Description of the economic model (EQUIPTMOD) to assess the impact of tobacco cessation in five European countries

EQUIPT ROI Tool Technical Manual and Annexes

The EQUIPT Study Group

October 2016

EQUIPTMOD Technical Manual Appendix - ENGLAND

This is a technical appendix to the main report describing the EQUIPT ROI Tool available from:
http://equipt.eu/deliverables

European-study on Quantifying Utility of Investment in Protection from Tobacco www.equipt.eu

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EQUIPTMOD Technical Manual
Appendix - ENGLAND

This is a technical appendix to the main report describing the EQUIPT ROI Tool available from:
http://equipt.eu/deliverables

Country	**England**
Person responsible to complete this report	**Puttarin Kulchaitanaroaj**
Version	**1.1**
Date	**October 2016**
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For **each parameter**, the following information is provided:

1. Name of the parameter	**State the name and provide following info:**
1.1. Source	List the full reference of the study. If the source is unpublished or the value comes from your own analysis, you must indicate so here
1.2 Parameter value(s)	Indicate the base value in bold and provide all other values suggested for sensitivity analyses
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Describe characteristics of the population and/or sub-groups from which the above value was obtained
2.2 Setting and location	Where was the study from which you have obtained the above value conducted? What were characteristics of (healthcare) system in that setting? If it is not possible to find this information in the source material, state 'not found'
2.3 Perspective	State whether the source study had any perspective, e.g. healthcare, societal, etc. If not applicable, state 'NA'
2.4 Interventions and comparators	Is the above parameter is related to an intervention and comparator, describe those as in the source material. If not applicable, state 'NA'.
2.5 Time horizon	State the time horizon related to the above parameter in the source material. If not applicable, state 'NA'.
2.6 Discount rate	State discount rate as applied in the source material. If not applicable, state 'NA'.
2.7 Choice of outcome	State how the source material chose (health or other relevant) outcomes to derive the above value? If not applicable, state 'NA'.
2.8 Measuring outcome	How was the outcome measured in the source material? Was it based on a single outcome or synthetic estimate? Was the outcome measured using preference-based method? If yes to one or more, provide details. If not applicable, state 'NA'.
2.9 Year	In which year the source study was conducted? Was the parameter value reflect the same year or different year (specify)?
2.10 Conversion	Was any conversion involved in deriving the above value? If yes, describe method of conversion.

	If no, state, 'NA'.
2.11 (Statistical) model	Was the above value calculated using any (statistical) model? If yes, describe method of analysis. Include the following: • How was the skewed, missing or censored data handled in the source material? • How was extrapolation done (if any)? • What statistical technique (e.g. ANOVA, OLS, Logistic regression, etc.) was used? • How was the uncertainty measured, e.g. via 95% confidence interval? If no, describe the non-model based calculation method.
3. Assumptions	**List all assumptions underpinning the above value, as described in the source materials.**
4. Limitations	**List all important limitations of source materials**
5. Transferability	**Is there anything from the source material that may have implications in relation to applying/generalizing the value to EQUIPT countries?**
6. Conflict of interest	**Look at the Conflict of Interest section in the source material and identify if there is anything that we should be aware of in using the above parameter value in the EQUIPT project (e.g. the value comes from pharma-sponsored study).**

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Abbreviations

CHD – Coronary Heart Disease

COPD – Chronic Obstructive Pulmonary Disease

EHIS – European Health Interview Survey

EQ-5D – Euro-QoL 5 Dimensions

FS – Former Smoker

GDP – Gross Domestic Product

GP – General Practitioner

GYTS – Global Youth Tobacco Survey

HICP – Harmonised indices of consumer prices

ICD – International Classification of Diseases

ICP – International Classification of Procedures in Medicine

LC – Lung Cancer

MEPS – Medical Expenditure Panel Survey

NHIF – National Health Insurance Fund

NRT – Nicotine replacement therapy

NS – Nonsmoker

OTC – Over the counter

Rx – prescription

S – Smoker

1. General data

1.1. Regional population details

1. Name of the parameter	**Population numbers**
1.1. Source	Office for National Statistics, Annual Mid-year Population Estimates, 2014 http://www.ons.gov.uk/ons/rel/pop-estimate/population-estimates-for-uk--england-and-wales--scotland-and-northern-ireland/mid-2014/stb---mid-2014-uk-population-estimates.html
1.2 Parameter value(s)	See Annexed Tables Table 1 (End of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	English male and female population by Local Authority.
2.2 Setting and location	England
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2014
2.10 Conversion	NA
2.11 (Statistical) model	Census data
3. Assumptions	N/A
4. Limitations	N/A
5. Transferability	-Local data
6. Conflict of interest	-

1. Name of the parameter	**Prevalence of smoking**
1.1. Source	Public Health England, Integrated Household Survey Jan-Dec 2014, accessed via the Local Tobacco Control Profiles for England http://www.tobaccoprofiles.info/profile/tobacco-control/data
1.2 Parameter value(s)	See Table 2 (End of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Adults 18 years and above
2.2 Setting and location	England Data disaggregated by Local Authorities
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2014
2.10 Conversion	NA
2.11 (Statistical) model	Data at local authority, regional and national levels are presented as published; data at Metropolitan County level calculated from the aggregated smoking population values at relevant local authorities, divided by the aggregate of the corresponding adult populations.
3. Assumptions	NA

4. Limitations	**NA**
5. Transferability	Local data
6. Conflict of interest	-

1.2. Mortality rates

1. Name of the parameter	**Mortality rates by smoking status**
1.1. Source	Office of the National Statistics, 2012. 6.1.5. Number and rate of deceased males by age-groups – Deaths per thousand males of corresponding age. Office of the National Statistics, 2012. 6.1.6. Number and rate of deceased females by age-groups – Deaths per thousand females of corresponding age. Doll R, Peto R, Wheatley K, Gray R, Sutherland I. Mortality in relation to smoking: 40 years' observations on male British doctors. BMJ. 1994 Oct 8; 309(6959): 901–911. Calculated values.
1.2 Parameter value(s)	See Table 3 Mortality rates by age and sex and Table (End of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	English male population English female population
2.2 Setting and location	England
2.3 Perspective	NA
2.4 Interventions and comparators	NA

2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2015 2015 1951-91
2.10 Conversion	NA
2.11 (Statistical) model	Mortality rates by smoking status are not available, the death rates of Doll were used to calculate the relative risks
3. Assumptions	**NA**
4. Limitations	**Country-specific mortality rates by smoking status are not available.**
5. Transferability	**Local data**
6. Conflict of interest	-

1.3. Relative Risks

1. Name of the parameter	**Relative risk of lung cancer**
1.1. Source	Peto et al., 2000. Smoking, smoking cessation, and lung cancer in the UK since 1950: combination of national statistics with two case-control studies. BMJ. 2000 Aug 5;321(7257):323-9. Relative risk of lung cancer.
1.2 Parameter value(s)	See (End of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Hospital patients under 75 years of age with and without lung cancer
2.2 Setting and location	England
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	1950-90
2.10 Conversion	NA

2.11 (Statistical) model	Country-specific relative risks are not available; we used the data of Peto et al., 2000.
3. Assumptions	**NA**
4. Limitations	NA
5. Transferability	**Yes**
6. Conflict of interest	**-**

1. Name of the parameter	**Relative risk of CHD**
1.1. Source	Department of Health and Human Services, 2004. Relative risk of CHD
1.2 Parameter value(s)	See (End of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	Characteristics of (healthcare) system were not found.
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2004
2.10 Conversion	NA
2.11 (Statistical) model	Country-specific relative risks are not available, we used the data of Department of Health and Human Services, 2004

3. Assumptions	**NA**
4. Limitations	**Country-specific relative risks are not available**
5. Transferability	**Yes**
6. Conflict of interest	**-**

1. Name of the parameter	**Relative risk of COPD**
1.1. Source	Department of Health and Human Services, 2004. Relative risk of COPD.
1.2 Parameter value(s)	See
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	Characteristics of (healthcare) system were not found.
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2004
2.10 Conversion	NA
2.11 (Statistical) model	Country-specific relative risks are not available, we used the data of Department of Health and Human Services, 2004

3. Assumptions	**NA**
4. Limitations	**Country-specific relative risks are not available**
5. Transferability	**Yes**
6. Conflict of interest	**-**

1. Name of the parameter	**Prevalence of stroke**
1.1. Source	Department of Health and Human Services, 2004. Relative risk of stroke.
1.2 Parameter value(s)	See Table (end of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	Characteristics of (healthcare) system were not found.
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2004
2.10 Conversion	NA
2.11 (Statistical) model	Country-specific relative risks are not available, we used the data of Department of Health and Human Services, 2004
3. Assumptions	**NA**

4. Limitations	**Country-specific relative risks are not available**
5. Transferability	**Yes**
6. Conflict of interest	**-**

1.4. Discount rate for costs and utilities

1. Name of the parameter	**Cost discount rate**
1.1. Source	NICE Guide to the methods of technology appraisal 2013 (NICE article [PMG9]) http://www.nice.org.uk/article/PMG9
1.2 Parameter value(s)	**3.5%**
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	England
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA

2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	**NA**
4. Limitations	**NA**
5. Transferability	**Local data**
6. Conflict of interest	**-**

1. Name of the parameter	**Outcome discount rate**
1.1. Source	NICE Guide to the methods of technology appraisal 2013 (NICE article [PMG9]) http://www.nice.org.uk/article/PMG9
1.2 Parameter value(s)	**3.5%**
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	England
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA

2.11 (Statistical) model	NA
3. Assumptions	**NA**
4. Limitations	**NA**
5. Transferability	**Local data**
6. Conflict of interest	**-**

1.5. Threshold value for QALY

1. Name of the parameter	**Threshold**
1.1. Source	Methods for the development of NICE public health guidance (third edition) 2012 https://www.nice.org.uk/article/pmg4/chapter/6-incorporating-health-economics
1.2 Parameter value(s)	**£20,000**
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	England
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	2012
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2012

2.10 Conversion	NA
2.11 (Statistical) model	
3. Assumptions	**NA**
4. Limitations	**NA**
5. Transferability	**Local data**
6. Conflict of interest	**-**

Inflation rates

1. Name of the parameter	**Inflation**
1.1. Source	The Hospital & community Health Services (HCHS) index - Curtis (2014) - Unit cost of Health and Social Care 2014, p. 263
1.2 Parameter value(s)	See Table (end of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	England
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	2001-2013
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2001-2013

2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	**NA**
4. Limitations	**NA**
5. Transferability	**Local data**
6. Conflict of interest	**-**

2. Disease Prevalence

2.1. Lung cancer prevalence

1. Name of the parameter	**Prevalence of lung cancer**
1.1. Source	Maddams, J., Brewster, D., Gavin, A., Steward, J., Elliott, J., Utley, M., & Møller, H. (2009). Cancer prevalence in the United Kingdom: estimates for 2008. British Journal of Cancer, 101(3), 541–547. http://doi.org/10.1038/sj.bjc.6605148
1.2 Parameter value(s)	See (end of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	English patients with lung cancer; English male population English female population
2.2 Setting and location	England
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA

2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2012
2.10 Conversion	NA
2.11 (Statistical) model	To calculate the prevalence of LC by sex and age group, the number of lung cancer was divided by the population number.
3. Assumptions	**The prevalence of LC under age 44 is zero.**
4. Limitations	
5. Transferability	**Local data**
6. Conflict of interest	**-**

2.2. Coronary Heart Disease (CHD) prevalence

1. Name of the parameter	**Prevalence of CHD**
1.1. Source	Coronary heart disease statistics: A compendium of health statistics 2012 edition; British Heart Foundation Health Promotion Research Group; Department of Public Health, University of Oxford. Table 2.13 Prevalence of CHD, stroke, myocardial infarction and angina, by sex and age, England 2006. Available from: https://www.bhf.org.uk/~/media/files/publications/research/2012_chd_statistics_compendium.pdf
1.2 Parameter value(s)	See (end of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	English population
2.2 Setting and location	England
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA

2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2011
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	**NA**
4. Limitations	**NA**
5. Transferability	**Local data**
6. Conflict of interest	-

2.3. Chronic Obstructive Pulmonary Disease (COPD) prevalence

1. Name of the parameter	**Prevalence of COPD**
1.1. Source	Modelled estimate of prevalence of COPD in England. East of England Public Health Observatory. Dec. 2011 www.apho.org.uk/diseaseprevalencemodels
1.2 Parameter value(s)	See Table (end of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	English population.
2.2 Setting and location	
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2009
2.10 Conversion	NA
2.11 (Statistical) model	NA

3. Assumptions	**NA**
4. Limitations	**NA**
5. Transferability	**Local data**
6. Conflict of interest	**-**

2.4. Stroke prevalence

1. Name of the parameter	**Prevalence of stroke**
1.1. Source	Townsend N et al 2014, British Heart Foundation, Cardiovascular Disease Statistics. https://www.bhf.org.uk/publications/statistics/cardiovascular-disease-statistics-2014
1.2 Parameter value(s)	See Table (end of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	English population.
2.2 Setting and location	
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2009
2.10 Conversion	NA

2.11 (Statistical) model	NA
3. Assumptions	**NA**
4. Limitations	**NA**
5. Transferability	**Local data**
6. Conflict of interest	**-**

3. Costs

Disease Costs

3.1. Lung cancer costs

1. Name of the parameter	**Cost of lung cancer**
1.1. Source	Leaviss et al. (2014), Table 27. Available at: http://www.ncbi.nlm.nih.gov/books/NBK262001/pdf/Bookshelf_NBK262001.pdf The original source is below. Sanderson H, Spiro S. Cancer of the lung. In: Stevens A, Raftery J, Mant J, Simpson S, editors. Health Care Needs Assessment: the Epidemiologically Based Needs Assessment Reviews. 2nd edn. Abingdon: Radcliffe Publishing; 2004. Pp. 503–48
1.2 Parameter value(s)	(Cost Year: 2010-2011) **£6,524.02** **Lower estimate: £5,245.31** **Upper estimate: £7802.72**
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Smokers aged 16 years or older
2.2 Setting and location	England
2.3 Perspective	**NHS perspective**

2.4 Interventions and comparators	NA
2.5 Time horizon	1 year
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	The cost was derived from the NHS perspective.
2.9 Year	The original source was published in 2003.
2.10 Conversion	NA
2.11 (Statistical) model	
3. Assumptions	Lower and upper estimates were calculated by assuming a standard error of 10% of the mean estimate.
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

3.2. Coronary Heart Disease (CHD) costs

1. Name of the parameter	**Cost of coronary heart disease**
1.1. Source	Leaviss et al. (2014), Table 27. Available at: http://www.ncbi.nlm.nih.gov/books/NBK262001/pdf/Bookshelf_NBK262001.pdf The original source is below. McMurray J, Hart W, Rhodes G. An evaluation of the cost of heart failure to the National Health Service in the UK. J Med Econ 1993;6:99–110.
1.2 Parameter value(s)	Cost year: 2010/11 £1162.5; Lower estimate: £934.45; Upper estimate: £1390.05
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Patients with coronary heart disease (ICD code I20-25)
2.2 Setting and location	England
2.3 Perspective	**NHS perspective**
2.4 Interventions and comparators	NA
2.5 Time horizon	1 year
2.6 Discount rate	NA
2.7 Choice of outcome	
2.8 Measuring outcome	
2.9 Year	The original source was published in 1993.

2.10 Conversion	NA
2.11 (Statistical) model	
3. Assumptions	Lower and upper estimates were calculated by assuming a standard error of 10% of the mean estimate.
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

3.3. Chronic Obstructive Pulmonary Disease (COPD) costs

1. Name of the parameter	**Cost of chronic obstructive pulmonary disease**
1.1. Source	Leaviss et al. (2014), Table 27. Available at: http://www.ncbi.nlm.nih.gov/books/NBK262001/pdf/Bookshelf_NBK262001.pdf The original source is below. Britton M. The burden of COPD in the U.K.: results from the Confronting COPD survey. Respir Med 2003;97(Suppl. C):S71–9. http://dx.doi.org/10.1016/S0954-6111(03)80027-6
1.2 Parameter value(s)	Cost year: 2010/11 £971.31 Lower estimate: £780.93 Upper estimate: £1161.69
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Patients with chronic obstructive pulmonary disease (ICD code J40-J43, J44)
2.2 Setting and location	England
2.3 Perspective	**NHS perspective**
2.4 Interventions and comparators	NA
2.5 Time horizon	1 year

2.6 Discount rate	NA
2.7 Choice of outcome	
2.8 Measuring outcome	
2.9 Year	The original source was published in 2003.
2.10 Conversion	NA
2.11 (Statistical) model	
3. Assumptions	Lower and upper estimates were calculated by assuming a standard error of 10% of the mean estimate.
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

3.4. Stroke costs

1. Name of the parameter	**Cost of stroke**
1.1. Source	Leaviss et al. (2014), Table 27. Available at: http://www.ncbi.nlm.nih.gov/books/NBK262001/pdf/Bookshelf_NBK262001.pdf
1.2 Parameter value(s)	Cost year: 2010/11 £5484.31 Lower estimate: £4996.99 Upper estimate: £5970.85
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Patients with stroke (ICD code I60-69)
2.2 Setting and location	England
2.3 Perspective	**NHS perspective**
2.4 Interventions and comparators	NA
2.5 Time horizon	1 year
2.6 Discount rate	NA
2.7 Choice of outcome	
2.8 Measuring outcome	
2.9 Year	The original source was published in 2011.

2.10 Conversion	NA
2.11 (Statistical) model	
3. Assumptions	Lower and upper estimates were calculated by assuming a standard error of 10% of the mean estimate.
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

Interventions cost

3.5. Cost of Rx Mono NRT

1. Name of the parameter	**Cost of Rx Mono NRT**
1.1. Source	- Costs of medications: BNF 2015 (British National Formulary 2015) http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/410-drugs-used-in-substance-dependence/4102-nicotine-dependence/nicotine-replacement-therapy/nicotine - Definition of the intervention: EQUIPT description by West and colleagues **-** The calculation is available at the file 'Pharmacotherapy interventions cost.xlsx'
1.2 Parameter value(s)	Cost year: 2014/15 £106.44 Lower estimate: £79.22 Upper estimate: £206.74
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	England
2.3 Perspective	NHS perspective
2.4 Interventions and comparators	NA
2.5 Time horizon	NA

2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	Weighted average based on BNF 2015 (http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/410-drugs-used-in-substance-dependence/4102-nicotine-dependence/nicotine-replacement-therapy/nicotine). Costed according to EQUIPT description. Weights of 0.80 for patches, 0.05 for gums and 0.15 respectively for all other forms of NRT is assumed based on market data ("Nicotine Replacement Therapy UK Market Review" (http://www.ash.org.uk/files/documents/ASH_429.pdf). A one-time dispensing cost of £7.60 added to drug cost [source: Curtis L (2014). Unit cost of Health and Social Care 2014, p. 196]. Lower estimate is for patches (assuming most commonly used form of NRT) and upper estimate is the simple average across all forms of NRT.
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.6. Cost of Rx Combo NRT

1. Name of the parameter	**Cost of Rx Combo NRT**
1.1. Source	- Costs of medications: BNF 2015 (British National Formulary 2015) http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/410-drugs-used-in-substance-dependence/4102-nicotine-dependence/nicotine-replacement-therapy/nicotine - Definition of the intervention: EQUIPT description by West and colleagues - The calculation is available at the file 'Pharmacotherapy interventions cost.xlsx'
1.2 Parameter value(s)	Cost year: 2014/15 £108.98 Lower estimate: £83.59 Upper estimate: £127.73
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	England
2.3 Perspective	NHS perspective
2.4 Interventions and comparators	NA

2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	Average based on BNF 2015 (http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/410-drugs-used-in-substance-dependence/4102-nicotine-dependence/nicotine-replacement-therapy/nicotine). Costed according to EQUIPT description. Weights of 0.80 for patches, 0.20 for gums are assumed based on market data ("Nicotine Replacement Therapy UK Market Review" (http://www.ash.org.uk/files/documents/ASH_429.pdf). A one-time dispensing cost of £7.60 added to drug cost [source: Curtis L (2014). Unit cost of Health and Social Care 2014, p. 196]. Lower estimate is for patches+gums (assuming most commonly used form of NRT) and upper estimate is for patches+inhalator
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.7. Cost of Varenicline (standard duration)

1. Name of the parameter	**Cost of Varenicline (standard duration)**
1.1. Source	- Costs of medications: BNF 2015 (British National Formulary 2015) http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/410-drugs-used-in-substance-dependence/4102-nicotine-dependence/varenicline/varenicline - Definition of the intervention: EQUIPT description by West and colleagues **-** The calculation is available at the file 'Pharmacotherapy interventions cost.xlsx' - Actual cost per GP prescription= £7.60 in 2013/14. Source: Curtis L (2014). Unit cost of Health and Social Care 2014, p. 196
1.2 Parameter value(s)	Cost year: 2014/15 £191.88 Lower estimate: £171.40
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	England
2.3 Perspective	NHS perspective
2.4 Interventions and comparators	NA

2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	Average based on BNF 2015 (http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/410-drugs-used-in-substance-dependence/4102-nicotine-dependence/varenicline/varenicline). Costed according to EQUIPT description. A one time dispensing cost of £7.60 added to drug cost [source: Curtis L (2014). Unit cost of Health and Social Care 2014, p. 196]. Lower estimate is for BNF recommended dosage. Upper estimate not available.
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.8. Cost of Varenicline (extended duration)

1. Name of the parameter	**Cost of Varenicline (extended duration)**
1.1. Source	- Costs of medications: BNF 2015 (British National Formulary 2015) http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/410-drugs-used-in-substance-dependence/4102-nicotine-dependence/varenicline/varenicline - Definition of the intervention: based on the agreed definition by the Project Team (see: A compendium of Tobacco Control Interventions) - The calculation is available at the file 'Pharmacotherapy interventions cost.xlsx'
1.2 Parameter value(s)	Cost year: 2014/15 £355.68
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	NA
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA

2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	Average based on BNF 2015 (http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/410-drugs-used-in-substance-dependence/4102-nicotine-dependence/varenicline/varenicline). Costed according to EQUIPT description. A one-time dispensing cost of £7.60 added to drug cost [source: Curtis L (2014). Unit cost of Health and Social Care 2014, p. 196]. Lower and upper estimates not available.
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.9. Cost of Bupropion

1. Name of the parameter	**Cost of Bupropion**
1.1. Source	- Costs of medications: BNF 2015 (British National Formulary 2015) http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/410-drugs-used-in-substance-dependence/4102-nicotine-dependence/bupropion/bupropion-hydrochloride - Definition of the intervention: based on the agreed definition by the Project Team (see: A compendium of Tobacco Control Interventions) - The calculation is available at the file 'Pharmacotherapy interventions cost.xlsx'
1.2 Parameter value(s)	Cost year: 2014/15 £79.98 Lower estimate: £70.24 Upper estimate: £89.73
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	England
2.3 Perspective	NHS perspective
2.4 Interventions and comparators	NA
2.5 Time horizon	NA

2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2014
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	Average based on BNF 2015 (http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/410-drugs-used-in-substance-dependence/4102-nicotine-dependence/bupropion/bupropion-hydrochloride). Costed according to EQUIPT description. A one time dispensing cost of £7.60 added to drug cost [source: Curtis L (2014). Unit cost of Health and Social Care 2014, p. 196]. Lower estimates based on 6 weeks course and upper based on 8 weeks course
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.10. Cost of Nortriptyline

1. Name of the parameter	**Cost of Nortriptyline**
1.1. Source	- Costs of medications: BNF 2015 (British National Formulary 2015) http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/43-antidepressant-drugs/431-tricyclic-and-related-antidepressant-drugs/tricyclic-antidepressants/nortriptyline - Definition of the intervention: based on the agreed definition by the Project Team (see: A compendium of Tobacco Control Interventions) - The calculation is available at the file 'Pharmacotherapy interventions cost.xlsx'
1.2 Parameter value(s)	Cost year: 2014/15 £84.10 Upper estimate: £91.67
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	England
2.3 Perspective	NHS perspective
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA

2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	Average based on BNF 2015 (http://www.evidence.nhs.uk/formulary/bnf/current/4-central-nervous-system/43-antidepressant-drugs/431-tricyclic-and-related-antidepressant-drugs/tricyclic-antidepressants/nortriptyline). Costed according to EQUIPT description. A one-time dispensing cost of £7.60 added to drug cost [source: Curtis L (2014). Unit cost of Health and Social Care 2014, p. 196]. Upper estimate based on actual packages bought. No lower estimate available.
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.11. Cost of Cytisine

1. Name of the parameter	**Cost of Cytisine**
1.1. Source	Leaviss et al. (2014), p. 47. Available at: http://www.ncbi.nlm.nih.gov/books/NBK262001/pdf/Bookshelf_NBK262001.pdf
1.2 Parameter value(s)	Cost year: 2010/11 £16.79
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	NA
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA

2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	Cytisine is not currently available in the UK. Leaviss state that "previous model of the costs and effects of cytisine for smoking cessation assumed treatment costs to be US$10 per smoker and it is possible to buy Tabex (active ingredient cytisine) online in the UK for £16.79 for 100 1.5-mg tablets, which represents approximately a standard course, and this cost is used in the model." No upper and lower estimates available.
4. Limitations	-
5. Transferability	**Local adaptation**
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.12. Cost of OTC Mono NRT

1. Name of the parameter	**Cost of OTC Mono NRT**
1.1. Source	West & Owen (2012), unpublished
1.2 Parameter value(s)	£0
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Smokers who want to stop smoking via over-the-counter NRT
2.2 Setting and location	England
2.3 Perspective	Healthcare – as patients pay for OTC NRT, a zero cost assumed from the healthcare perspective.
2.4 Interventions and comparators	
2.5 Time horizon	1 year
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2014
2.10 Conversion	NA
2.11 (Statistical) model	

3. Assumptions	Over the counter costs are 100% met by the individual, not the state – thus zero cost
4. Limitations	-
5. Transferability	-
6. Conflict of interest	-

Source: Spreadsheet 'Int Default Costs'

3.13. Cost of Nicotine Replacement Therapy: reduce to quit

1. Name of the parameter	**Cost of Cut down to quit**
1.1. Source	NICE Guidance PH45 http://www.nice.org.uk/guidance/ph45/evidence/tobacco-harm-reduction-economic-analyses2
1.2 Parameter value(s)	£210.04 Lower estimate £185.04 Upper estimate 235.04
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Smokers who do not currently plan to quit but are prepared to reduce the daily volume of tobacco that they smoke
2.2 Setting and location	NA
2.3 Perspective	Healthcare
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2014
2.10 Conversion	NA

2.11 (Statistical) model	NA
3. Assumptions	Typical NRT at £15.42 per week for 3 months plus a generic behavioural support by health professional as indicated in Column F. Upper estimate include 2x such support over 3 months while Lower estimate assumes no such support cost to user or the support cost (whatevere it may be) is paid for by users themselves (zero for health systems).
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

Source: Spreadsheet 'Int Default Cost' from the EQUIPT model v2.55.

3.14. Cost of Specialist behavioral support: one-to-one

1. Name of the parameter	**Cost of Specialist behavioral support: one-to-one**
1.1. Source	NICE Guidance PH10 (NICE 2007).
1.2 Parameter value(s)	Cost year: 2006/7 £103.74
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	England
2.3 Perspective	NHS perspective
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	NICE Guidance PH10 (NICE 2007). £14.82 (2007) for one-to-one support per session. Average number of sessions per smoker = 6. Note that one extra session

	added, as per intervention description that allows a 1 hour session in the beginning.
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.15. Cost of Specialist behavioral support: group-based

1. Name of the parameter	**Cost of Specialist behavioral support: group-based**
1.1. Source	NICE Guidance PH10 (NICE 2007).
1.2 Parameter value(s)	Cost year: 2006/7 £31.62
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	England
2.3 Perspective	NHS perspective
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	NICE Guidance PH10 (NICE 2007). £59.28 (2007) for group support per session. Average number of group sessions per smoker =8. Average number of people per

	group session = 15.
4. Limitations	**-**
5. Transferability	**Local data**
6. Conflict of interest	**-**

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.16. Cost of Telephone support: pro-active

1. Name of the parameter	**Cost of Telephone support: pro-active**
1.1. Source	A US study by Hollis et al. 2007: http://tobaccocontrol.bmj.com/content/16/Suppl_1/i53.full.pdf+html
1.2 Parameter value(s)	Cost year: 2012/13 £150
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	The United States of American
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA

3. Assumptions	-
4. Limitations	No robust data on this is available. A US study (Hollis et al. 2007: http://tobaccocontrol.bmj.com/content/16/Suppl_1/i53.full.pdf+html) found that cost/participant varied from $67-$132, depending on the intensity of counselling. This suggests the UK figure might be a reasonable assumption to make.
5. Transferability	**Locally adapted value.**
6. Conflict of interest	**-**

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.17. Cost of SMS text messaging

1. Name of the parameter	**Cost of SMS text messaging**
1.1. Source	Guerrierra C., Cairns J, Roberts I. et al. The cost effectiveness of smoking cessation support delivered by mobile phone text messaging: Txt2stop. Eur J Health Econ. 2013; 14(5):789-97.
1.2 Parameter value(s)	Cost year: 2010/11 £16.12
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	NA
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA

3. Assumptions	**NA**
4. Limitations	**-**
5. Transferability	**Local data**
6. Conflict of interest	**-**

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.18. Cost of Printed self-help materials

1. Name of the parameter	**Cost of Printed self-help materials**
1.1. Source	Blyth et al. (2015). https://ueaeprints.uea.ac.uk/54168/3/FullReport_hta19590.pdf Owen and West (2012)
1.2 Parameter value(s)	Cost Year: 2012/13 £12.39; Lower estimate: £5.00 Upper estimate: £20.78
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Smokers making a quit attempt during the year
2.2 Setting and location	England
2.3 Perspective	NHS perspective
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA

2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	Upper estimates from trial data on relapse prevention (Blyth et al.) and include copyright, revision, printing and posting costs. Booklets are assumed to be posted 8 times. Lower estimate is from Owen and West (2012).
4. Limitations	-
5. Transferability	-
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

Cost of Indoor-smoking ban

1. Name of the parameter	**Cost of Indoor-smoking ban**
1.1. Source	NA
1.2 Parameter value(s)	£0
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Smokers
2.2 Setting and location	England
2.3 Perspective	NHS perspective
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	Default cost assumed at zero. Users to define their own

4. Limitations	-
5. Transferability	-
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

3.19. Cost of Social marketing

1. Name of the parameter	**Cost of Social marketing**
1.1. Source	Curtis L. 2014. Unit Costs of Health and Social Care. PSSRU. P.117
1.2 Parameter value(s)	Cost year: 2013/14 £1.15; Lower estimate: £0.29; Upper estimate: £2.01
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	NA
2.2 Setting and location	NA
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA
2.11 (Statistical) model	NA

3. Assumptions	In the model, assume on/off situation where if you make the minimum spend of £1.15 per smoker (100% uptake) the estimated effect (1.03 relative increase) will be produced but if you don't invest this minimum you don't produce any effect. Given the lack of information about the impact of greater spends the model would not incorporate this option. Note on TVRs: http://ukdataservice.ac.uk/media/215826/opinions_sims_29may13.pdf
4. Limitations	-
5. Transferability	-
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

Cost of Brief physician advice

1. Name of the parameter	**Cost of Brief physician advice**
1.1. Source	Curtis L. 2014. Unit Costs of Health and Social Care. PSSRU. P194
1.2 Parameter value(s)	Cost year: 2013/14 £19.48; Lower estimate: £13.37; Upper estimate: £38.95
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	All smokers attending a surgery or clinic for any purpose during the year
2.2 Setting and location	England
2.3 Perspective	NHS perspective
2.4 Interventions and comparators	NA
2.5 Time horizon	1 year
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2013/14
2.10 Conversion	NA
2.11 (Statistical) model	NA

3. Assumptions	Based on NICE Guidance PH1 (http://www.nice.org.uk/guidance/PH1), 5 mins of GP time assumed and costed according to Curtis's estimate of £67 per consultation (lasting 17.2 minutes). Qualification and direct care staff costs are included in the estimate. Lower estimate assumes 5 minutes of a typical consultation (lasting 11.7 minutes) and Upper estimate assumes 10 minutes of a typical consultation (lasting 17.2 minutes).
4. Limitations	-
5. Transferability	**Local data**
6. Conflict of interest	-

Source: Spreadsheet 'Intervention costs' from File 'Copy of UK updated Data_Putt.xlsx'

4. Interventions (uptake)

4.1. Interventions included in the model

1. Name of the parameter	**Uptake data for included intervention**
1.1. Source	Estimated by the EQUIPT Team (West et al.)
1.2 Parameter value(s)	See below Table 14(see End of the document)
2. How was the value obtained?	**Please provide info on the following:** These were estimated using a number of assumptions.
2.1 Target population/sub-group	
2.2 Setting and location	England
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA

2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	**See Compendium spreadsheet.**
4. Limitations	
5. Transferability	**Locally adapted data**
6. Conflict of interest	**-**

Source: Spreadsheet 'Int Default Uptakes'

5. Interventions (effectiveness)

5.1. Interventions included in the model

1. Name of the parameter	**Effectiveness data for included interventions**
1.1. Source	Estimated by the EQUIPT Team (West et al.)
1.2 Parameter value(s)	See below Table 15 (End of the document)
2. How was the value obtained?	**Please provide info on the following:** These were estimated using a number of assumptions.
2.1 Target population/sub-group	All smokers
2.2 Setting and location	NA
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	NA
2.10 Conversion	NA

2.11 (Statistical) model	NA
3. Assumptions	**See Compendium spreadsheet.**
4. Limitations	
5. Transferability	**Locally adapted data**
6. Conflict of interest	-

6. Utilities

6.1. Lung cancer utility

1. Name of the parameter	**Utility for lung cancer**
1.1. Source	Sullivan PW, Slejko JF, Sculpher MJ et al. Catalogue of EQ-5D scores for the United Kingdom. Med Decis Making 2011;31(6):800-804.
1.2 Parameter value(s)	**0.56**
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Individuals who completed the 2000, 2001, 2002, and 2003 MEPS surveys
2.2 Setting and location	UK
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	2000-2003
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	EQ-5D

2.9 Year	2011
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	**Country-specific utility values are not available, we adapted the data from Sullivan et al.**
4. Limitations	**Country-specific utility values are not available, we adapted the data from Sullivan et al.**
5. Transferability	**Yes**
6. Conflict of interest	**-**

6.2. Coronary Heart Disease (CHD) utility

1. Name of the parameter	**Utility for CHD**
1.1. Source	Sullivan PW, Slejko JF, Sculpher MJ et al. Catalogue of EQ-5D scores for the United Kingdom. Med Decis Making 2011;31(6):800-804.
1.2 Parameter value(s)	**0.621**
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Individuals who completed the 2000, 2001, 2002, and 2003 MEPS surveys
2.2 Setting and location	UK
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	2000-2003
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	EQ-5D
2.9 Year	2011

2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	**Country-specific utility values are not available, we adapted the data from Sullivan et al.**
4. Limitations	**Country-specific utility values are not available, we adapted the data from Sullivan et al.**
5. Transferability	**Yes**
6. Conflict of interest	**-**

6.3. Chronic Obstructive Pulmonary Disease (COPD) utility

1. Name of the parameter	**Utility for COPD**
1.1. Source	Sullivan PW, Slejko JF, Sculpher MJ et al. Catalogue of EQ-5D scores for the United Kingdom. Med Decis Making 2011;31(6):800-804.
1.2 Parameter value(s)	**0.732**
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Individuals who completed the 2000, 2001, 2002, and 2003 MEPS surveys
2.2 Setting and location	UK
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	2000-2003
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	EQ-5D
2.9 Year	2011

2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	**Country-specific utility values are not available, we adapted the data from Sullivan et al.**
4. Limitations	**Country-specific utility values are not available, we adapted the data from Sullivan et al.**
5. Transferability	**Yes**
6. Conflict of interest	**-**

Stroke utility

1. Name of the parameter	**Utility for stroke**
1.1. Source	Sullivan PW, Slejko JF, Sculpher MJ et al. Catalogue of EQ-5D scores for the United Kingdom. Med Decis Making 2011;31(6):800-804.
1.2 Parameter value(s)	**0.55**
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Individuals who completed the 2000, 2001, 2002, and 2003 MEPS surveys
2.2 Setting and location	UK
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	2000-2003
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	EQ-5D
2.9 Year	2011

2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	**Country-specific utility values are not available, we adapted the data from Sullivan et al.**
4. Limitations	**Country-specific utility values are not available, we adapted the data from Sullivan et al.**
5. Transferability	**Yes**
6. Conflict of interest	**-**

6.4. Utility for Never smoker

1. Name of the parameter	**Utility for Never smoker**
1.1. Source	Vogl et al. Smoking and health-related quality of life in English general population: implications for economic evaluations. BMC Public Health 2012;12:203
1.2 Parameter value(s)	**0.8839**
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	English general population
2.2 Setting and location	UK
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	EQ-5D
2.9 Year	2006

2.10 Conversion	NA
2.11 (Statistical) model	A Ordinary Least Square (OLS) model predicted the net utility of smokers, former smokers and never-smokers, controlling for biology, clinical conditions, other lifestyle factors and social capital.
3. Assumptions	
4. Limitations	
5. Transferability	**Yes**
6. Conflict of interest	-

6.5. Utility for Former smoker

1. Name of the parameter	**Utility for Former smoker**
1.1. Source	Vogl et al. Smoking and health-related quality of life in English general population: implications for economic evaluations. BMC Public Health 2012;12:203
1.2 Parameter value(s)	**0.8695**
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	English general population
2.2 Setting and location	UK
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	EQ-5D NA
2.9 Year	2006
2.10 Conversion	NA

<table>
<tr><td>2.11 (Statistical) model</td><td>A Ordinary Least Square (OLS) model predicted the net utility of smokers, former smokers and never-smokers, controlling for biology, clinical conditions, other lifestyle factors and social capital.</td></tr>
<tr><td>3. Assumptions</td><td>Utility for former smokers
<table><tr><td>Ex-occasional smoker</td><td>0.8819</td></tr><tr><td>Ex-regular smoker</td><td>0.8669</td></tr></table>
Proportion of former smokers
<table><tr><td>Ex-occasional smoker</td><td>5.4%</td></tr><tr><td>Ex-regular smoker</td><td>26%</td></tr></table></td></tr>
<tr><td>4. Limitations</td><td></td></tr>
<tr><td>5. Transferability</td><td>Yes</td></tr>
<tr><td>6. Conflict of interest</td><td>-</td></tr>
</table>

6.6. Utility for Current smoker

1. Name of the parameter	**Utility for Current smoker**
1.1. Source	Vogl et al. Smoking and health-related quality of life in English general population: implications for economic evaluations. BMC Public Health 2012;12:203
1.2 Parameter value(s)	**0.8497**
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	English general population
2.2 Setting and location	UK
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	EQ-5D NA
2.9 Year	2006
2.10 Conversion	NA

<table>
<tr><td>2.11 (Statistical) model</td><td>A Ordinary Least Square (OLS) model predicted the net utility of smokers, former smokers and never-smokers, controlling for biology, clinical conditions, other lifestyle factors and social capital.</td></tr>
<tr><td>3. Assumptions</td><td>Utility for current smokers
<table><tr><td>Light smoker</td><td>0.8629</td></tr><tr><td>Moderate smoker</td><td>0.8509</td></tr><tr><td>Heavy smoker</td><td>0.8319</td></tr></table>
Proportion of current smokers
<table><tr><td>Light smoker</td><td>7.2%</td></tr><tr><td>Moderate smoker</td><td>8.6%</td></tr><tr><td>Heavy smoker</td><td>5.9%</td></tr></table></td></tr>
<tr><td>4. Limitations</td><td></td></tr>
<tr><td>5. Transferability</td><td>Yes</td></tr>
<tr><td>6. Conflict of interest</td><td>-</td></tr>
</table>

7. Passive Smoking

7.1. Cost attributable to passive smoking in children

1. Name of the parameter	**Child passive smoking costs per smoker**
1.1. Source	Passive smoking and children: A report by the Tobacco Advisory Group of the Royal College of Physicians. Royal College of Physicians. March 2010. - Table 5.2 Events of disease in children in the UK caused by passive smoking in the home (2008) - Table 5.3 Hospital episodes (admissions) in children aged 0-14 in England in 2005/6 from specified diseases attributable to passive smoke exposure. - Population in England 2005-2006. Copy of mid-2006-unformatted-data-file.xls - Population in England 2013-2014. Copy of MYE1: Population Estimates Summary for the UK, mid-2014.xls - GP unit cost and hospital unit cost (2006/07 cost) are from Curtis (2014) - The cost calculation is available at File: Cost estimates of diseases England 20151007 v3.xlsx.
1.2 Parameter value(s)	Cost year: 2014 Total of passive smoking for children: £231,173,037.78 calculated from 1) Lower respiratory tract infection (LRTI) (0-4 years): £111,822,343.05 2) Acute otitis media (AOM) (0-4 years): £50,854,711.02 **3)** Asthma (0-14 years): £68,495,983.70
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	1) Lower respiratory tract infection (0-4 years) 2) Acute otitis media (0-4 years)

	3) Asthma (0-14 years)
2.2 Setting and location	England
2.3 Perspective	NHS perspective
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2005/6, 2006/7, 2008, and 2013/14
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	- The total costs are calculated from general-practitioner (GP) costs and hospital costs. - GP costs are calculated from GP unit cost multiplied by number of children who have the disease. - Hospital costs are calculated from hospital unit cost multiplied by number of children who have the disease. - The number of children who have the disease is calculated from the rate of having the disease multiplied by the number of population in 2013/14. - The GP rate of ***lower respiratory tract infection*** is calculated from number of children aged ***0-2 years*** who have the disease divided by number of children aged

	0-2 years old in year 2008. - The GP rate of ***acute otitis media*** is calculated from number of children aged ***0-16 years*** who have the disease divided by number of children aged ***0-16 years*** old in year 2008. - The GP rate of ***asthma*** is calculated from number of children aged ***3-4 years and 5-16 years*** old who have the disease divided by number of children aged ***3-4 years and 5-16 years*** old in year 2008. - The hospital rate of lower respiratory tract infection is calculated from number of children aged ***0-2 years*** old who have the disease divided by number of children aged ***0-2 years*** old in 2005/06. - The hospital rate of acute otitis media is calculated from number of children ***aged 0-14*** years who have the disease divided by number of children ***aged 0-14*** years in 2005/06. - The hospital rate of asthma is calculated from number of children aged ***3-4 and 5-14 years*** old who have the disease divided by number of children aged ***3-4 and 5-14*** years old in 2005/06. - In summary, the rates are calculated from the different age ranges than the age ranges required. LRTI: 0-2 vs 0-4 years, respectively. AOM: 0-16 and 0-14 vs 0-4 years, respectively. Asthma: 3-16 and 3-14 vs 0-14 years, respectively.
4. Limitations	The rates are calculated from the different age intervals.
5. Transferability	**Locally adapted data**
6. Conflict of interest	

8. Productivity Loss

8.1. Work days lost per smoker

1. Name of the parameter	**Additional days of absence from work per year as a result of smoking**
1.1. Source	Weng S, Ali S, Leonardi-Bee J. (2012)
1.2 Parameter value(s)	2.74 days SE = 0.274
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	
2.2 Setting and location	
2.3 Perspective	
2.4 Interventions and comparators	
2.5 Time horizon	
2.6 Discount rate	
2.7 Choice of outcome	
2.8 Measuring outcome	
2.9 Year	
2.10 Conversion	

2.11 (Statistical) model	
3. Assumptions	
4. Limitations	
5. Transferability	**Yes**
6. Conflict of interest	

8.2. Average hourly wage

1. Name of the parameter	**Average hourly wage rate**
1.1. Source	Annual Survey of Hours and Earnings (2014)
1.2 Parameter value(s)	£11.74
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Individuals in part-time or full-time paid employment
2.2 Setting and location	England
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2014
2.10 Conversion	NA
2.11 (Statistical) model	NA
3. Assumptions	NA
4. Limitations	NA

5. Transferability	Local data
6. Conflict of interest	-

Source: Spreadsheet 'Productivity'

8.3. Employment among smokers

1. Name of the parameter	**Employment rate among smokers**
1.1. Source	Office For National Statistics, Integrated Household Survey (January - December 2013), Current Smokers broken down by Region and Basic economic activity. Ad hoc analysis created on 18th November 2014 by Office for National Statistics
1.2 Parameter value(s)	See Table 16 (End of this document)
2. How was the value obtained?	**Please provide info on the following:**
2.1 Target population/sub-group	Smokers self-reporting as in employment
2.2 Setting and location	English Government Office Regions
2.3 Perspective	NA
2.4 Interventions and comparators	NA
2.5 Time horizon	NA
2.6 Discount rate	NA
2.7 Choice of outcome	NA
2.8 Measuring outcome	NA
2.9 Year	2014
2.10 Conversion	NA
2.11 (Statistical) model	Data at regional level are presented as published; data at local authority level is a direct transcript of the value for the relevant region in which the authority falls; the England national figure is calculated from the aggregated employed smoking

	subpopulation values for each region, divided by the aggregate of the corresponding adult smoking populations.
3. Assumptions	NA
4. Limitations	NA
5. Transferability	Local data
6. Conflict of interest	-

Source: Spreadsheet 'PopDetails'

Annexed Tables

Table 1 Population numbers

Age	Male	% of total male	Female	% of total female	Total	% of total population
0	340,320	1.27%	323,863	1.18%	664,183	1.23%
1	350,346	1.31%	332,357	1.22%	682,703	1.26%
2	362,052	1.35%	344,972	1.26%	707,024	1.31%
3	355,576	1.33%	338,531	1.24%	694,107	1.28%
4	349,446	1.31%	333,494	1.22%	682,940	1.26%
5	344,782	1.29%	329,174	1.20%	673,956	1.25%
6	348,126	1.30%	331,519	1.21%	679,645	1.26%
7	337,168	1.26%	320,616	1.17%	657,784	1.22%
8	329,581	1.23%	314,696	1.15%	644,277	1.19%
9	315,492	1.18%	301,211	1.10%	616,703	1.14%
10	309,958	1.16%	295,987	1.08%	605,945	1.12%
11	301,489	1.13%	286,854	1.05%	588,343	1.09%
12	295,822	1.10%	281,989	1.03%	577,811	1.07%
13	302,505	1.13%	290,211	1.06%	592,716	1.10%
14	311,723	1.16%	296,517	1.08%	608,240	1.12%
15	321,455	1.20%	305,724	1.12%	627,179	1.16%
16	325,470	1.22%	309,406	1.13%	634,876	1.17%
17	335,161	1.25%	318,108	1.16%	653,269	1.21%
18	338,364	1.26%	317,389	1.16%	655,753	1.21%
19	338,315	1.26%	321,562	1.18%	659,877	1.22%
20	352,883	1.32%	335,706	1.23%	688,589	1.27%
21	355,638	1.33%	340,725	1.25%	696,363	1.29%
22	366,843	1.37%	358,814	1.31%	725,657	1.34%
23	382,818	1.43%	368,725	1.35%	751,543	1.39%

24	379,178	1.42%	365,087	1.34%	744,265	1.38%
25	372,533	1.39%	367,148	1.34%	739,681	1.37%
26	375,527	1.40%	374,719	1.37%	750,246	1.39%
27	364,438	1.36%	370,547	1.36%	734,985	1.36%
28	373,158	1.39%	371,259	1.36%	744,417	1.38%
29	375,543	1.40%	373,510	1.37%	749,053	1.38%
30	365,510	1.37%	367,575	1.34%	733,085	1.35%
31	368,257	1.38%	371,867	1.36%	740,124	1.37%
32	367,344	1.37%	372,644	1.36%	739,988	1.37%
33	371,034	1.39%	375,263	1.37%	746,297	1.38%
34	372,166	1.39%	375,549	1.37%	747,715	1.38%
35	357,950	1.34%	359,272	1.31%	717,222	1.33%
36	334,445	1.25%	334,422	1.22%	668,867	1.24%
37	329,184	1.23%	329,073	1.20%	658,257	1.22%
38	333,472	1.25%	335,935	1.23%	669,407	1.24%
39	339,722	1.27%	342,529	1.25%	682,251	1.26%
40	344,557	1.29%	349,278	1.28%	693,835	1.28%
41	359,920	1.34%	363,609	1.33%	723,529	1.34%
42	374,547	1.40%	379,033	1.39%	753,580	1.39%
43	384,124	1.43%	393,520	1.44%	777,644	1.44%
44	375,282	1.40%	383,534	1.40%	758,816	1.40%
45	383,512	1.43%	393,188	1.44%	776,700	1.44%
46	383,207	1.43%	392,645	1.44%	775,852	1.43%
47	390,157	1.46%	396,892	1.45%	787,049	1.45%
48	388,201	1.45%	399,344	1.46%	787,545	1.46%
49	390,142	1.46%	401,075	1.47%	791,217	1.46%
50	386,767	1.44%	396,708	1.45%	783,475	1.45%
51	378,799	1.41%	387,863	1.42%	766,662	1.42%
52	371,507	1.39%	378,286	1.38%	749,793	1.39%
53	358,737	1.34%	364,670	1.33%	723,407	1.34%

54	344,032	1.28%	349,919	1.28%	693,951	1.28%
55	336,043	1.26%	341,969	1.25%	678,012	1.25%
56	328,446	1.23%	334,422	1.22%	662,868	1.22%
57	315,355	1.18%	322,495	1.18%	637,850	1.18%
58	304,272	1.14%	310,909	1.14%	615,181	1.14%
59	292,029	1.09%	300,641	1.10%	592,670	1.10%
60	291,647	1.09%	302,566	1.11%	594,213	1.10%
61	288,624	1.08%	298,300	1.09%	586,924	1.08%
62	279,117	1.04%	291,561	1.07%	570,678	1.05%
63	281,118	1.05%	293,852	1.07%	574,970	1.06%
64	285,582	1.07%	301,564	1.10%	587,146	1.08%
65	293,538	1.10%	308,405	1.13%	601,943	1.11%
66	309,438	1.16%	326,313	1.19%	635,751	1.17%
67	336,442	1.26%	353,767	1.29%	690,209	1.28%
68	258,038	0.96%	273,947	1.00%	531,985	0.98%
69	249,134	0.93%	266,439	0.97%	515,573	0.95%
70	247,463	0.92%	265,287	0.97%	512,750	0.95%
71	227,696	0.85%	248,071	0.91%	475,767	0.88%
72	200,983	0.75%	222,594	0.81%	423,577	0.78%
73	178,977	0.67%	201,374	0.74%	380,351	0.70%
74	185,462	0.69%	209,505	0.77%	394,967	0.73%
75	182,353	0.68%	208,461	0.76%	390,814	0.72%
76	176,060	0.66%	202,596	0.74%	378,656	0.70%
77	164,604	0.61%	193,210	0.71%	357,814	0.66%
78	153,716	0.57%	184,600	0.68%	338,316	0.63%
79	143,630	0.54%	175,728	0.64%	319,358	0.59%
80	129,885	0.49%	163,433	0.60%	293,318	0.54%
81	120,382	0.45%	156,189	0.57%	276,571	0.51%
82	113,848	0.43%	152,268	0.56%	266,116	0.49%
83	103,881	0.39%	145,592	0.53%	249,473	0.46%

84	92,584	0.35%	136,299	0.50%	228,883	0.42%
85	80,265	0.30%	122,635	0.45%	202,900	0.37%
86	68,957	0.26%	110,192	0.40%	179,149	0.33%
87	60,457	0.23%	99,623	0.36%	160,080	0.30%
88	51,172	0.19%	90,173	0.33%	141,345	0.26%
89	42,148	0.16%	79,489	0.29%	121,637	0.22%
90	43,345	0.16%	37,502	0.14%	80,846	0.15%
91	33,840	0.13%	31,069	0.11%	64,909	0.12%
92	20,194	0.08%	19,568	0.07%	39,763	0.07%
93	9,701	0.04%	9,990	0.04%	19,691	0.04%
94	6,837	0.03%	7,567	0.03%	14,404	0.03%
95	5,496	0.02%	6,422	0.02%	11,918	0.02%
96	4,910	0.02%	6,319	0.02%	11,229	0.02%
97	4,299	0.02%	5,966	0.02%	10,265	0.02%
98	2,850	0.01%	4,149	0.02%	6,998	0.01%
99	1,748	0.01%	2,780	0.01%	4,528	0.01%
100	2,346	0.01%	4,233	0.02%	6,579	0.01%
Total	26,773,196	100.00%	27,344,147	100.00%	54,117,343	100.00%

Table 2 Prevalence of smoking

Code	Smoking rate	Ex smoking rate
EN	17.99%	33.86%
EN-EAMI	18.83%	34.38%
EN-EAEN	17.88%	36.44%
EN-LOND	16.99%	29.39%
EN-NOEA	19.90%	34.14%
EN-NOWE	19.87%	32.44%
EN-SOEA	16.59%	36.79%
EN-SOWE	16.88%	38.84%
EN-WEMI	16.94%	29.30%
EN-YATH	20.11%	34.25%
EN-BUCK	15.12%	37.90%
EN-CAMB	15.49%	37.17%
EN-CUMB	19.14%	35.08%
EN-DBSH	19.91%	35.50%
EN-DEVO	13.82%	42.72%
EN-DORS	15.76%	42.72%
EN-EASU	17.38%	41.92%
EN-ESSE	18.04%	37.63%
EN-GLOU	16.29%	34.86%
EN-HAMP	13.54%	36.86%
EN-HERT	17.80%	33.98%
EN-KENT	19.07%	37.19%
EN-LANC	19.48%	31.51%
EN-LEIC	17.04%	36.50%
EN-LINC	17.49%	35.60%
EN-NORF	16.72%	40.36%
EN-NHNT	19.35%	33.21%

Code	Smoking rate	Ex smoking rate
EN-NOYO	15.63%	38.61%
EN-NTSH	17.47%	35.74%
EN-OXFO	13.60%	34.33%
EN-SOME	17.83%	39.99%
EN-STAF	13.73%	31.88%
EN-SUFF	20.21%	37.55%
EN-SURR	14.52%	36.72%
EN-WARW	15.33%	29.16%
EN-WESU	16.98%	39.42%
EN-WORC	17.10%	31.48%
EN-CODU	20.61%	35.59%
EN-DARL	20.09%	37.34%
EN-TAWE	20.43%	33.04%
EN-HART	23.40%	34.82%
EN-MIDD	20.23%	29.14%
EN-NHUM	16.52%	35.42%
EN-RACL	18.89%	38.28%
EN-SOTE	19.24%	32.82%
EN-BWDA	23.62%	30.90%
EN-BLAC	26.93%	34.33%
EN-GRMA	21.32%	31.18%
EN-CHEA	12.55%	36.88%
EN-CWAC	20.06%	30.19%
EN-HALT	17.80%	32.50%
EN-MERS	19.35%	33.39%
EN-WARR	15.52%	36.63%
EN-SOYO	19.71%	33.97%
EN-WEYO	21.85%	31.85%
EN-EROY	14.17%	40.11%

Code	Smoking rate	Ex smoking rate
EN-KUHU	26.36%	33.62%
EN-NELI	23.34%	35.02%
EN-NOLI	17.86%	34.69%
EN-YORK	18.43%	39.74%
EN-DERB	18.73%	32.78%
EN-LCSH	20.72%	27.23%
EN-NOTT	24.16%	30.78%
EN-RUTL	14.15%	44.15%
EN-WMCO	18.22%	26.14%
EN-HERE	14.43%	38.66%
EN-SHRO	15.25%	39.21%
EN-SOTR	18.69%	28.52%
EN-TAWR	20.67%	32.38%
EN-BEDF	14.24%	35.25%
EN-CEBE	17.46%	37.06%
EN-LUTO	20.05%	23.70%
EN-PETE	18.63%	34.48%
EN-SOSE	20.11%	37.11%
EN-THUR	20.75%	30.05%
EN-BADA	21.66%	23.51%
EN-BARN	13.23%	29.64%
EN-BEXL	16.65%	35.82%
EN-BREN	13.59%	22.41%
EN-BROM	13.96%	35.61%
EN-CAMD	16.85%	32.07%
EN-COLO	13.28%	35.57%
EN-CROY	17.08%	32.79%
EN-EALI	16.39%	30.86%
EN-ENFI	13.60%	29.39%

Code	Smoking rate	Ex smoking rate
EN-GREE	17.29%	31.63%
EN-HACK	20.02%	30.40%
EN-HAFU	22.22%	35.45%
EN-HARI	20.72%	31.35%
EN-HARR	13.13%	24.91%
EN-HAVE	18.36%	34.29%
EN-HILL	17.08%	23.93%
EN-HOUN	12.30%	29.51%
EN-ISLI	22.23%	30.62%
EN-KACH	18.67%	36.84%
EN-KUTH	13.46%	32.91%
EN-LAMB	18.06%	31.41%
EN-LEWI	20.63%	27.75%
EN-MERT	15.49%	27.93%
EN-NEWH	20.64%	14.39%
EN-REDB	14.17%	25.06%
EN-RUTH	11.23%	36.57%
EN-STWK	16.51%	32.12%
EN-SUTT	15.33%	36.97%
EN-TOHA	22.10%	21.28%
EN-WAFO	20.68%	21.65%
EN-WAND	14.39%	32.75%
EN-WEST	19.98%	28.15%
EN-BRFO	16.88%	35.85%
EN-BAHO	23.09%	38.78%
EN-IOWI	16.18%	42.04%
EN-MEDW	22.73%	35.14%
EN-MIKE	19.12%	30.23%
EN-PORT	21.66%	35.46%

Code	Smoking rate	Ex smoking rate
EN-READ	16.96%	31.74%
EN-SLOU	18.97%	22.85%
EN-SOTN	20.50%	31.12%
EN-WEBE	15.50%	39.13%
EN-WAMA	12.14%	37.89%
EN-WOKI	9.80%	38.43%
EN-BNES	15.58%	36.69%
EN-BOUR	17.87%	34.80%
EN-BRIS	18.94%	36.01%
EN-CORN	19.27%	39.08%
EN-NOSO	12.40%	41.36%
EN-PLYM	22.39%	37.17%
EN-POOL	15.53%	40.75%
EN-SOGL	13.93%	35.52%
EN-SWIN	17.83%	37.47%
EN-TORB	19.92%	39.45%
EN-WILT	17.57%	39.29%

Source: Spreadsheet: 'PopDetails'

Table 3 Mortality rates by age and sex

Age	Male	Female
12	0.000109	0.000073
13	0.000109	0.000086
14	0.000126	0.000111
15	0.000143	0.000117
16	0.000207	0.000143
17	0.000291	0.000147
18	0.000437	0.000183
19	0.000451	0.000182
20	0.000438	0.000195
21	0.000447	0.000210
22	0.000444	0.000206
23	0.000531	0.000215
24	0.000503	0.000213
25	0.000509	0.000242
26	0.000589	0.000240
27	0.000588	0.000262
28	0.000585	0.000338
29	0.000646	0.000306
30	0.000707	0.000345
31	0.000743	0.000396
32	0.000737	0.000409
33	0.000802	0.000452
34	0.000841	0.000515
35	0.000951	0.000548
36	0.000972	0.000583
37	0.001104	0.000628
38	0.001248	0.000705

39	0.001323	0.000805
40	0.001476	0.000848
41	0.001555	0.000923
42	0.001606	0.001016
43	0.001801	0.001118
44	0.001938	0.001230
45	0.002183	0.001340
46	0.002241	0.001386
47	0.002413	0.001607
48	0.002538	0.001662
49	0.002849	0.001849
50	0.002989	0.002053
51	0.003363	0.002237
52	0.003547	0.002490
53	0.003979	0.002671
54	0.004383	0.002892
55	0.004693	0.003313
56	0.005136	0.003496
57	0.005805	0.003893
58	0.006436	0.004239
59	0.007256	0.004663
60	0.007825	0.005061
61	0.008584	0.005632
62	0.009478	0.006101
63	0.010095	0.006608
64	0.011174	0.007132
65	0.011821	0.007698
66	0.012864	0.008288
67	0.014319	0.009399
68	0.015742	0.010448

69	0.017672	0.011374
70	0.019360	0.012742
71	0.021701	0.014053
72	0.024767	0.016085
73	0.026878	0.017835
74	0.029728	0.019818
75	0.032908	0.022065
76	0.036389	0.024632
77	0.039824	0.027566
78	0.045402	0.030727
79	0.049823	0.035335
80	0.056963	0.040595
81	0.064340	0.045800
82	0.072810	0.051752
83	0.082028	0.059294
84	0.091541	0.068807
85	0.103664	0.077328
86	0.116761	0.087863
87	0.130446	0.099480
88	0.146379	0.111630
89	0.163635	0.128760
90	0.180493	0.144589
91	0.199919	0.161416
92	0.230916	0.186166
93	0.248881	0.202744
94	0.260150	0.222723
95	0.294090	0.242517
96	0.332882	0.283728
97	0.364445	0.306580
98	0.395327	0.337380

99	0.420776	0.373948
100	0.430126	0.393181

Source: Spreadsheet 'ActuarialLife Tables'

Table 4 Death rates by age and smoking status

	Start age	End age	CS_mal	CS_fem	FS_mal	FS_fem	NS_mal	NS_fem	Comments
EN	**0**	**34**	0.11	0.11	0.11	0.11	0.11	0.11	**Death Rates (per 1000 population per year) by age** **Values are NOT stratified by sex (universal values used)**
EN	**35**	**44**	2.80	2.80	2.00	2.00	1.60	1.60	
EN	**45**	**54**	8.10	8.10	4.90	4.90	4.00	4.00	
EN	**55**	**64**	20.30	20.30	13.40	13.40	9.50	9.50	
EN	**65**	**74**	47.00	47.00	31.60	31.60	23.70	23.70	
EN	**75**	**84**	106.00	106.00	77.30	77.30	67.40	67.40	
EN	**85**	**100**	218.70	218.70	179.70	179.70	168.60	168.60	

Source: Spreadsheet 'DeathRates'

Table 5 Relative risk of LC by sex

Disease	Sex	Age	Smoking Status	RR	Lower CI	Upper CI	Source
Lung Cancer	Male	35-54	Current	14.33			Surgeon General 2014, Table 12.3
Lung Cancer	Male	35-54	Former	4.4			Surgeon General 2014, Table 12.3
Lung Cancer	Female	35-54	Current	13.3			Surgeon General 2014, Table 12.3
Lung Cancer	Female	35-54	Former	2.64			Surgeon General 2014, Table 12.3
Lung Cancer	Male	≥ 55	Current	24.97	22.2	28.09	Thun NEJM 2013
Lung Cancer	Male	≥ 55	Former	6.75	6.06	7.52	Thun NEJM 2013
Lung Cancer	Female	≥ 55	Current	25.66	23.17	28.4	Thun NEJM 2013
Lung Cancer	Female	≥ 55	Former	6.7	6.09	7.36	Thun NEJM 2013

Source: Spreadsheet 'RR Disease'

Table 6 Relative risk of CHD

Disease	Sex	Age	Smoking Status	RR	Lower CI	Upper CI	Source
CHD	Male	35-54	Current	3.88			Surgeon General 2014, Table 12.3
CHD	Male	35-54	Former	1.83			Surgeon General 2014, Table 12.3
CHD	Female	35-54	Current	4.98			Surgeon General 2014, Table 12.3
CHD	Female	35-54	Former	2.23			Surgeon General 2014, Table 12.3
CHD	Male	55-64	Current	2.5	2.34	2.66	Thun NEJM 2013
CHD	Male	55-64	Former	1.43	1.37	1.48	Thun NEJM 2013
CHD	Female	55-64	Current	2.86	2.65	3.08	Thun NEJM 2013
CHD	Female	55-64	Former	1.44	1.38	1.51	Thun NEJM 2013
CHD	Male	≥ 65	Current	2.5	2.34	2.66	Thun NEJM 2013
CHD	Male	≥ 65	Former	1.43	1.37	1.48	Thun NEJM 2013
CHD	Female	≥ 65	Current	2.86	2.65	3.08	Thun NEJM 2013
CHD	Female	≥ 65	Former	1.44	1.38	1.51	Thun NEJM 2013

Source: Spreadsheet 'RR Disease'

Table 7 Relative risk of COPD by sex

Disease	Sex	Age	Smoking Status	RR	Lower CI	Upper CI	Source
COPD	Male	35-54	Current	1			Surgeon General 2014, Table 12.3
COPD	Male	35-54	Former	1			Surgeon General 2014, Table 12.3
COPD	Female	35-54	Current	1			Surgeon General 2014, Table 12.3
COPD	Female	35-54	Former	1			Surgeon General 2014, Table 12.3
COPD	Male	≥ 55	Current	25.61	21.68	30.25	Thun NEJM 2013
COPD	Male	≥ 55	Former	7.05	6.07	8.19	Thun NEJM 2013
COPD	Female	≥ 55	Current	22.35	19.55	25.55	Thun NEJM 2013
COPD	Female	≥ 55	Former	8.09	7.19	9.1	Thun NEJM 2013

Source: Spreadsheet 'RR Disease'

Table 8 Relative risk of Stroke by smoking status

Disease	**Sex**	**Age**	**Smoking Status**	**RR**	**Lower CI**	**Upper CI**	**Source**
Stroke	Male	35-54	Current	1			Surgeon General 2014, Table 12.3
Stroke	Male	35-54	Former	1			Surgeon General 2014, Table 12.3
Stroke	Female	35-54	Current	1			Surgeon General 2014, Table 12.3
Stroke	Female	35-54	Former	1			Surgeon General 2014, Table 12.3
Stroke	Male	55-64	Current	1.92	1.66	2.21	Thun NEJM 2013
Stroke	Male	55-64	Former	1.16	1.07	1.25	Thun NEJM 2013
Stroke	Female	55-64	Current	2.1	1.87	2.36	Thun NEJM 2013
Stroke	Female	55-64	Former	1.15	1.07	1.22	Thun NEJM 2013
Stroke	Male	≥ 65	Current	1.92	1.66	2.21	Thun NEJM 2013
Stroke	Male	≥ 65	Former	1.16	1.07	1.25	Thun NEJM 2013
Stroke	Female	≥ 65	Current	2.1	1.87	2.36	Thun NEJM 2013
Stroke	Female	≥ 65	Former	1.15	1.07	1.22	Thun NEJM 2013

Source: Spreadsheet 'RR Disease'

Table 9 Inflation

Year	Weight	Pay & Prices index (1987/8=100)	Financial Year	Source
2001	1.4784	196.5	2000/01	The Hospital & community Health Services (HCHS) index - Curtis (2014) - Unit cost of Health and Social Care 2014, p. 263
2002	1.4068	206.5	2001/02	
2003	1.3594	213.7	2002/03	
2004	1.2923	224.8	2003/04	
2005	1.2505	232.3	2004/05	
2006	1.2059	240.9	2005/06	
2007	1.1629	249.8	2006/07	
2008	1.1304	257	2007/08	
2009	1.0880	267	2008/09	
2010	1.0815	268.6	2009/10	
2011	1.0499	276.7	2010/11	
2012	1.0283	282.5	2011/12	
2013	1.0111	287.3	2012/13	
2014	1.0000	290.5	2013/14	

Source: Spreadsheet 'Inflation table'

Table 10 Prevalence of lung cancer

	Lung Cancer, Forman D, Stockton D, Moller H, Quinn M, Babb P, De AR, et al. Cancer prevalence in the UK: results from the EUROPREVAL study. Ann Oncol 2003;14:648–54. http://dx.doi.org/10.1093/annonc/mdg169		2004-2008 update Source: Maddams, J., Brewster, D., Gavin, A., Steward, J., Elliott, J., Utley, M., & Møller, H. (2009). Cancer prevalence in the United Kingdom: estimates for 2008. British Journal of Cancer, 101(3), 541–547. http://doi.org/10.1038/sj.bjc.6605148	
	Per 100,000	%	Per 100,000	%
MEN				
0-44	0.00	0.00	0.00	0.00
45-54	0.00	0.15	0.00	0.09
55-64	0.00	0.15	0.00	0.09
65-74	0.01	0.80	0.01	0.75
75+	0.01	0.80	0.01	0.75
All ages	**0.00**	0.14	**0.00**	**0.13**
WOMEN				
0-44	0.00	0.00	0.00	0.00
45-54	0.00	0.07	0.00	0.08
55-64	0.00	0.07	0.00	0.08
65-74	0.00	0.23	0.00	0.33
75+	0.00	0.23	0.00	0.33
All ages	**0.00**	0.06	**0.00**	**0.08**

Source: Spreadsheet 'LC – prev %'

Table 11 Prevalence of CHD

Lower age	Upper age	male	female
16	**24**	0.10%	0.10%
25	**34**	0.20%	0.10%
35	**44**	0.60%	0.30%
45	**54**	3.60%	1.30%
55	**64**	10.60%	3.50%
65	**74**	20.80%	10.00%
75	**100**	28.60%	19.30%
All	**All**	**6.50%**	**4.00%**

Source: Spreadsheet 'CHD – prev %'

Table 12 Prevalence of COPD

Lower age	Upper age	all	male	female
16	44		1.28%	1.28%
45	64		4.15%	4.15%
65	74		8.13%	8.13%
75	100		8.94%	8.94%

Source: Spreadsheet 'COPD – prev %'

Table 13 Prevalence of Stroke

Lower age	Upper age	male	female
0	44	0.10%	0.11%
45	54	0.85%	0.75%
55	64	2.60%	1.80%
65	74	6.08%	4.16%
75	100	14.55%	12.17%

Source: Spreadsheet 'Stroke – prev %'

Table 14: Intervention uptake

Code	Interventions included in the model	Uptake as % of smokers
102	Rx Mono NRT	5.00%
103	Rx Combo NRT	2.00%
104	Varenicline (standard duration)	5.00%
105	Varenicline (extended duration)	1.00%
106	Bupropion	1.00%
107	Nortriptyline	0.00%
108	Cytisine	0.00%
201	OTC Mono NRT	0.00%
202	OTC Combo NRT	-
301	Specialist behavioural support: one-to-one	2.00%
302	Specialist behavioural support: group-based	1.00%
303	Telephone support: pro-active	0.50%
304	SMS text messaging	0.50%
305	Printed self-help materials	1.00%
401	Social marketing	0.00%
501	Brief physician advice	21.00%
502	Cut down to quit	12.00%
601	Taxation increase	100.00%
602	Indoor-smoking ban	100.00%

Table 15: Intervention effectiveness

Intervention	Relative Effect	Population	Source	lower CI	upper CI
Unassisted	1.0000	Smokers of 10+ cigarettes			
Rx Mono NRT	1.6000	Smokers of 10+ cigarettes	Stead, L. F., Perera, R., Bullen, C., Mant, D., Hartmann-Boyce, J., Cahill, K., & Lancaster, T. (2012). Nicotine replacement therapy for smoking cessation. Cochrane Database Syst Rev, 11(11).	1.53	1.68
Rx Combo NRT	1.3400	Smokers of 10+ cigarettes	Stead, L. F., Perera, R., Bullen, C., Mant, D., Hartmann-Boyce, J., Cahill, K., & Lancaster, T. (2012). Nicotine replacement therapy for smoking cessation. Cochrane Database Syst Rev, 11(11).	1.18	1.51
Varenicline (standard duration)	2.3000	Smokers of 10+ cigarettes	Cahill K, Stead LF, Lancaster T. Nicotine receptor partial agonists for smoking cessation. Cochrane Database of Systematic Reviews 2012, Issue 4. Art. No.: CD006103. DOI: 10.1002/14651858.CD006103.pub6.	2.02	2.55
Varenicline (extended duration)	1.2000	Smokers of 10+ cigarettes	Tonstad, S., Tønnesen, P., Hajek, P., Williams, K. E., Billing, C. B., Reeves, K. R., & Varenicline Phase 3 Study Group. (2006). Effect of maintenance therapy with varenicline on smoking cessation: a randomized controlled trial. Jama, 296(1), 64-71.	1.05	1.38
Bupropion	1.6000	Smokers of 10+ cigarettes	Hughes, J. R., Stead, L. F., Lancaster, T., & Cochrane Database Syst Rev. (2014). Antidepressants for smoking cessation. Cochrane Database of Systematic Reviews: Reviews 2007, (1).	1.46	1.84
Nortriptyline	2.0000	Smokers of 10+ cigarettes	Hughes, J. R., Stead, L. F., Lancaster, T., & Cochrane Database Syst Rev. (2014). Antidepressants for smoking cessation. Cochrane Database of Systematic Reviews: Reviews 2007, (1).	1.48	2.78
Cytisine	3.3000	Smokers of 10+ cigarettes	Hajek, P., McRobbie, H., & Myers, K. (2013). Efficacy of cytisine in helping smokers quit: systematic review and meta-analysis. Thorax, 68(11), 1037-1042.	1.84	5.9
OTC Mono NRT	1.6000	Smokers of 10+ cigarettes	Stead, L. F., Perera, R., Bullen, C., Mant, D., Hartmann-Boyce, J., Cahill, K., & Lancaster, T. (2012). Nicotine replacement therapy for smoking cessation. Cochrane Database Syst Rev, 11(11).	1.53	1.68
OTC Combo NRT	1.3400	Smokers of 10+ cigarettes	Stead, L. F., Perera, R., Bullen, C., Mant, D., Hartmann-Boyce, J., Cahill, K., & Lancaster, T. (2012). Nicotine replacement therapy for smoking cessation. Cochrane Database Syst Rev, 11(11).	1.18	1.51
			McRobbie H, Bullen C, Hartmann-Boyce J, Hajek P. Electronic cigarettes for smoking cessation and reduction. Cochrane Database of Systematic Reviews 2014, Issue 12. Art. No.: CD010216. DOI: 10.1002/14651858.CD010216.pub2.		
Specialist behavioural support: one-to-one	1.4000	Motivated smokers	Lancaster, T., & Stead, L. F. (2005). Individual behavioural counselling for smoking cessation. Cochrane Database Syst Rev, 2.	1.24	1.57
Specialist behavioural support: group-based	2.0000	Motivated smokers	Lancaster, T., & Stead, L. F. (2005). Individual behavioural counselling for smoking cessation. Cochrane Database Syst Rev, 2.	1.6	2.46
Telephone support: pro-active	1.4000	Motivated smokers	Stead, L. F., & Lancaster, T. (2005). Group behaviour therapy programmes for smoking cessation. Cochrane Database Syst Rev, 2.	1.26	1.5

SMS text messaging	1.7100	Motivated smokers	Whittaker, R., McRobbie, H., Bullen, C., Borland, R., Rodgers, A., & Gu, Y. (2012). Mobile phone-based interventions for smoking cessation. Cochrane Database Syst Rev, 11.	1.47	1.99
Printed self-help materials	1.1900	Motivated smokers	Hartmann-Boyce J, Lancaster T, Stead LF. Print-based self-help interventions for smoking cessation. Cochrane Database of Systematic Reviews 2014, Issue 6. Art. No.: CD001118. DOI: 10.1002/14651858.CD001118.pub3.	1.04	1.37

Table 16: Employment among smokers

Name	Code	SmokEmpl rate
England	EN	57.3%
East Midlands	EN-EAMI	60.7%
East England	EN-EAEN	63.5%
London	EN-LOND	55.4%
North East	EN-NOEA	46.1%
North West	EN-NOWE	52.2%
South East	EN-SOEA	62.3%
South West	EN-SOWE	61.7%
West Midlands	EN-WEMI	55.3%
Yorkshire and The Humber	EN-YATH	53.9%
Buckinghamshire	EN-BUCK	62.3%
Cambridgeshire	EN-CAMB	63.5%
Cumbria	EN-CUMB	52.2%
Derbyshire	EN-DBSH	60.7%
Devon	EN-DEVO	61.7%
Dorset	EN-DORS	61.7%
East Sussex	EN-EASU	62.3%
Essex	EN-ESSE	63.5%
Gloucestershire	EN-GLOU	61.7%
Hampshire	EN-HAMP	62.3%
Hertfordshire	EN-HERT	63.5%
Kent	EN-KENT	62.3%
Lancashire	EN-LANC	52.2%
Leicestershire	EN-LEIC	60.7%
Lincolnshire	EN-LINC	60.7%
Norfolk	EN-NORF	63.5%
Northamptonshire	EN-NHNT	60.7%

Name	Code	SmokEmpl rate
North Yorkshire	EN-NOYO	53.9%
Nottinghamshire	EN-NTSH	60.7%
Oxfordshire	EN-OXFO	62.3%
Somerset	EN-SOME	61.7%
Staffordshire	EN-STAF	55.3%
Suffolk	EN-SUFF	63.5%
Surrey	EN-SURR	62.3%
Warwickshire	EN-WARW	55.3%
West Sussex	EN-WESU	62.3%
Worcestershire	EN-WORC	55.3%
County Durham	EN-CODU	46.1%
Darlington	EN-DARL	46.1%
Tyne and Wear (Met County)	EN-TAWE	46.1%
Hartlepool	EN-HART	46.1%
Middlesbrough	EN-MIDD	46.1%
Northumberland	EN-NHUM	46.1%
Redcar and Cleveland	EN-RACL	46.1%
Stockton-on-Tees	EN-SOTE	46.1%
Blackburn with Darwen	EN-BWDA	52.2%
Blackpool	EN-BLAC	52.2%
Greater Manchester (Met County)	EN-GRMA	52.2%
Cheshire East	EN-CHEA	52.2%
Cheshire West and Chester	EN-CWAC	52.2%
Halton	EN-HALT	52.2%
Merseyside (Met County)	EN-MERS	52.2%
Warrington	EN-WARR	52.2%
South Yorkshire (Met County)	EN-SOYO	53.9%
West Yorkshire (Met County)	EN-WEYO	53.9%
East Riding of Yorkshire	EN-EROY	53.9%

Name	Code	SmokEmpl rate
Kingston upon Hull, City of	EN-KUHU	53.9%
North East Lincolnshire	EN-NELI	53.9%
North Lincolnshire	EN-NOLI	53.9%
York	EN-YORK	53.9%
Derby	EN-DERB	60.7%
Leicester	EN-LCSH	60.7%
Nottingham	EN-NOTT	60.7%
Rutland	EN-RUTL	60.7%
West Midlands (Met County)	EN-WMCO	55.3%
Herefordshire, county of	EN-HERE	55.3%
Shropshire	EN-SHRO	55.3%
Stoke-on-Trent	EN-SOTR	55.3%
Telford and Wrekin	EN-TAWR	55.3%
Bedford	EN-BEDF	63.5%
Central Bedfordshire	EN-CEBE	63.5%
Luton	EN-LUTO	63.5%
Peterborough	EN-PETE	63.5%
Southend-on-Sea	EN-SOSE	63.5%
Thurrock	EN-THUR	63.5%
Barking and Dagenham	EN-BADA	55.4%
Barnet	EN-BARN	55.4%
Bexley	EN-BEXL	55.4%
Brent	EN-BREN	55.4%
Bromley	EN-BROM	55.4%
Camden	EN-CAMD	55.4%
City of London	EN-COLO	55.4%
Croydon	EN-CROY	55.4%
Ealing	EN-EALI	55.4%
Enfield	EN-ENFI	55.4%

Name	Code	SmokEmpl rate
Greenwich	EN-GREE	55.4%
Hackney	EN-HACK	55.4%
Hammersmith and Fulham	EN-HAFU	55.4%
Haringey	EN-HARI	55.4%
Harrow	EN-HARR	55.4%
Havering	EN-HAVE	55.4%
Hillingdon	EN-HILL	55.4%
Hounslow	EN-HOUN	55.4%
Islington	EN-ISLI	55.4%
Kensington and Chelsea	EN-KACH	55.4%
Kingston upon Thames	EN-KUTH	55.4%
Lambeth	EN-LAMB	55.4%
Lewisham	EN-LEWI	55.4%
Merton	EN-MERT	55.4%
Newham	EN-NEWH	55.4%
Redbridge	EN-REDB	55.4%
Richmond upon Thames	EN-RUTH	55.4%
Southwark	EN-STWK	55.4%
Sutton	EN-SUTT	55.4%
Tower Hamlets	EN-TOHA	55.4%
Waltham Forest	EN-WAFO	55.4%
Wandsworth	EN-WAND	55.4%
Westminster	EN-WEST	55.4%
Bracknell Forest	EN-BRFO	62.3%
Brighton and Hove	EN-BAHO	62.3%
Isle of Wight	EN-IOWI	62.3%
Medway	EN-MEDW	62.3%
Milton Keynes	EN-MIKE	62.3%
Portsmouth	EN-PORT	62.3%

Name	Code	SmokEmpl rate
Reading	EN-READ	62.3%
Slough	EN-SLOU	62.3%
Southampton	EN-SOTN	62.3%
West Berkshire	EN-WEBE	62.3%
Windsor and Maidenhead	EN-WAMA	62.3%
Wokingham	EN-WOKI	62.3%
Bath and North East Somerset	EN-BNES	61.7%
Bournemouth	EN-BOUR	61.7%
Bristol	EN-BRIS	61.7%
Cornwall	EN-CORN	61.7%
North Somerset	EN-NOSO	61.7%#
Plymouth	EN-PLYM	61.7%
Poole	EN-POOL	61.7%
South Gloucestershire	EN-SOGL	61.7%
Swindon	EN-SWIN	61.7%
Torbay	EN-TORB	61.7%
Wiltshire	EN-WILT	61.7%