attempt without NRT resulted in ICERS suggesting that these are cost-effective changes. Changes from abrupt attempts with NRT involved increased costs and reduces effectiveness.

Simple analysis – alternative case

Under the assumption that smokers who switch to CDTQ from an alternative method retain the success rate of the alternative method, then the change to CDTQ involved only a change in costs with no change in outcomes. Any change from an abrupt quit method involving NHS costs to CDTQ OTC was clearly cost-saving for the NHS. A change from 'abrupt individual counselling' to CDTQ prescription only' was also cost-saving. All other changes involved increased costs for the same outcome.

Mixed analysis – base case

In this analysis, a single form of NRT was considered, under the assumption that some of the smokers who attempted this form of CDTQ were those who would otherwise make no attempt to quit, while others would now choose CDTQ instead of abrupt quitting.

CDTQ with NRT OTC

This case had no costs for the NHS to consider. Therefore, only success rates were considered. Changing from no attempt to CDTQ with NRT OTC increased the success rate by 0.0155 whereas changing from abrupt quit

with NRT OTC decreased the success rate by 0.0309. The change in success rate could be considered according to the percentage of CDTQ attempt which were changed from abrupt quit. For example, if one smoker changed from abrupt to CDTQ for every three who change from no attempt to CDTQ, that means that 25% of the CDTQ attempts were changes from abrupt quit. Results for this analysis are presented in table 5.

Table 5. Mixed analysis for CDTQ with NRT OTC

% from abrupt quit	Difference in success rate
0	0.0155
25	0.0039
33	0.0002
34	–0.0003
50	–0.0077
75	–0.0193
100	–0.0309

If more than 34% of the attempts at CDTQ were made by people who would otherwise have attempted abrupt quit, the net effect of making CDTQ available was to reduce the overall success rate.

CDTQ prescription only

This case assumed that those trying CDTQ prescription only would otherwise have made no attempt or would have tried abrupt quit with prescription only. Either case involved an increase in costs for the NHS. The results are presented in table 6.

Table 6. Mixed analysis for CDTQ prescription only

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	104.96	0.0137	7,661	3,451	2,970	3,580	7,739
25	91.24	0.0035	26,446	11,913	10,251	12,358	26,714
30	88.50	0.0014	63,211	28,474	24,501	29,538	63,850
31	87.95	0.0010	88,836	40,016	34,432	41,512	89,733
32	87.40	0.0006	150,687	67,877	58,406	70,414	152,209
33	86.85	0.0002	510,880	230,126	198,016	238,729	516,040
34	86.30	–0.0002		Comparator dominates CDTQ			
50	77.52	–0.0068		Comparator dominates CDTQ			
75	63.80	–0.0171		Comparator dominates CDTQ			
100	50.08	–0.0273		Comparator dominates CDTQ			

There was a net gain in success rate only if the proportion changing from abrupt quit is less than 34%. If the proportion is just less than 34%, the change was beneficial in success terms but had a high ICER. The ICER decreased rapidly with small reductions in this proportion.

CDTQ individual counselling

In this case, it was assumed that those trying CDTQ prescriptions only would otherwise have made no quit attempt or would have tried abrupt quit with individual counseling. The results are presented in table 7 and showed a similar pattern to the results for prescription only.

Table 7. Mixed analysis for CDTQ individual counselling

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	153.79	0.0373	4,123	1,857	1,598	1,927	4,165
25	125.76	0.0093	13,487	6,075	5,227	6,302	13,623
30	120.16	0.0037	32,214	14,511	12,486	15,053	32,539
31	119.04	0.0026	45,590	20,536	17,671	21,304	46,051
32	117.91	0.0015	79,031	35,600	30,632	36,931	79,830
33	116.79	0.0004	313,120	141,045	121,364	146,318	316,283
34	115.67	–0.0007	Comparator dominates CDTQ				
50	97.74	–0.0187	Comparator dominates CDTQ				
75	69.71	–0.0466	Comparator dominates CDTQ				
100	41.68	–0.0746	Comparator dominates CDTQ				

CDTQ group counselling

In this case, it was assumed that those trying CDTQ prescriptions only would otherwise have made no quit attempt or would have tried abrupt quit with group counseling. The results are presented in table 8 and showed a similar pattern to the results for prescription only and individual counselling.

Table 8. Mixed analysis for CDTQ group counselling

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	128.27	0.0373	3,439	1,549	1,333	1,607	3,474
25	104.01	0.0093	11,154	5,024	4,323	5,212	11,267
30	99.16	0.0037	26,584	11,975	10,304	12,422	26,852
31	98.19	0.0026	37,605	16,939	14,576	17,573	37,985
32	97.22	0.0015	65,159	29,351	25,255	30,448	65,817
33	96.25	0.0004	258,034	116,232	100,013	120,577	260,641
34	95.28	–0.0007	Comparator dominates CDTQ				
50	79.75	–0.0187	Comparator dominates CDTQ				
75	55.49	–0.0466	Comparator dominates CDTQ				
100	31.23	–0.0746	Comparator dominates CDTQ				

Mixed analysis – alternative case

Assuming that people who switched to CDTQ from abrupt retain the success rate of abrupt quit, showed that in the OTC case there was always an increase in success with no change in NHS costs. In all other cases, the ICER remained low until a very high percentage of the CDTQ attempts were made instead of abrupt quitting.

Full analysis – base case

In this case, the comparator was a mixture of those who would otherwise not attempt to quit with those who would use any of the non-CDTQ attempt to quit. It was assumed that people would switch to CDTQ in proportion to the different methods of quitting, and separate analyses have been performed with and without the 'no NRT' group. Four options for policy making were presented: CDTQ with NRT available, (1) OTC only, (2) OTC or prescription with no consulting, (3) OTC or prescription with consulting (4) a full range of options.

Option 1 – CDTQ available OTC only

This case involved no costs for NHS in CDTQ. If only a small proportion of those attempting CDTQ would otherwise have made an abrupt quit attempt, then there was a net reduction in NHS costs for an increased effectiveness. However, if a high proportion of those attempting CDTQ would otherwise have made an abrupt quit attempt, then there was a reduction of effectiveness. Tables 9 and 10 present the case where the comparator group excluded those who would otherwise quit without NRT. If the percentage from abrupt quit is 25% or more, there is a reduction in effectiveness and also in NHS costs. As the percentage of abrupt quit increased slightly, the ICER decreased rapidly. This meant that if the percentage from abrupt quit is only just over 25% the cost-saving would not be justified by the reduction in effectiveness.

Table 9. CDTQ OTC only versus no quit or any NRT (individual counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)[a]	ICER (£/QALY) for age group[a]			
				<35 years	35–44 years	45–54 years	55–64 years
0	0.00	0.0155		CDTQ dominates comparator			
24	–12.02	0.0002		CDTQ dominates comparator			
25	–12.52	–0.0004	*30,038*	*13,531*	*11,643*	*14,036*	*30,342*
26	–13.02	–0.0011	*12,359*	*5,567*	*4,790*	*5,775*	*12,484*
27	–13.52	–0.0017	*7,999*	*3,603*	*3,101*	*3,738*	*8,080*
28	–14.02	–0.0023	*6,026*	*2,714*	*2,336*	*2,816*	*6,087*
30	–15.02	–0.0036	*4,173*	*1,880*	*1,617*	*1,950*	*4,215*
50	–25.04	–0.0163	*1,533*	*690*	*594*	*716*	*1,548*
75	–37.56	–0.0323	*1,164*	*525*	*451*	*544*	*1,176*
100	–50.07	–0.0482	*1,040*	*468*	*403*	*486*	*1,050*

[a] ICER in italics indicates a point in the south-west quadrant of the cost-effectiveness plane. This means reductions in both cost and effectiveness. A low ICER means that the saving in money is not worth making.

Table 10. CDTQ OTC only versus no quit or any NRT (group counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)[a]	ICER (£/QALY) for age group[a]			
				<35 years	35–44 years	45–54 years	55–64 years
0	0.00	0.0155		CDTQ dominates comparator			
24	–10.97	0.0002		CDTQ dominates comparator			
25	–11.43	–0.0004	*27,416*	*12,350*	*10,627*	*12,811*	*27693*
26	–11.88	–0.0011	*11,280*	*5,081*	*4,372*	*5,271*	*11,394*
27	–12.34	–0.0017	*7,301*	*3,289*	*2,830*	*3,412*	*7,375*
28	–12.80	–0.0023	*5,500*	*2,477*	*2,132*	*2,570*	*5,555*
30	–13.71	–0.0036	*3,808*	*1,716*	*1,476*	*1,780*	*3,847*
50	–22.85	–0.0163	*1,399*	*630*	*542*	*654*	*1,413*
75	–34.28	–0.0323	*1,063*	*479*	*412*	*497*	*1,074*
100	–45.70	–0.0482	*949*	*427*	*368*	*443*	*958*

[a] ICER in italics indicates a point in the south-west quadrant of the cost-effectiveness plane. This means reductions in both cost and effectiveness. A low ICER means that the saving in money is not worth making.

A similar pattern was shown in table 11 and 12 (below) where the comparator group included those who would otherwise attempt to quit without the use of NRT. In this case the effectiveness threshold was 41%.

Table 11. CDTQ OTC only versus no quit or any quit (individual counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)[a]	ICER (£/QALY) for age group[a]			
				<35 years	35–44 years	45–54 years	55–64 years
0	0.00	0.0155		CDTQ dominates comparator			
25	–3.67	0.0059		CDTQ dominates comparator			
40	–5.87	0.0001		CDTQ dominates comparator			
41	–6.02	–0.0003	*22,727*	*10,237*	*8,809*	*10,620*	*22,957*
42	–6.16	–0.0006	*9,492*	*4,276*	*3,679*	*4,436*	*9,588*
43	–6.31	–0.0010	*6,103*	*2,749*	*2,366*	*2,852*	*6,165*
44	–6.46	–0.0014	*4,552*	*2,050*	*1,764*	*2,127*	*4,598*
50	–7.34	–0.0037	*1,969*	*887*	*763*	*920*	*1,989*
75	–11.00	–0.0133	*825*	*372*	*320*	*386*	*833*
100	–14.67	–0.0230	*639*	*288*	*248*	*299*	*646*

[a] ICER in italics indicates a point in the south-west quadrant of the cost-effectiveness plane. This means reductions in both cost and effectiveness. A low ICER means that the saving in money is not worth making.

Table 12. CDTQ OTC only versus no quit or any quit (group counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)[a]	ICER (£/QALY) for age group[a]			
				<35 years	35–44 years	45–54 years	55–64 years
0	0.00	0.0155		CDTQ dominates comparator			
25	–3.35	0.0059		CDTQ dominates comparator			
40	–5.36	0.0001		CDTQ dominates comparator			
41	–5.49	–0.0003	*20,744*	*9,344*	*8,040*	*9,693*	*20,953*
42	–5.62	–0.0006	*8,664*	*3,903*	*3,358*	*4,048*	*8,751*
43	–5.76	–0.0010	*5,571*	*2,509*	*2,159*	*2,603*	*5,627*
44	–5.89	–0.0014	*4,155*	*1,871*	*1,610*	*1,941*	*4,197*
50	–6.70	–0.0037	*1,797*	*810*	*697*	*840*	*1,816*
75	–10.04	–0.0133	*753*	*339*	*292*	*352*	*761*
100	–13.39	–0.0230	*583*	*263*	*226*	*273*	*589*

[a] ICER in italics indicates a point in the south-west quadrant of the cost-effectiveness plane. This means reductions in both cost and effectiveness. A low ICER means that the saving in money is not worth making.

Option 2 – CDTQ available NRT only

This option assumed that CDTQ was available as OTC or prescription only, but without counselling. The average cost per CDTQ attempt was generally higher than for the comparator attempt. The effectiveness findings were similar to option 1. As before, the cost-effectiveness threshold (£30,000) was just below the effectiveness threshold (difference in success in favour of intervention – see tables 13 - 16).

Table 13. CDTQ NRT only versus no quit or NRT (individual counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)[a]	ICER (£/QALY) for age group[a]			
				<35 years	35–44 years	45–54 years	55–64 years
0	41.98	0.0148	2,841	1,280	1,101	1,327	2,869
20	31.97	0.0020	15,621	7,036	6,055	7,299	15,778
21	31.47	0.0014	22,319	10,054	8,651	10,430	22,545
22	30.97	0.0008	40,048	18,040	15,523	18,714	40,453
23	30.47	0.0001	223,055	100,475	86,455	104,231	225,308
24	29.97	–0.0005		Comparator dominates CDTQ			
25	29.47	–0.0011		Comparator dominates CDTQ			
50	16.95	–0.0171		Comparator dominates CDTQ			
75	4.43	–0.0330		Comparator dominates CDTQ			
100	–8.09	–0.0489	*165*	*75*	*64*	*77*	*167*

[a] ICER in italics indicates a point in the south-west quadrant of the cost-effectiveness plane. This means reductions in both cost and effectiveness. A low ICER means that the saving in money is not worth making.

Table 14. CDTQ NRT only versus no quit or NRT (group counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)[a]	ICER (£/QALY) for age group[a]			
				<35 years	35–44 years	45–54 years	55–64 years
0	41.98	0.0148	2,841	1,280	1,101	1,327	2,869
20	32.84	0.0020	16,048	7,229	6,220	7,499	16,210
21	32.39	0.0014	22,970	10,347	8,903	10,734	23,202
22	31.93	0.0008	41,292	18,600	16,005	19,295	41,709
23	31.47	0.0001	230,414	103,790	89,308	107,670	232,742
24	31.02	–0.0005		Comparator dominates CDTQ			
25	30.56	–0.0011		Comparator dominates CDTQ			
50	19.13	–0.0171		Comparator dominates CDTQ			
75	7.71	–0.0330		Comparator dominates CDTQ			
100	–3.72	–0.0489	*76*	*34*	*29*	*36*	*77*

[a] ICER in italics indicates a point in the south-west quadrant of the cost-effectiveness plane. This means reductions in both cost and effectiveness. A low ICER means that the saving in money is not worth making.

Table 15. CDTQ NRT only versus no quit or any quit (individual counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	41.98	0.0148	2,841	1,280	1,101	1,327	2,869
25	38.32	0.0052	7,415	3,340	2,874	3,465	7,490
35	36.85	0.0013	27,866	12,552	10,801	13,022	28,148
36	36.70	0.0009	39,135	17,628	15,168	18,287	39,530
37	36.56	0.0006	66,063	29,758	25,606	30,871	66,731
38	36.41	0.0002	215,646	97,138	83,584	100,769	217,824
39	36.26	–0.0002		Comparator dominates CDTQ			
50	34.65	–0.0044		Comparator dominates CDTQ			
75	30.98	–0.0141		Comparator dominates CDTQ			
100	27.31	–0.0237		Comparator dominates CDTQ			

Table 16. CDTQ NRT only versus no quit or any quit (group counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	41.98	0.0148	2,841	1,280	1,101	1,327	2,869
25	38.64	0.0052	7,477	3,368	2,898	3,494	7,552
35	37.30	0.0013	28,205	12,705	10,932	13,180	28,490
36	37.16	0.0009	39,626	17,850	15,359	18,517	40,026
37	37.03	0.0006	66,920	30,144	25,938	31,271	67,596
38	36.90	0.0002	218,528	98,436	84,701	102,116	220,735
39	36.76	–0.0002	Comparator dominates CDTQ				
50	35.29	–0.0044	Comparator dominates CDTQ				
75	31.94	–0.0141	Comparator dominates CDTQ				
100	28.59	–0.0237	Comparator dominates CDTQ				

In tables 13 and 14 (first two – under option 2), a different outcome was seen when the percentage from abrupt quit is very high (over 75%). In these cases, where 'no NRT' was excluded from the comparator, CDTQ was actually cost-saving. However there was also a reduction in effectiveness, and the ICER is very low, so that the cost-saving would not be worth making.

Option 3 – CDTQ available OTC or counselling

In this option, it was assumed that CDTQ was available either OTC or by prescription with counselling. Results were similar to option 2, except that the thresholds were somewhat higher (see tables 17 - 20).

Table 17. CDTQ OTC or counselling versus no quit or any NRT (individual counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	61.52	0.0242	2,540	1,144	984	1,187	2,566
25	49.00	0.0083	5,901	2,658	2,287	2,757	5,961
35	43.99	0.0019	22,716	10,232	8,805	10,615	22,945
36	43.49	0.0013	33,457	15,071	12,968	15,634	33,795
37	42.99	0.0007	64,819	29,198	25,124	30,289	65,474
38	42.49	0.0000	1,600,907	721,129	620,507	748,087	1,617,078
39	41.99	–0.0006	Comparator dominates CDTQ				
50	36.48	–0.0076	Comparator dominates CDTQ				
75	23.96	–0.0235	Comparator dominates CDTQ				
100	11.44	–0.0394	Comparator dominates CDTQ				

Table 18. CDTQ OTC or counselling versus no quit or any NRT (group counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	51.31	0.0242	2,118	954	821	990	2,140
25	39.88	0.0083	4,803	2,164	1,862	2,244	4,852
35	35.31	0.0019	18,234	8,214	7,068	8,521	18,419
36	34.85	0.0013	26,814	12,078	10,393	12,530	27,085
37	34.40	0.0007	51,866	23,363	20,103	24,236	52,390
38	33.94	0.0000	1,278,854	576,060	495,680	597,595	1,291,772
39	33.48	–0.0006	Comparator dominates CDTQ				
50	28.46	–0.0076	Comparator dominates CDTQ				
75	17.03	–0.0235	Comparator dominates CDTQ				
100	5.60	–0.0394	Comparator dominates CDTQ				

Table 19. CDTQ OTC or counselling versus no quit or any quit (individual counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	61.52	0.0242	2,540	1,144	984	1,187	2,566
25	57.85	0.0146	3,960	1,784	1,535	1,851	4,000
50	54.18	0.0050	10,847	4,886	4,204	5,069	10,957
58	53.01	0.0019	27,626	12,444	10,708	12,909	27,905
59	52.86	0.0015	34,453	15,519	13,354	16,100	34,801
60	52.71	0.0011	45,848	20,652	17,770	21,424	46,311
61	52.57	0.0008	68,693	30,943	26,625	32,099	69,387
62	52.42	0.0004	137,681	62,018	53,365	64,337	139,072
63	52.27	–0.0000		Comparator dominates CDTQ			
75	50.51	–0.0046		Comparator dominates CDTQ			
100	46.84	–0.0142		Comparator dominates CDTQ			

Table 20. CDTQ OTC or counselling versus no quit or any quit (group counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	51.31	0.0242	2,118	954	821	990	2,140
25	47.96	0.0146	3,283	1,479	1,273	1,534	3,316
50	44.61	0.0050	8,932	4,023	3,462	4,174	9,022
58	43.54	0.0019	22,692	10,222	8,796	10,604	22,922
59	43.41	0.0015	28,292	12,744	10,966	13,221	28,578
60	43.27	0.0011	37,637	16,954	14,588	17,588	38,018
61	43.14	0.0008	56,374	25,394	21,850	26,343	56,943
62	43.01	0.0004	112,955	50,880	43,781	52,783	114,096
63	42.87	0.0000		Comparator dominates CDTQ			
75	41.26	–0.0046		Comparator dominates CDTQ			
100	37.92	–0.0142		Comparator dominates CDTQ			

Option 4 – CDTQ full range

In this option, it was assumed that the full range of CDTQ choices was available. Results follow the same pattern as for option 2 and 3, with thresholds somewhere in between (see tables 21 - 24)

Table 21. CDTQ full range versus no quit or any NRT (individual counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	62.25	0.0193	3,222	1,451	1,249	1,506	3,254
25	49.73	0.0034	14,612	6,582	5,663	6,828	14,759
27	48.73	0.0021	22,877	10,305	8,867	10,690	23,108
28	48.23	0.0015	32,296	14,548	12,518	15,092	32,622
29	47.72	0.0009	55,716	25,097	21,595	26,036	56,279
30	47.22	0.0002	214,752	96,735	83,237	100,351	216,921
31	46.72	–0.0004		Comparator dominates CDTQ			
50	37.21	–0.0125		Comparator dominates CDTQ			
75	24.69	–0.0284		Comparator dominates CDTQ			
100	12.17	–0.0443		Comparator dominates CDTQ			

Table 22. CDTQ full range versus no quit or any NRT (group counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	57.14	0.0193	2,958	1,332	1,146	1,382	2,988
25	45.72	0.0034	13,433	6,051	5,207	6,277	13,569
27	44.80	0.0021	21,035	9,475	8,153	9,829	21,247
28	44.35	0.0015	29,697	13,377	11,511	13,877	29,997
29	43.89	0.0009	51,237	23,080	19,859	23,943	51,755
30	43.43	0.0002	197,504	88,966	76,552	92,291	199,499
31	42.97	–0.0004		Comparator dominates CDTQ			
50	34.29	–0.0125		Comparator dominates CDTQ			
75	22.86	–0.0284		Comparator dominates CDTQ			
100	11.44	–0.0443		Comparator dominates CDTQ			

Table 23. CDTQ full range versus no quit or any quit (individual counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	62.25	0.0193	3,222	1,451	1,249	1,506	3,254
25	58.58	0.0097	6,034	2,718	2,339	2,820	6,095
45	55.64	0.0020	27,583	12,425	10,691	12,889	27,862
46	55.50	0.0016	33,989	15,310	13,174	15,883	34,332
47	55.35	0.0012	44,341	19,973	17,186	20,720	44,789
48	55.20	0.0009	63,908	28,788	24,771	29,864	64,554
49	55.06	0.0005	114,872	51,744	44,524	53,679	116,032
50	54.91	0.0001	579,317	260,953	224,541	270,709	585,168
51	54.76	–0.0003		Comparator dominates CDTQ			
75	51.24	–0.0095		Comparator dominates CDTQ			
100	47.57	–0.0191		Comparator dominates CDTQ			

Table 24. CDTQ full range versus no quit or any quit (group counselling)

% from abrupt quit	Difference in cost	Difference in success rate	ICER (£/quit)	ICER (£/QALY) for age group			
				<35 years	35–44 years	45–54 years	55–64 years
0	57.14	0.0193	2,958	1,332	1,146	1,382	2,988
25	53.79	0.0097	5,542	2,496	2,148	2,590	5,598
45	51.12	0.0020	25,339	11,414	9,821	11,841	25,595
46	50.98	0.0016	31,224	14,065	12,102	14,591	31,539
47	50.85	0.0012	40,734	18,349	15,788	19,035	41,146
48	50.71	0.0009	58,711	26,446	22,756	27,435	59,304
49	50.58	0.0005	105,532	47,537	40,904	49,314	106,598
50	50.45	0.0001	532,223	239,740	206,288	248,702	537,599
51	50.31	–0.0003		Comparator dominates CDTQ			
75	47.10	–0.0095		Comparator dominates CDTQ			
100	43.75	–0.0191		Comparator dominates CDTQ			

Full analysis – alternative case

The alternative case assumed that those opting for CDTQ who would otherwise have chosen a different quit method, retained the success rate of the alternative method. The four options from the full analysis – base case were also modeled for the alternative case.

In option 1, without NHS costs, CDTQ dominated the comparator. For the other options, the ICERs remained low until the percentage from abrupt quit became very high. For the other options, there is a low ICER unless the percentage from abrupt quit is very high

Summary

The results of the Wang study suggested that compared with no quit attempt, CDTQ delivers ICERs well within margins generally considered cost-effective. Compared with abrupt quitting, CDTQ is less effective and more costly, but may address a different population. If CDTQ were to be offered on the NHS as a matter of policy, results suggested that it would only deliver low ICERs if a substantial majority of the people attempting CDTQ were those who would otherwise make no attempt to quit. This result was robust to considerable variations in the forms of CDTQ offered and the assumption about QALYs gained per success.