Component 3 Smokefree Secondary Care Settings

Review 7

APPENDICES

Draft 3 26th October 2012

November 2021: NICE guidelines PH45 (June 2013) and PH48 (November 2013) have been updated and replaced by NG209.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.

APPENDIX 1: Summary of Included Study Countries' Smokefree Status

Country States/Provinces	**Public places with complete <u>national</u> indoor smokefree legislation for Health-Care Facilities at 31st December 2008**[1]	**Public places with complete <u>subnational</u> indoor smokefree legislation for Health-Care Facilities at 31st December 2008**[1]	**Additional Information (from Review 6 and Review 7's included papers)**
Australia	**No**		
Australian Capital Territory, New South Wales, Northern Territory, Queensland, South Australia, Tasmania, Victoria, Western Australia		Yes (all)	• **New South Wales State**: legislation introduced in 1988 which required a total prohibition of smoking by all staff, patients and visitors in all hospital buildings and vehicles **(Nagle, 1996)**. • **Queensland State**: As of 2005, there was no formal policy regarding smoking in any acute mental health unit in the State **(Campion 2008)**. • **South Australia State**: Smoking banned inside hospitals in the State 'for many years' but smoking has been allowed outdoors either in defined areas or alternatively, areas where smoking is banned are defined **(Jones, 2010)**.
Canada	**No**		
Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Northwest Territories, Nova Scotia, Nunavut, Ontario, Prince Edward Island, Quebec, Saskatchewan, Yukon		Yes (all)	• **Ontario Province**: *Tobacco Control Act 1994* banned smoking in all government buildings. Large psychiatric facilities sought and received special dispensation from the Provincial Ministry of Health and Long Term Care to allow patients and some staff to smoke in specially ventilated rooms **(Parle, 2004)**. The *Smoke-Free Ontario Act* (enacted May 31st 2006) prohibits smoking in all enclosed workplaces and public places in Ontario. All long-term and residential care facilities, including psychiatric facilities, are exempted from this legislation and are permitted to provide controlled designated smoking rooms to allow residents, but not staff, to smoke **(Voci, 2010)**. • **Calgary City**: Calgary Health Region (CHR) went entirely smokefree on May 31st 2002, banning tobacco use indoors as well as on all CHR-owned property. It was the first health region in Canada to do so **(Patterson, 2008)**.
Denmark	**Yes**		

[1] **Data Source:** World Health Organization (2009). *WHO Report on the Global Tobacco Epidemic, 2009: Implementing smoke-free environments*. Geneva: World Health Organization. http://whqlibdoc.who.int/publications/2009/9789241563918_eng_full.pdf. [WHO defines "indoor smokefree" as "Smoking is not allowed at any time in any indoor area under any circumstances"]

Greece	**No**		• Greece enacted legislation (*Health Law 76017*) in August 2002 prohibiting smoking in all health care centres such as public and private hospitals, health centres and pharmacies **[Vardavas, 2009]**.
Israel	**Yes**		• 2001 anti-smoking law completely banned smoking in all hospitals in Israel **(Donchin, 2004)**.
Ireland	**Yes**		• Legislation banning smoking in indoor workplaces came into force in 2004 **[Fitzpatric, 2009]**.
Sweden	**Yes**		• A Tobacco Act was passed in the Swedish Parliament in July 1993 that banned smoking in all buildings providing health care **[Tillgren, 1998]**.
Switzerland	**No**		
Ticino		Yes	
UK	**Yes**		
England , Northern Ireland, Scotland , Wales		Yes (all)	**England and Wales**: • The *National Service Framework for Coronary Heart Disease* required that by April 2001, all NHS bodies, in collaboration with Local Authorities, must have implemented a smoking policy **(Arack, 2009; Bloor, 2006)**. • The 2004 Department of Health White Paper *Choosing Health: Making Healthier Choices Easier* made a commitment to a smokefree NHS by the end of 2006 **(Arack, 2009; Parks, 2009; Praveen, 2009)**. • The *Health Act 2006* banned smoking in all enclosed or substantially enclosed public places and workplaces, including health care facilities from July 1st 2007 **(Arack, 2009; Cormac, 2010; Garg, 2009; Parks, 2009; Praveen, 2009; Pritchard, 2008; Smith, 2008; Ratschen, 2008)**. Mental health facilities were granted a temporary exemption for one year during which time designated smoking rooms meeting specified requirements were permitted **(Hill, 2007; Praveen, 2009; Pritchard, 2008; Smith, 2008)**. From July 1st 2008 smoking was banned in any enclosed or substantially enclosed part of mental health establishments **(Hill, 2007; Mental Health Foundation, 2009; Pritchard, 2008; Smith, 2008).** **Scotland** • Legislation banning smoking in enclosed public places came into force in 2006. Psychiatric facilities were one of the few settings exempt from the ban **(HUG, 2007; McNeill, 2007)**
USA	**No**		• In December 1988, officials of the United States Department of Veterans Affairs (VA) announced the goal of establishing smoke-free VA acute care facilities by mid-1989. Psychiatric facilities were excluded from this proclamation **(Erwin, 1991)**. • In May 1988 the Surgeon General and the Medicare Administrator sent letters to 7,000 Medicare hospitals asking for action to establish smokefree environments in their facilities **(Baile, 1991)**. • A bill requiring all hospitals participating in Federal Health Programs to adopt no-smoking

			policies was introduced in Congress in the late 1980s, but the bill was defeated **(Baile, 1991)**. • The Joint Commission on the Accreditation of HealthCare Organizations (JCAHO) declared that all accredited hospitals in the USA must be smokefree as of January 1992 **(Haller, 1996; Ryabik, 1995; Velasco, 1996)**. • Effective December 31st 1993, the JCAHO introduced indoor restrictions on smoking as a quality indicator **(Sheffer, 2009)**. • The JCAHO required all hospitals in the USA to be smokefree from January 1st 1994 **(Stillman, 1995).**
Alaska, Arizona, Arkansas, Colorado, Connecticut, Delaware, District of Columbia, Hawaii, Idaho, Illinois, Iowa, Maryland, Massachusetts, Minnesota, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Utah, Washington, Wisconsin		Yes	
California, Florida, Georgia, Kansas, Louisiana, Maine, Michigan, Mississippi, Missouri, North Carolina, Oklahoma, Vermont, Virginia, West Virginia		No	
Alabama, Indiana, Kentucky, South Carolina, Texas, Wyoming		Not reported by WHO	

APPENDIX 2: Sample database search strategies for Smokefree strategies and interventions in secondary care settings (Reviews 6 &7)

MEDLINE (includes Medline in Process)
Database host: EBSCO Host
Search date: 7/2/2012
Number of records: 4269

#	Query
S29	S25 NOT S28 Limiters - Date of Publication from: 19900101-20121231
S28	S27 NOT S26
S27	(MH "Animals")
S26	(MH "Animals") AND (MH "HUMANS")
S25	S23 or S24
S24	((S18 OR S19) AND S17)
S23	(S22 AND S16)
S22	(S18 or S19 or S20 or S21)
S21	TI ("acute care" OR "acute service#" OR "acute setting#" OR "acute trust#" OR "ambulance#" OR "health centre#" OR "care centre#" OR "health center#" OR "care center#" OR "inhospital" OR "national health service" OR "national health services" OR "secondary care" OR accident OR (acute N2 department#) OR "acute unit#" OR emergency OR "health authorities" OR "health board#" OR "clinical care" OR "clinical unit#" OR "care facilities" OR "care facility" OR "care unit#" OR "care trust" OR "elective care" OR "medical care" OR "health service#" OR "health system#" OR "health trust#" OR "health unit#" OR "healthcare unit#" OR "heath authority" OR hospice# OR hospitalised OR hospitalized OR hospital OR hospitals OR maternity OR prenatal OR perinatal OR antenatal OR obstetric# OR inpatient# OR "prison healthcare" OR "prison health" OR "NHS Trust#" OR outpatient# OR patient# OR psychiatric OR PCTs OR "mental health*" OR (secure W3 unit#) OR surgery OR "residential care" OR "long term care" OR "specialist unit#" OR "specialist care" OR "speciality care" OR "staff residence" OR "staff residency" OR "staff residencies" OR "staff accommodation" OR ward#)
S20	AB ("acute care" OR "acute service#" OR "acute setting#" OR "acute trust#" OR "ambulance#" OR "health centre#" OR "care centre#" OR "health center#" OR "care center#" OR "inhospital" OR "national health service" OR "national health services" OR "secondary care" OR accident OR (acute N2 department#) OR "acute unit#" OR emergency OR "health authorities" OR "health board#" OR "clinical care" OR "clinical unit#" OR "care facilities" OR "care facility" OR "care unit#" OR "care trust" OR "elective care" OR "medical care" OR "health service#" OR "health system#" OR "health trust#" OR "health unit#" OR "healthcare unit#" OR "heath authority" OR hospice# OR hospitalised OR hospitalized OR hospital OR hospitals OR maternity OR prenatal OR perinatal OR antenatal OR obstetric# OR inpatient# OR "prison healthcare" OR "prison health" OR "NHS Trust#" OR outpatient# OR patient# OR psychiatric OR PCTs OR "mental health*" OR (secure W3 unit#) OR surgery OR "residential care" OR "long term care" OR "specialist unit#" OR "specialist care" OR "speciality care" OR "staff residence" OR "staff residency" OR "staff residencies" OR "staff accommodation" OR ward#)
S19	(MH "Administrative Personnel") OR (MH "Adolescent, Hospitalized") OR (MH "Cancer Care Facilities") OR (MH "Cardiac Care Facilities") OR (MH "Child, Hospitalized") OR (MH "Emergency Medical Services") OR (MH "Emergency Service, Hospital+") OR (MH "Home Care Services") OR (MH "Home Care Services, Hospital-Based") OR (MH "Hospices") OR (MH "Hospital Administration") OR (MH "Hospital Administrators") OR (MH "Hospital Communication Systems") OR (MH "Hospital Design and Construction") OR (MH "Hospital Units+") OR (MH "Hospitalization+") OR (MH "Hospitals, Chronic Disease") OR (MH "Hospitals, Community") OR (MH "Hospitals, Convalescent") OR (MH "Hospitals, County") OR (MH "Hospitals, District") OR (MH "Hospitals, Federal") OR (MH "Hospitals, General") OR (MH "Hospitals, Isolation") OR (MH "Hospitals, Maternity") OR (MH "Hospitals, Municipal") OR (MH "Hospitals, Osteopathic") OR (MH "Hospitals, Pediatric") OR (MH "Hospitals, Private") OR (MH "Hospitals, Proprietary") OR (MH "Hospitals, Psychiatric") OR (MH "Hospitals, Public") OR (MH "Hospitals, Religious") OR (MH "Hospitals, Rural") OR (MH "Hospitals, Satellite") OR (MH "Hospitals, Special") OR (MH "Hospitals, State") OR (MH "Hospitals, Teaching") OR (MH "Hospitals, University") OR (MH "Hospitals,

	Urban") OR (MH "Hospitals, Voluntary") OR (MH "Hospitals+") OR (MH "Inpatients") OR (MH "Legislation, Hospital") OR (MH "Maintenance and Engineering, Hospital") OR (MH "Maternal Health Services+") OR (MH "Medical Staff, Hospital") OR (MH "Nurse-Patient Relations") OR (MH "Nursing Staff, Hospital") OR (MH "Obstetrics and Gynecology Department, Hospital") OR (MH "Outpatient Clinics, Hospital+") OR (MH "Outpatients") OR (MH "Patient Acceptance of Health Care") OR (MH "Patient Admission") OR (MH "Patient Advocacy") OR (MH "Patient Compliance") OR (MH "Patients") OR (MH "Personnel, Hospital") OR (MH "Physician-Patient Relations") OR (MH "Psychiatric Department, Hospital") OR (MH "Psychiatric Nursing") OR (MH "Surgicenters") OR (MH "Visitors to Patients")
S18	(MH "Health Facilities+") OR (MH "Health Facility Administration+") OR (MH "Health Facility Environment+")
S17	(MH "Smoking/PC") OR (MH "Tobacco Use Disorder/PC") OR (MH"Tobacco Use Cessation")
S16	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S15
S15	((S13 OR S14) AND S12)
S14	TI (smoking OR tobacco OR cigarette# OR smokers OR smoke OR nonsmoking OR nonsmokers) OR AB (smoking OR tobacco OR cigarette# OR smokers OR smoke OR nonsmoking OR nonsmokers)
S13	(MH "Smoking") OR (MH "Smoking Cessation") OR (MH "Tobacco Use Disorder") OR (MH"Tobacco Use Cessation")
S12	(MH "Social Control Policies") OR (MH "Social Control, Formal") OR (MH "Legislation as Topic") OR (MH "Legislation, Hospital") OR (MH "Organizational Policy") OR (MH "Public Policy") OR (MH "Health Policy")
S11	(MH "Tobacco Smoke Pollution/LJ") OR (MH "Tobacco Smoke Pollution/PC") OR (MH "Smoking/LJ") OR (MH "Smoking Cessation/LJ")
S10	(TI ((bans OR ban OR banning OR restrict* OR prohibit* OR sanction# OR eliminat* OR remov* OR restrict* OR eradicat* OR sanction* OR curbs OR curb OR curbing OR enforce# OR enforcing OR control* OR prevent*)) N3 (("second hand" N1 smok*) OR (secondhand N1 smok*) OR (passive N1 smok*) OR (environmental N2 smoke) OR "involuntary smoking" OR (pollution N2 tobacco) OR (pollution N2 cigarette#))) OR (AB ((bans OR ban OR banning OR restrict* OR prohibit* OR sanction# OR eliminat* OR remov* OR restrict* OR eradicat* OR sanction* OR curbs OR curb OR curbing OR enforce# OR enforcing OR control* OR prevent*)) N3 (("second hand" N1 smok*) OR (secondhand N1 smok*) OR (passive N1 smok*) OR (environmental N2 smoke) OR "involuntary smoking" OR (pollution N2 tobacco) OR (pollution N2 cigarette#)))
S9	AB ((workplace# OR place# OR zone# OR space# OR facility OR facilities OR area# OR location# OR premises OR propert* OR site# OR building# OR campus* OR ground# OR establishment# OR room# OR shelter# OR environment# OR enclos* OR hospital#) N1 ("non smoking" OR nonsmoking)) OR (AB (smoking OR "smoking break#" OR smoke OR smoker#) N1 (place# OR zone# OR space# OR facility OR facilities OR area# OR location# OR premises OR building# OR room# OR shelter# OR site# OR enclos*))
S8	TI ((workplace# OR place# OR zone# OR space# OR facility OR facilities OR area# OR location# OR premises OR propert* OR site# OR building# OR campus* OR ground# OR establishment# OR room# OR shelter# OR environment# OR enclos* OR hospital#) N1 ("non smoking" OR nonsmoking)) OR (TI (smoking OR "smoking break#" OR smoke OR smoker#) N1 (place# OR zone# OR space# OR facility OR facilities OR area# OR location# OR premises OR building# OR room# OR shelter# OR site# OR enclos*))
S7	(TI ("tobacco control#" OR "cigarette# control#" OR "smoking control#" OR ("control tobacco" OR "control cigarette#" OR "control smoking"))) OR (TI ("control* tobacco" OR "control* cigarette#" OR "control* smoking")) OR (TI ("smoking break#" OR smoke) N2 (control* OR prevent OR preventing OR prevents OR prevention)) OR (TI (tobacco OR cigarette# OR smoking) N2 (prevent OR preventing OR prevents OR prevention)) OR (AB ("tobacco control#" OR "cigarette# control#" OR "smoking control#" OR ("control tobacco" OR "control cigarette#" OR "control smoking"))) OR (AB ("control* tobacco" OR "control* cigarette#" OR "control* smoking")) OR (AB ("smoking break#" OR smoke) N2 (control* OR prevent OR preventing OR prevents OR prevention)) OR (AB (tobacco OR cigarette# OR smoking) N2 (prevent OR preventing OR prevents OR prevention))
S6	TI ((smoking OR tobacco OR cigarette# OR smokers OR "smoking break#" OR smoke) N3 (bans OR ban OR banning OR restrict* OR prohibit* OR eliminat* OR remov* OR restrict* OR eradicat* OR sanction* OR curbs OR curb OR curbing OR enforce# OR enforcing)) OR AB ((smoking OR tobacco OR cigarette# OR smokers OR "smoking break#" OR smoke) N3 (bans OR ban OR banning OR restrict* OR prohibit* OR eliminat* OR remov* OR restrict* OR eradicat* OR sanction* OR curbs OR curb OR curbing OR enforce# OR enforcing))
S5	TI ((act or acts or policy OR policies OR rule# OR "hospital guideline#" OR law# OR regulation# OR rules

	OR rule OR ordinance# OR legislat* OR code# OR compliance) N3 (smoking OR tobacco OR cigarette# OR smokers OR nonsmoking OR nonsmokers OR smoke)) OR AB ((act or acts or policy OR policies OR rule# OR law# OR regulation# OR rules OR rule OR "hospital guideline#" OR ordinance# OR legislat* OR code# OR compliance) N3 (smoking OR tobacco OR cigarette# OR smokers OR nonsmoking OR nonsmokers OR smoke))
S4	TI ("no smoking" OR antitobacco OR "anti tobacco" OR "antismoking" OR "anti smoking") OR AB ("no smoking" OR antitobacco OR "anti tobacco" OR "antismoking" OR "anti smoking")
S3	TI ("end smoking") OR TI ("ending smoking") OR AB (("end smoking") OR ("ending smoking"))
S2	TI ((tobacco W2 free) OR (cigarette W2 free)) OR AB ((tobacco W2 free) OR (cigarette W2 free))
S1	TI ("smoke free" OR "smoking free" OR smokefree) OR AB ("smoke free" OR "smoking free" OR smokefree)

Trials Register of Promoting Health Interventions (TRoPHI)
Database host: EPPI-Centre
Database coverage dates: 2005-current
Search date: 14/2/2012
Number of records retrieved: 126

344 Focus of the report: tobacco 823
345 Type(s) of intervention: environmental modification OR legislation OR regulation 387
346 344 AND 345 49
347 Freetext (item record) smokefree 3
351 Freetext (item record) antitobacco 1
352 Freetext (item record) antismoking 16
353 Freetext (item record) "anti smoking" 17
354 Freetext (item record) "anti tobacco" 5
355 Freetext (item record) "smoke free" 23
356 Freetext (item record) "smoking free" 0
357 Freetext (item record) "smokefree" 3
358 Freetext (item record) "tobacco free" 2
359 Freetext (item record) "cigarette free" 0
361 Freetext (item record) "end smoking" 0
362 Freetext (item record) "ending smoking" 0
363 Freetext (item record) "non smoking" 16
364 351 OR 352 OR 353 OR 354 OR 355 OR 356 OR 357 OR 358 OR 359 OR 361 OR 362 OR 363 78
365 Freetext (item record) smoke 134
366 Freetext (item record) smoking 690
367 Freetext (item record) tobacco 270
368 Freetext (item record) "cigarette*" 226
369 Freetext (item record) "environment*" 378
370 365 OR 366 OR 367 OR 368 OR 369 1148
371 Freetext (item record) "ban*" 102
372 Freetext (item record) "prohibit*" 4
373 Freetext (item record) "hospital" 297
374 Freetext (item record) hospitals 46
375 371 OR 372 OR 373 OR 374 420
376 370 AND 375 81
378 364 AND 375 10
379 346 OR 376 OR 378 126

APPENDIX 3: Inclusion decision questions applied at title and abstract screening stage, with guidance notes (Reviews 6 & 7)

Criterion	Guidance notes	Decision
1. YEAR: Was the document published during or after 1990?	Include studies published during or after 1990. Exclude studies before 1990.	If yes, proceed to 2. If no, use EX1 – NOT YEAR
2. LANGUAGE: Was the document published in English?	Include English-language documents. Exclude documents in languages other than English.	If yes, proceed to 3. If no, use EX2 – NOT LANGUAGE
3. RESEARCH: Does the document report on a piece of research?	Include documents that are primary research, in that data have been collected during that study through interaction with or observation of study participants, or secondary research, such as systematic reviews of the literature. Examples of non-research documents include opinion pieces, commentaries, or legislation.	If yes, proceed to 4. If no, use EX3 – NOT RESEARCH
4. SMOKEFREE: Does the title or abstract refer to smokefree strategies or interventions?	Include studies of specific activities or strategies designed to support the implementation of smokefree legislation or policies. If the legislation or policy is not explicitly stated, interventions where the removal of second-hand smoke or environmental tobacco smoke is an explicit aim will be included. Examples of interventions include, but are not restricted to: • restrictions to eliminate smoking on hospital and other secondary care properties and estates, both indoors and outdoors, including signage and enforcement • restrict ions on staff smoking breaks • revised job descriptions to include policy enforcement by staff • creation of smokefree ‘champions’ • campaign and information materials to alert staff and service users of proposed and impending policy changes • interventions that help people temporarily abstain from smoking whilst	If yes, proceed to 5. If no, use EX4 – NOT SMOKEFREE

	onsite. Activities/interventions that will not be covered • Programmes or interventions exclusively aimed at preventing the uptake of tobacco use. • Programmes or interventions exclusively aimed at supporting tobacco use cessation.	
5. SECONDARY CARE: Was the study conducted in a secondary care setting or with secondary care staff?	Include studies where the smoking policy is conducted in a mental health, acute or maternity secondary care settings. Also include other settings where secondary care staff undertake their work where second-hand smoke may be present. Secondary care is defined as a service provided by medical specialists who generally do not have first contact with patients—usually referred to by a GP—such as psychiatrist, dermatologist, etc. • Included secondary care settings are the buildings and grounds of hospitals (including accident and emergency departments), psychiatric units, mental health units, secure hospitals, maternity units, outpatient clinics and staff residencies. • The buildings and grounds of prison healthcare units and tertiary care services where secondary healthcare staff are employed, or secondary healthcare is provided, are settings that will be included. • Smokefree legislation in the UK covers enclosed vehicles for paid and voluntary work, thus ambulances and hospital vehicles are also included as settings. Activities/interventions that will not be covered: • Strategies and interventions for ensuring smokefree compliance in primary care settings (e.g., GP surgeries). • Studies looking at policies that apply to public spaces more generally (e.g., national legislation banning smoking in all closed public places) - even if the public spaces might include secondary health care settings.	If yes, proceed to 6. If no, use EX5 – NOT SECONDARY CARE
6. COMMUNITY SETTINGS BUT NOT SMOKEFREE: Was the study conducted in a secondary care	Exclude community and private residences settings where it is not EXPLICIT from the study paper's title or abstract that they relate to i) smokefree policies/legislation and ii) the secondary care worker/the type of secondary care delivered.	If yes, proceed to 7. If no, use EX6 -

setting (same as Q5), OR in a community or private residence setting AND explicitly refers to smokefree policies and secondary care workers/services?	Include any other type of secondary care setting, or any community and private residences settings where it is that the study relates to i) smokefree policies/legislation and ii) the secondary care worker/the type of secondary care delivered.	COMMUNITY SETTINGS BUT NOT SMOKEFREE
7. RESEARCH DESIGN: Is the study design a comparison (e.g., controlled trials, before-and-after) and/or views or process evaluation (e.g., interviews, surveys)?	The study must be a comparison design or include views/process data on barriers and facilitators. Eligible comparison designs: reviews of reviews, systematic reviews and guidelines (including NICE guidelines), randomised controlled trials, controlled trials, controlled before and after studies, interrupted time series, and uncontrolled before and after studies. Eligible views/process evaluations: This includes trials (controlled and non-controlled), descriptive studies (including questionnaire surveys, and process evaluations), qualitative studies (including, but not restricted to, ethnographies, phenomenologies, and grounded theory studies), discussion papers or reports, and 'views studies' (which are written based on a multiple perspective approach with an emphasis on guidance for health professionals). Any studies without these research designs (e.g., single case studies) should be excluded.	If yes, proceed to 8. If no, use EX7 – NOT RESEARCH DESIGN
8. EFFECTIVENESS: Does the study evaluate the effectiveness of an intervention?	Include if the study evaluates the effectiveness of an intervention. The study must evaluate the effectiveness of an intervention (or interventions) either through a comparison with a control group or comparison across time, or through reviews of the evidence. Specifically: reviews of reviews, systematic reviews and guidelines (including NICE guidelines), randomised controlled trials, controlled trials, controlled before and after studies, interrupted time series, and uncontrolled before and after studies.	If yes, use IN1 - EFFECTIVENESS. Then proceed to 9. If no, proceed to 9.
9. BARRIERS/FACILITATORS: Does the title or abstract include barriers or facilitators (including	Include if the title or abstract includes barriers or facilitators (including knowledge, attitudes and beliefs) of using or implementing an intervention. The study must include qualitative and/or quantitative evidence of views and	If yes, use IN2 - BARRIERS/FACILITATORS.

knowledge, attitudes and beliefs) of using or implementing smoking cessation interventions/ services?	opinions – questionnaire surveys, process evaluations and qualitative studies; both primary studies and systematic reviews.	End of criteria.
Marker1	Marker for not high income country. Mark any study that was not conducted in a high income country. High income countries are: Andorra, Aruba, Australia, Austria, Bahamas, The, Bahrain, Barbados, Belgium, Bermuda, Brunei Darussalam, Canada, Cayman Islands, Channel Islands, Croatia, Curaçao, Cyprus, Czech Republic, Denmark, Equatorial Guinea, Estonia, Faeroe Islands, Finland, France, French Polynesia, Germany, Gibraltar, Greece, Greenland, Guam, Hong Kong SAR, China, Hungary, Iceland, Ireland, Isle of Man, Israel, Italy, Japan, Korea, Rep., Kuwait, Liechtenstein, Luxembourg, Macao SAR, China, Malta, Monaco, Netherlands, New Caledonia, New Zealand, Northern Mariana Islands, Norway, Oman, Poland, Portugal, Puerto Rico, Qatar, San Marino, Saudi Arabia, Singapore, Sint Maarten (Dutch part), Slovak Republic, Slovenia, Spain, St. Martin (French part), Sweden, Switzerland, Trinidad and Tobago, Turks and Caicos Islands, United Arab Emirates, United Kingdom, United States, Virgin Islands (U.S.)	

APPENDIX 4: Websites search summary (Reviews 6 & 7)

#	Websites searched	Results
1.	Smoke free http://smokefree.nhs.uk	0
2.	NHS Centre for Smoking Cessation and Training http://www.ncsct.co.uk/	0
3.	Action on Smoking and Health (ASH) http://www.ash.org.uk	0
4.	Treat tobacco.net http://www.treatobacco.net/en/index.php	0
5.	Society for Research on Nicotine and Tobacco http://www.srnt.org	0
6.	International Union against Cancer http://www.uicc.org	0
7.	WHO Tobacco Free Initiative (TIF) http://www.who.int/tobacco/en	0
8.	International Tobacco Control Policy Evaluation Project http://www.itcproject.org	0
9.	Tobacco Harm Reduction http://www.tobaccoharmreduction.org/index.htm	0
10.	Current controlled trials www.controlled-trials.com	0
11.	Association for the treatment of tobacco use and dependence (ATTUD) www.attud.org	0
12.	National Institute on drug abuse- the science of drug abuse and addiction http://www.nida.nih.gov/nidahome.html	0
13.	NICE http://www.nice.org.uk/	0
14.	Public health observatories http://www.apho.org.uk/resource/advanced.aspx	0
15.	Scottish Government http://www.scotland.gov.uk/topics/research	0
16.	Welsh Government http://wales.gov.uk/	0
17.	NHS Evidence https://www.evidence.nhs.uk/	1
18.	Joseph Rowntree Foundation http://www.jrf.org.uk/publications	0
19.	UK Centre for Tobacco Control Studies http://www.ukctcs.org/ukctcs/index.aspx	0
20.	World Conference on Tobacco or Health abstracts from 2006, 2009, 2012 conferences	57
21.	Globalink http://www.globalink.org/	0
22.	CDC tobacco control and prevention http://www.cdc.gov/tobacco/	1
23.	Canadian Council for Tobacco Control http://www.cctc.ca/cctc/EN/tcrc/articles/tcarticle.2010-12-24.4349020582	11
24.	Tobacco Information Scotland http://www.tobaccoinscotland.com/page.cfm?pageid=71	0
Total number of records found		**70**

APPENDIX 5: Inclusion decision questions applied at full text screening stage, with guidance notes (Reviews 6 & 7)

Notes:

- Shading: reviews 6 & 7; review 6 only; review 7 only
- Each study should have either **one** EX1-EX5 code or **two** review-specific codes

Criterion	Guidance notes	Decision
1. YEAR: Was the document published during or after 1990?	Include studies published during or after 1990. Exclude studies before 1990.	If yes, proceed to 2. If no, use EX1 on FT – NOT YEAR
2. LANGUAGE: Was the document published in English?	Include English-language documents. Exclude documents in languages other than English.	If yes, proceed to 3. If no, use EX2 on FT – NOT LANGUAGE
3. RESEARCH: Does the document report on a piece of primary research?	Include documents that are primary research, in that data have been collected during that study through interaction with or observation of study participants. Exclude reviews but mark systematic reviews to be checked for relevant included studies for Reviews 6 and 7. Examples of non-research documents include opinion pieces, commentaries, or legislation.	If yes, proceed to 4. If no, use EX3 on FT – NOT PRIMARY RESEARCH & mark if a systematic review
Marker 1: Review	*Review excluded but the included studies are to be checked for relevant studies for our reviews.*	
4. SMOKEFREE: Does the document examine smokefree legislation, smokefree policy(ies) or smokefree intervention(s)?	Include studies that examine smokefree legislation or policies or a smokefree intervention(s). If the legislation or policy is not explicitly stated, examination of interventions where the removal of second-hand smoke or environmental tobacco smoke is an explicit aim will be included. Examples of interventions include, but are not restricted to: • restrictions to eliminate smoking on hospital and other secondary care properties and estates, both indoors and outdoors, including signage and enforcement • restrictions on staff smoking breaks • revised job descriptions to include policy enforcement by staff • creation of smokefree 'champions' • campaign and information materials to alert staff and service users of proposed and impending policy changes	If yes, proceed to 5. If no, use EX4 on FT – NOT EXAMINING SMOKEFREE

	• interventions that help people temporarily abstain from smoking whilst onsite. Exclude: activities/interventions that will not be covered • Programmes or interventions exclusively aimed at preventing the uptake of tobacco use. • Programmes or interventions exclusively aimed at supporting tobacco use cessation. Exclude studies that do not mention smokefree legislation or policies or a smokefree intervention(s). Also exclude studies conducted in smokefree contexts and settings but which do not examine smokefree implementation process and effect.	
5. SECONDARY CARE: Was the study conducted in a secondary care setting or with secondary care staff, users or visitors?	Include studies where the smoking policy is conducted in a mental health, acute or maternity secondary care settings. Also include other settings where secondary care staff undertake their work where second-hand smoke may be present. Secondary care is defined as a service provided by medical specialists who generally do not have first contact with patients—usually referred to by a GP—such as psychiatrist, dermatologist, etc. • Included secondary care settings are the buildings and grounds of hospitals (including accident and emergency departments), psychiatric units, mental health units, secure hospitals, maternity units, outpatient clinics and staff residencies. • The buildings and grounds of prison healthcare units and tertiary care services where secondary healthcare staff are employed, or secondary healthcare is provided, are settings that will be included. • Smokefree legislation in the UK covers enclosed vehicles for paid and voluntary work, thus ambulances and hospital vehicles are also included as settings. Activities/interventions that will not be covered: • Strategies and interventions for ensuring smokefree compliance in primary care settings (e.g., GP surgeries). • Studies looking at policies that apply to public spaces more generally (e.g., national legislation banning smoking in all closed public places) - even if the public spaces might include secondary health care settings.	If yes, proceed to 6. If no, use EX5 on FT – NOT SECONDARY CARE
6. EVALUATION OF EFFECTIVENESS: Does the study evaluate the effectiveness of strategy/ies or intervention/s to support compliance/implementatio	Include evaluations of specific activities or strategies designed to support the compliance with or implementation of smokefree legislation or policies. If the legislation or policy is not explicitly stated, interventions where the removal of second-hand smoke or environmental tobacco smoke is an explicit aim will be included. Examples of interventions include, but are not restricted to: • restrictions to eliminate smoking on hospital and other secondary care properties and estates, both indoors and outdoors, including signage and enforcement • restrictions on staff smoking breaks	If yes proceed to 7 If no, use Rev 6:EX6 on FT – NOT EVALUATION OF EFFECTIVENESS. Then proceed to 8.

n of smokefree legislation/policies?	• revised job descriptions to include policy enforcement by staff • creation of smokefree 'champions' • campaign and information materials to alert staff and service users of proposed and impending policy changes • interventions that help people temporarily abstain from smoking whilst onsite. Activities/interventions that will not be covered • Programmes or interventions exclusively aimed at preventing the uptake of tobacco use. • Programmes or interventions exclusively aimed at supporting tobacco use cessation. Exclude studies that do not evaluate a strategy or intervention to support compliance or implementation with smokefree legislation or policy.	
7. RESEARCH DESIGN: Is the study design a comparison (e.g., controlled trials, before-and-after)?	The study must be a comparison design. Eligible comparison designs: guidelines (including NICE guidelines), randomised controlled trials, controlled trials, controlled before and after studies, interrupted time series, and uncontrolled before and after studies. Any studies without these research designs (e.g., single case studies) should be excluded at this stage. However retrospective comparison studies which include self-report behaviour and/or perceptions of compliance post-implementation could provide a valid measure of effectiveness and should be marked so they can be retrieved for Review 6 later if deemed necessary.	If yes, use Rev 6:IN1 on FT – EFFECTIVENESS REVIEW. Then proceed to 8. If no, use Rev 6:EX7 on FT – NOT RESEARCH DESIGN & mark if retrospective comparison study and proceed to 8.
Marker 2: Retrospective comparison	*Retrospective comparison study which includes self-report behaviour and/or perceptions of compliance post-implementation provide a less robust yet valid measure of effectiveness.* *These studies should be given a marker so they can be retrieved for Review 6 later if deemed necessary*	
8. COUNTRY: Was the study conducted in a high income country(ies)?	Include any study that was conducted in a high income country(ies). High income countries are: Andorra, Aruba, Australia, Austria, Bahamas, The, Bahrain, Barbados, Belgium, Bermuda, Brunei Darussalam, Canada, Cayman Islands, Channel Islands, Croatia, Curaçao, Cyprus, Czech Republic, Denmark, Equatorial Guinea, Estonia, Faeroe Islands, Finland, France, French Polynesia, Germany, Gibraltar, Greece, Greenland, Guam, Hong Kong SAR, China, Hungary, Iceland, Ireland, Isle of Man, Israel, Italy, Japan, Korea, Rep., Kuwait, Liechtenstein, Luxembourg, Macao SAR, China, Malta, Monaco, Netherlands, New Caledonia, New Zealand, Northern Mariana Islands, Norway, Oman, Poland, Portugal, Puerto Rico, Qatar, San Marino, Saudi Arabia, Singapore, Sint Maarten (Dutch part), Slovak Republic, Slovenia, Spain, St. Martin (French part), Sweden, Switzerland, Trinidad and Tobago, Turks and Caicos Islands, United Arab Emirates, United Kingdom, United States, Virgin Islands (U.S.)	If yes, proceed to 9 If no, use Rev7:EX8 on FT – NOT HI COUNTRY

	If a study was conducted in a mixture of high and non-high income countries, include the study. Exclude studies conducted in countries not in this list.	
9. BARRIERS/FACILITATORS: Does the document include barriers or facilitators (including knowledge, attitudes and beliefs) to implementing or complying with smokefree policies/legislation or smokefree interventions?	Include if the document includes barriers or facilitators (including knowledge, attitudes and beliefs) to implementing or complying with smokefree policies/legislation or smokefree interventions. The study must include qualitative and/or quantitative evidence of views and opinions – questionnaire surveys, process evaluations and qualitative studies. This includes trials (controlled and non-controlled), descriptive studies (including questionnaire surveys, and process evaluations), qualitative studies (including, but not restricted to, ethnographies, phenomenologies, and grounded theory studies), discussion papers or reports, and 'views studies' (which are written based on a multiple perspective approach with an emphasis on guidance for health professionals) Relevant data may come from papers from process or implementation issues encountered in trials.	If yes, use Rev 7:IN2 on FT – BARRIERS/FACILITATORS REVIEW. If no, use Rev 7:EX9 on FT – NO BARRIERS/FACILITATORS End of criteria.
QUERY on FT	Query for team discussion	
Marker 3	*Smoking cessation interventions in acute & maternity care*	
Marker 4	*Smoking cessation interventions in mental health care*	
Marker 5	*Cost-effectiveness*	
Marker 6	*Useful background information*	

APPENDIX 6: Quality Assessment Details for Review 7 Included Studies

Theoretical approach

1. Is a qualitative approach appropriate? (a Appropriate, b Inappropriate, c Not sure)
2. Is the study clear in what it seeks to do? (a Clear, b Unclear, c Mixed)

Study design

3. How defensible/rigorous is the research design/methodology? (a Defensible, b Indefensible, c Not sure)

Data collection

4. How well was the data collection carried out? (a Appropriately, b Inappropriately, c Not sure/inadequately reported)

Trustworthiness

5. Is the role of the researcher clearly described? (a Clearly described, b Unclear, c Not described)
6. Is the context clearly described? (a Clear, b Unclear, c Not sure)
7. Were the methods reliable? (a Reliable, b Unreliable, c Not sure)

Analysis

8. Is the data analysis sufficiently rigorous? (a Rigorous, b Not rigorous, c Not sure/not reported)
9. Are the data 'rich'? (a Rich, b Poor, c Not sure/not reported)
10. Is the analysis reliable? (a Reliable, b Unreliable, c Not sure/not reported)
11. Are the findings convincing? (a Convincing, b Not convincing, c Not sure)
12. Are the findings relevant to the aims of the study? (a Relevant, b Irrelevant, c Partially relevant)
13. Conclusions (a Adequate, b Inadequate, c Not sure)

Ethics

14. How clear and coherent is the reporting of ethics? (a Appropriate, b Inappropriate, c Not sure/not reported)

Overall assessment

15. As far as can be ascertained from the paper, how well was the study conducted?

++ *All or most of the checklist criteria have been fulfilled, where they have not been fulfilled the conclusions are very unlikely to alter.*

+ *Some of the checklist criteria have been fulfilled, where they have not been fulfilled, or not adequately described, the conclusions are unlikely to alter.*

- *Few or no checklist criteria have been fulfilled and the conclusions are likely or very likely to alter.*

NR not reported

NA not applicable

Title	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Arack (2009)	a	a	c	c	c	b	c	c	b	c	c	a	a	a	-
Campion (2008)	a	a	b	c	c	a	c	c	a	c	a	a	a	c	+
Cooke (1991)	c	b	b	c	c	c	c	c	b	c	c	a	a	c	- *This paper is a case study, with no methodology reported, so it has achieved a low score on these criteria. Despite this, it still has some interesting barriers and facilitators information.*
Drach (2012)	a	b	c	c	b	b	c	c	b	c	c	a	a	a	-
Fitzpatrick (2009)	a	a	c	c	c	b	c	c	a	c	a	a	a	a	+ *Methodology not described.*
HUG (2007)	a	a	b	c	c	b	c	c	a	c	c	a	a	c	-
Jessup (2007)	a	a	a	a	c	a	a	a	a	a	a	a	a	a	++
Johnson (2010)	a	a	a	a	a	a	a	a	a	a	a	a	a	a	++
Karan (1993)	a	b	b	c	c	b	c	c	a	c	c	c	a	c	-
Kotz (1993)	c	b	c	c	c	b	c	c	c	c	c	c	a	c	-

															This is a case study with no information on data collection, study methodology, so it scores low on these criteria, however it does have useful barriers and facilitators information.
McNeill (2007)	a	a	c	c	c	b	c	c	c	c	a	a	a	a	+
Mental Health Foundation (2009)	a	c	c	b	c	c	c	c	a	c	a	a	a	c	+ *Although the methodology is flawed, the data is rich.*
Parle (2004)	c	b	c	c	c	b	c	c	a	c	c	a	c	c	- *This is a case study, so it has not scored very highly on these criteria, but it has useful barriers and facilitators data.*
Patterson (2008)	a	b	a	a	a	a	a	a	a	a	a	a	a	a	++
Pritchard (2008)	a	a	a	a	a	a	a	a	a	a	a	a	a	a	++
Ratschen (2008)	a	a	c	c	c	b	a	c	a	c	a	a	a	a	+
Ratschen (2009a)	a	a	a	a	a	a	a	a	a	a	a	a	a	a	++
Ratschen (2010)	a	a	a	a	a	a	a	a	a	a	a	a	a	a	++
Schultz (2011)	a	a	a	a	b	b	a	a	a	a	a	a	a	a	++
Seymour (2000)	a	c	c	c	c	b	c	c	a	c	a	a	a	c	-
Sheffer (2009)	a	c	a	a	c	b	c	c	b	c	c	a	a	a	+
Tillgren (1998)	a	c	c	c	c	b	c	c	b	c	a	a	a	c	-
Wareing (2012)	a	a	c	c	a	b	c	c	b	c	c	a	a	c	+
Wheeler (2007)	a	c	c	c	c	b	c	c	b	c	a	a	a	a	-

1.1 Is the source population or source area well described?
1.2 Is the eligible population or area representative of the source population or area?
1.3 Do the selected participants or areas represent the eligible population or area?
2.1 Selection of exposure (and comparison) group. How was selection bias minimised?
2.2 Was the selection of explanatory variables based on a sound theoretical basis?
2.3 Was the contamination acceptably low?
2.4 How well were likely confounding factors identified and controlled?
2.5 Is the setting applicable to the UK?
3.1 Were the outcome measures and procedures reliable?
3.2 Were all outcome measurements complete?
3.3 Were all the important outcomes assessed?
3.4 Was there a similar follow-up time in exposure and comparison groups?
3.5 Was follow-up time meaningful?
4.1 Was the study sufficiently powered to detect an intervention effect (if one exists)?
4.2 Were multiple explanatory variables considered in the analyses?
4.3 Were the analytical methods appropriate?
4.4 Was the precision of association given or calculable? Is association meaningful?
5.1 Are the study results internally valid (i.e. unbiased)?
5.2 Are the findings generalisable to the source population (i.e. externally valid)?

++ for that aspect, the study has been designed/conducted in such a way as to minimise the risk of bias
+ the answer is not clear from the way the study is reported, or that the study may not have addressed all potential sources of bias for that aspect
– for those aspects of the study design in which significant sources of bias may persist
NR not reported
NA not applicable

Title	1.1	1.2	1.3	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	4.4	5.1	5.2
Arack (2009)	+	NA	NR	NA	NA	NA	NA	++	-	+	+	NA	NA	NR	NA	NR	NA	-	-
Baile (1991)	++	-	NR	NA	NA	NA	NA	-	+	+	NA	NA	NA	NA	NA	NR	NA	+	-
Bloor (2006)	++	++	+	NA	NA	NA	NR	++	+	+	+	NA	NA	NR	NA	-	-	+ *Limited reporting of analysis and any confounders makes internal validity unclear; no control group.*	+ *Source population's demographics provided - excluding smoking behaviour.*
Cormac (2010)	+	++	+	NA	NA	NA	NR	++	+	++	++	NA	++	NR	NA	++	+	+	+
Daughton (1992)	-	++	-	NA	NA	NA	NR	-	-	+	+	NA	+	NR	NA	++	++	- *demographic data not collected; no control group*	- *source population not described; potential selection/respondent bias*
Donchin (2004)	++	+	++	NA	NA	NA	NR	+	+	NR	+	NA	+	NR	NA	++	++	+ *no control group for temporal confounders*	+
Erwin	++	++	+	NA	NA	NA	NR	-	-	NR	+	NA	+	NR	NA	NR	NR	-	+

(1991)																		*Data analysis unreported*	
Etter (2008)	++	++	+	NA	NA	NA	NR	+	-	+	+	NA	+	-	NA	+	++	+ *follow-up measures taken 3-5 months post-total ban, subject selection was consistent with no significant diffs btw group demogs*	+ *Small sample size*
Fitzpatrick (2009)	++	+	+	NA	NA	NA	NA	++	+	+	NA	NA	NA	NA	NA	NR	NA	+	+
Garg (2009)	++	+	+	NA	NA	NA	NR	++	-	++	+	NA	NA	NR	NA	-	+	+ *Reliability and validation of outcome measures limited; social desirability/interviewer bias may be a factor; no control group.*	+ *No demographics for non-responders but self-report smoking rates of respondents (30%) slightly higher than UK general population.*
Haller (1996)	+	++	++	+	NA	NA	NR	-	+	NR	+	NA	++	NR	NA	++	++	+ *Risk self-selection bias, unvalidated outcome measures, no control group*	+
Hill (2007)	++	++	++	NA	NA	NA	NA	++	+	+	NA	NA	NA	NA	NA	+	NA	++	++
Hudzinski (1990)	+	++	-	NA	NA	NA	-	+	+	NR	+	NA	+	NR	NA	+	-	+ *Same sample but may have become desensitised to questionnaire; no control group*	+
Jones (2010)	+	++	++	NA	NA	NA	NA	+	+	NA	NA	NA	NA	NA	NA	NR	NA	+	+
Kannegaard (2005)	++	++	++	NA	NA	NA	NA	+	++	NA	NA	NA	-	NR	NA	++	NA	++	++
Lewis (2011)	-	++	-	NA	NA	NA	NA	++	+	NA	NA	NA	NA	NA	NA	++	NA	+	+
Matthews (2005)	+	-	-	NA	NA	NA	NR	-	-	NR	+	NA	++	NR	NA	++	++	- *Paper lacks detail on methods/analysis to answer this*	- *Patient source population possibly; no details to assess this for staff source population*
Parks (2009)	++	++	++	NA	NA	NA	NA	++	++	-	NA	NA	NA	NA	NA	++	NA	+	++
Patten (1995)	+	++	-	NA	NA	NA	NR	+	+	NR	+	NA	++	NR	NA	++	++	+ *risk self-selection bias, unvalidated outcome measures, no control group*	+ *patient chart data possibly, not staff and patient survey results*
Praveen (2009)	-	NR	-	NA	NA	NA	NA	++	++	NA	NA	NA	NA	NA	NA	NR	NA	+	-
Ratschen	++	++	+	NA	NA	NA	NR	++	-	+	+	NA	NA	NR	NA	NR	-	+	+

(2008)																		*Possible respondent reporting bias*	*reasonable interview and survey response rate however based on 1 employee's observations per hospital (survey); triangulated study design*
Ratschen (2009b)	++	++	+	NA	NA	NA	NA	++	++	NA	NA	NA	NA	NA	NA	++	NA	++	++
Rosen (1995)	++	++	+	NA	NA	NA	NR	+	-	++	+	NA	NA	NR	NA	++	++	+ *Potential self selection bias; no control group for temporal confounders*	+
Sheffer (2009)	+	++	NR	NA	NA	NA	NA	-	++	++	NA	NA	++	NA	NA	++	NA	+	+
Shipley (2008)	++	+	++	NA	NA	NA	NR	++	+	++	++	NA	NA	NR	NA	+	+	+ *No control group for temporal trends*	+ *100% participation, full time acute nursing & medical staff only*
Smith (2008)	+	++	++	NA	NA	NA	NA	++	+	NA	NA	NA	NA	NA	NA	++	NA	+	++
Steiner (1991)	+	+	+	NA	NA	NA	NA	-	NR	NA	NA	NA	++	NA	NA	NR	NA	+	+
Steiner (2009)	+	++	+	NA	NA	NA	NA	-	+	-	NA	NA	NA	NA	NA	++	NA	+	+
Stillman (1995)	++	++	+	NR	+	NA	+	+	+	-	+	NA	+	++	+	++	+	+ *That the participants were recruited from a smoking cessation counselling programme*	+
Ullén (2002)	+	+	+	NA	NA	NA	NA	+	+	NA	NA	NA	NA	NR	NA	NR	NA	+	+
Vardavas (2009)	++	+	+	NA	NA	NA	NR	-	-	++	+	NA	NA	NR	NA	+	-	- *Self report smoking, other measures not validated, few p values reported, no control group*	+ *non full-time staff excluded*
Voci (2010)	+	++	-	NA	NA	NA	NA	-	++	NA	NA	NA	NA	NA	NA	++	NA	++	-
Wheeler (2007)	+	++	+	NA	NA	NA	NR	+	+	NR	+	NA	+	NR	NA	++	-	- *Limited reporting as many measures/parts to the study; self-selection bias; no control group*	+
Wye (2010)	++	++	+	NA	NA	NA	NA	+	++	NA	NA	NA	NA	NA	NA	++	NA	++	++

APPENDIX 7: Evidence Tables for Review 7 Included Qualitative Studies

Study details	Research parameters	Population and sample selection	Smokefree	Outcomes and methods of analysis	Results	Notes
Authors *Arack et al* **Year** 2009 **Aim of study** *To explore the effects of a complete smoking ban at an NHS trust, focusing on the attitudes, compliance and smoking behaviour of NHS staff on the smoke-free NHS policy.* **Study design** Cross-sectional study **Quality score** -	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Not stated **Setting** *Isle of Wight NHS Acute Trust.* **How were the data collected: What method(s):** Questionnaires: open-ended questions **When:** Not stated **By Whom:** Not stated	**Country** England **Secondary Care Setting** Both **What population were the sample recruited from:** Staff *11,000 NHS Acute Trust staff* **Source population demographics** Occupation *Acute Trust staff* **How were they recruited:** *'Opportunity sample'. Participants recruited through hospital wards and departments that demonstrated an interest in taking part.* **How many participants were recruited:** Total sample *n=160* *89% female.* *91% Caucasian, 4.5% Asian-Indian, 1.3% Asian-other, 1.3% black African, 0.6% other.* *48.4% never smokers, 27% ex-smokers, 19.5% smokers, 5% occasional smokers.*	**Smokefree: Implementation stage:** Smokefree in place *January 2006* **Fieldwork stage:** After implementation – single time-point *May 2007* **Where:** Not reported **Coverage:** Not reported **Supporting strategies:** Not reported	**Brief description of method and process of analysis:** *Thematic analysis*	**Key themes/findings relevant to this review: Attitudes to smokefree** Staff **Beliefs - people's rights** Smokers' right to smoke **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree results in changed patient aggression/management issues" **Planning & resource issues** Staff workload/resourcing Smoking cessation services **Other factors** Safety issues	**Limitations identified by author(s):** *Possibility of participation bias. Limited sample size.* *No objective measures of health behaviour.* **Recommendations for future research:** *Further research on the effects of the smoking ban: objective measures of health and focus groups to collect information on attitudes, compliance and health behaviour of NHS staff.* *Studies targeting different ethnic groups.* *Development of a standardised attitude scale on smoking behaviour to help support and evaluate workplace smokefree policies.* **Source of funding:** Not reported

		Occupational groups: 38% nursing, 30.9% admin/clerical, 17.8% allied health professions, 2.0% science and professional, 5.3% technical, 3.9% medical, 1.3% auxiliary. **Were there specific inclusion/exclusion criteria:** Inclusion criteria not reported Exclusion criteria not reported % participation agreement *45%*				
Authors *McNeill, Bauld & Ferguson* **Year** 2007 **Aim of study** *To summarise available evidence on tobacco use and tobacco-related harm in psychiatric services.* *To explore the views of stakeholders.* *To examine how different services across the UK had addressed the range of issues around smoking in*	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Case study(ies) **Setting** *Mental health services in Scotland.* **How were the data collected: What method(s):** Interviews Observation **When:** Not stated **By Whom:** Not stated	**Country** Scotland **Secondary Care Setting** Mental Health **What population were the sample recruited from:** Staff *Professionals involved in managing, delivering or supporting mental health services in Scotland.* **Source population demographics** Occupation *Professionals involved in managing, delivering or supporting mental health services in*	**Smokefree: Implementation stage:** *Recent UK mental health setting* **Fieldwork stage:** Before implementation – single time-point *December 2006-March 2007* After implementation – single time-point *Only for case studies* **Where:** Mental Health **Coverage:** *Not applicable.*	**Brief description of method and process of analysis:** *Detailed notes were taken during and following each interview. These notes formed the basis for thematic data analysis with the framework approach commonly used in applied policy research.*	**Key themes/findings relevant to this review: Attitudes to smokefree** Staff **Beliefs - people's rights** Smokers' right to smoke **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree results in changed patient aggression/management issues" "Smokefree results in changed medication issues" "Smokefree affects patient recruitment & retention" "Smokefree affects staff"	**Limitations identified by author(s):** *Findings based on expectations not experiences and limited to staff views - no client perspective provided* **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Government

mental health services. **Study design** Case study Interview study **Quality score** +		*Scotland.* **How were they recruited:** *Interviewees were identified by colleagues in Health Scotland and the Scottish Executive.* **How many participants were recruited:** Total sample *Key informant interviews: 11 health professionals* *Case study interviews: Interviews with various staff members.* **Were there specific inclusion/exclusion criteria:** Inclusion criteria not reported Exclusion criteria not reported % participation agreement not reported			Other views on smokefree effects **Planning & resource issues** Staff workload/resourcing Staff training Smoking cessation services Pharmacotherapies Planning/Timing-specific issues Other planning & resource issues **Communication issues** Availability of information **Other factors** Safety issues Other	
Authors *Campion et al* **Year** 2008 **Aim of study** *The aim of the paper is to describe the introduction, trial and termination of a smoke-free policy in an acute mental health unit of a regional hospital,*	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Not stated **Setting** *Mental health unit with 8 high dependency beds (locked, involuntary patients) and 26 low dependency beds (open, voluntary and involuntary*	**Country** Australia **Secondary Care Setting** Mental Health **What population were the sample recruited from:** *Key informants* **Source population demographics** None reported **How were they recruited:** Not reported	**Smokefree: Implementation stage:** *Smokefree policy trialled and terminated.* **Fieldwork stage:** After implementation – single time-point **Where:** Mental Health **Coverage:** Smokefree building(s) **Supporting strategies:** Written policy(ies)	**Brief description of method and process of analysis:** *Not reported*	**Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree results in changed patient aggression/management issues" "Smokefree affects patient recruitment & retention" **Planning & resource issues** Staff workload/resourcing Staff training	**Limitations identified by author(s):** None identified by author(s) **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Not reported

and to consider factors that may contribute to the success of such policies in other settings. **Study design** Interview study Document/Content analysis *Review of correspondence relating to the trial.* **Quality score** +	*patients). The mental health unit is part of a Queensland regional hospital.* **How were the data collected: What method(s):** Interviews *Key informant interviews* Other *Review of correspondence related to the smoke free trial* **When:** Not stated **By Whom:** Not stated	**How many participants were recruited:** Not reported **Were there specific inclusion/exclusion criteria:** Inclusion criteria not applicable Exclusion criteria not applicable % participation agreement not reported	Implementation committee *steering group* Pharmacotherapies/NRT *for staff* Other *support and information sessions for patients*		Other planning & resource issues **Other factors** Safety issues	
Authors *Cooke* **Year** 1991 **Aim of study** *Not reported* **Study design** Case study **Quality score** - Comments (write in)	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Case study(ies) **Setting** *20-bed acute inpatient psychiatric unit.* **How were the data collected: What method(s):** Not stated **When:** Not stated **By Whom:** Not stated	**Country** Canada **Secondary Care Setting** Mental Health	**Smokefree: Implementation stage:** Smokefree in place **Fieldwork stage:** After implementation – single time-point **Where:** Mental Health **Coverage:** Smokefree building(s) **Supporting strategies:** Not reported	**Brief description of method and process of analysis:** *Not reported*	**Key themes/findings relevant to this review: Attitudes to smokefree** Staff **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree results in changed patient aggression/management issues" Other views on smokefree effects	**Limitations identified by author(s):** None identified by author(s) **Limitations identified by review team:** *This paper is a case study, with no methodology reported, so it has achieved a low quality appraisal score.* **Evidence gaps and/or recommendations for future research:** None reported

						Source of funding: Not reported
Authors *Drach, Morris, Cushing, Romoli and Harris* **Year** 2012 **Aim of study** *To assess current tobacco-related policies and procedures at all state-funded, mental health and drug addiction residential treatment facilities before policy implementation.* **Study design** Cross-sectional study **Quality score** -	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Not stated **Setting** *State-funded, mental health and drug addiction residential treatment facilities.* **How were the data collected: What method(s):** Interviews **When:** Not stated **By Whom:** *Public health staff*	**Country** USA **Secondary Care Setting** Mental Health **What population were the sample recruited from:** *Treatment facility administrators* **Source population demographics** Occupation *Treatment facility administrators.* **How were they recruited:** *Two weeks before survey implementation, a memorandum was sent to treatment facility administrators, informing them of the upcoming survey and requesting their participation.* **How many participants were recruited:** Total sample *Administrators from 163 facilities.* **Were there specific inclusion/exclusion criteria:** Inclusion criteria *Administrators from community-based residential treatment facilities for mental health*	**Smokefree: Implementation stage:** Smokefree impending **Fieldwork stage:** Before implementation – single time-point **Where:** Mental Health **Coverage:** Smokefree building(s) Smokefree grounds **Supporting strategies:** Not reported	**Brief description of method and process of analysis:** *Brief answers from the open-ended item grouped into broad themes using content analysis.*	**Beliefs - people's rights** Smokers' right to smoke **Planning & resource issues** Smoking cessation services Other planning & resource issues	**Limitations identified by author(s):** *'Although assured confidentiality, facility administrators may have overstated the presence of smoke-free policies. Also, strong written policies are not always demonstrated in daily practice; these data should not be assumed to reflect enforcement, compliance, or non-administrative staff support.* **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Government

		and addiction in Oregon. Exclusion criteria not reported % participation agreement *98%*				
Authors *Fitzpatrick et al* **Year** 2009 **Aim of study** *To assess patient and staff attitudes to the 2004 indoor smoking ban, and its implications for smoking management.* **Study design** Cross-sectional study Interview study **Quality score** +	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Not stated **Setting** *Acute general hospital with between 350 and 520 in-patient beds.* **How were the data collected: What method(s):** Interviews *Patient interviews average 5 min; Staff interviews average 15 min.* **When:** Not stated **By Whom:** Not stated	**Country** Ireland **Secondary Care Setting** Both **What population were the sample recruited from:** Patients Staff **Source population demographics** Smoking status *smoking patients and patients using smoking cessation services* **How were they recruited:** *Half of patients recruited outdoors in smoking shelters, and the remainder recruited through ward smoking cessation services.* **How many participants were recruited:** Total sample *30 patients, 28 staff members.* **Were there specific inclusion/exclusion criteria:** Inclusion criteria not	**Smokefree: Implementation stage:** Smokefree in place *Indoor ban implemented in 2004.* Smokefree impending *Campus wide ban to be implemented in 2009.* **Fieldwork stage:** After implementation – single time-point *2005* **Where:** Not reported **Coverage:** Smokefree building(s) Smokefree grounds *Due to be implemented in 2009.* **Supporting strategies:** Not reported	**Brief description of method and process of analysis:** *Not reported.*	**Key themes/findings relevant to this review: Attitudes to smokefree** Patients **Other factors** Safety issues	**Limitations identified by author(s):** None identified by author(s) **Limitations identified by review team:** *Methodology not described.* **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Government

		reported Exclusion criteria not reported % participation agreement not reported				
Authors *HUG Highland Users Group* **Year** 2007 **Aim of study** *To explore the feelings of the Highland Users Group about the [public smoking] ban, and to explore their views on the possibility of Psychiatric Hospitals becoming smoke free.* **Study design** *Discussion meetings.* **Quality score** -	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Not stated **Setting** *Highland Users Group, a network of people who use, or have used, mental health services in the Highlands* **How were the data collected: What method(s):** *Discussion meetings.* **When:** *August 2006* **By Whom:** Not stated	**Country** Scotland **Secondary Care Setting** Mental Health **What population were the sample recruited from:** Patients *People who use, or have used, mental health services in the Highlands* **Source population demographics** None reported **How were they recruited:** Not reported **How many participants were recruited:** Total sample *n=85* **Were there specific inclusion/exclusion criteria:** Inclusion criteria not applicable Exclusion criteria not applicable % participation agreement not reported	**Smokefree: Implementation stage:** *Psychiatric units exempt from smoking ban at the time of the study.* **Fieldwork stage:** Before implementation – single time-point **Where:** Mental Health **Coverage:** *Psychiatric units exempt from smoking ban.* **Supporting strategies:** *Not applicable*	**Brief description of method and process of analysis:** *Not reported.*	**Key themes/findings relevant to this review: Attitudes to smokefree** Patients **Beliefs - people's rights** Smokers' right to smoke **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree affects patients' mental health" "Smokefree results in changed patient aggression/management issues" "Smokefree affects patient recruitment & retention" **Planning & resource issues** Smoking cessation services Planning/Timing-specific issues **Other factors** Safety issues	**Limitations identified by author(s):** None identified by author(s) **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Voluntary/Charity
Authors *Jessup*	**What was/were the research questions:**	**Country** USA	**Smokefree: Implementation stage:**	**Brief description of method and process of**	**Key themes/findings relevant to this review:**	**Limitations identified by**

Year 2007 **Aim of study** *Aims of the case study were to examine program characteristics affecting organizational change in tobacco policy and clinical practice and explore perinatal-specific motivators for change.* **Study design** Interview study *face-to-face semi-structured interview* **Quality score** ++	Not reported **What theoretical approach does the study take:** Case study(ies) **Setting** *Women's Recovery Service is a residential perinatal drug and alcohol treatment and recovery services program with a 90 day residential treatment component, after care and transitional housing. It has capacity for 20 pregnant and/or parenting women and 12 children ages 0 to 11 years.* **How were the data collected: What method(s):** Depth interviews (one-to-one) *1 hour* **When:** Not stated **By Whom:** Not stated	**Secondary Care Setting** Mental Health **What population were the sample recruited from:** Staff *Executive Director and Programme Staff* **Source population demographics** None reported **How were they recruited:** Recruitment method *All staff invite to participate* **How many participants were recruited:** Total sample *8: Executive Director; Medical Director; Nurse; Therapist; Child Care Director; Case Manager x 2; Intake Specialist.* **Were there specific inclusion/exclusion criteria:** Inclusion criteria not applicable Exclusion criteria not applicable % participation agreement *73% (three overnight staff declined to take part due to time inconvenience).*	Smokefree in place **Fieldwork stage:** After implementation – single time-point **Where:** Mental Health **Coverage:** *Clients were required to abstain from cigarette smoking entirely while enrolled in the residential program, including during passes to outside appointments, events, and family or child visitation.* **Supporting strategies:** Posters/signage Cessation support Pharmacotherapies/NRT Removal from treatment (patient) *This practice was eliminated after a few weeks.* Other *Sanctions (reduction of privileges, loss of pass) for tobacco use accompanied by increase in therapeutic interventions (e.g. homework, reading). Educational materials. Client verbal agreement signature on a non-smoking statement of understanding. Pre-admission notification*	**analysis:** *Interviews audio-recorded and transcribed then coded.* *A total of 81 codes emerged, and transcripts were coded using them. Analysis was conducted using a theoretical analytic framework. The framework was composed of organizational domains, including organizational readiness and climate, staff attributes, and agency resources.*	**Attitudes to smokefree** Other group **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree affects patient recruitment & retention" Other views on smokefree effects **Planning & resource issues** Staff workload/resourcing Smoking cessation services Other planning & resource issues	**author(s):** *Results derived from examination of a single program and generalise only to that program. Sample selection limited to staff members employed at the program at the time the study was conducted. Recall bias and pro-innovation bias may have altered or omitted significant facts of the story of organisational change as reported by the respondents.* **Recommendations for future research:** *Theoretical models of organizational change do not specifically conceptualize stigma or controversy attached to an innovation, therefore development of theoretical models that account for the status of an innovation as disputed would be especially relevant for understanding*

			to clients and referral sources regarding the program's tobacco policy and treatment. Placement of the phrase "nicotine free" in the outgoing message of the program's answering machine and on the WRS program brochure, website, and t-shirts.			*how organizations and individuals interact with controversial technology or tools. While educational level has been described as positively affecting innovation, it would be useful to understand the effects of role diversity on organizational change. Research on the impact of elimination of environmental tobacco smoke and nicotine treatment on paediatric respiratory status of children in residential drug abuse treatment settings could have significant implications for improved health status and cost reduction.* **Source of funding:** Government
Authors *Johnson, Moffat and Malchy* **Year**	**What was/were the research questions:** Not reported **What theoretical**	**Country** Canada **Secondary Care Setting**	**Smokefree: Implementation stage:** Smokefree in place **Fieldwork stage:**	**Brief description of method and process of analysis:** *Discourse analysis*	**Beliefs - people's rights** Smokers' right to smoke **Beliefs - effects of smokefree on patients,**	**Limitations identified by author(s):** *The authors*

2010 **Aim of study** *To examine the perceptions of health care providers, both professionals and paraprofessionals, in relation to their roles in tobacco control in the community mental health system.* **Quality score** ++	**approach does the study take:** Discourse Analysis **Setting** *Two community mental health teams, two community resource centres and two mental health housing units.* **How were the data collected: What method(s):** Depth interviews (one-to-one) **When:** *January-April 2009* **By Whom:** Author/Researcher	Mental Health **What population were the sample recruited from:** Staff **Source population demographics** Occupation *Community mental health care providers: Para-professionals and professionals such as nurses, medics and occupational therapists.* **How were they recruited:** *Not reported* **How many participants were recruited:** Total sample *91: professionals [n = 42] and paraprofessionals [n = 49].* *Over half (63%) of the total sample was female. The average time spent working in the mental health system was 10.3 years and the average time in the current workplace was 4.8 years. Of the 91 participants, 52 were non smokers, 18 were former smokers, 6 were occasional smokers and 15 identified as current smokers.* **Were there specific inclusion/exclusion criteria:**	After implementation – single time-point *January -April 2009* **Where:** Mental Health **Coverage:** Smokefree building(s) Smokefree grounds **Supporting strategies:** Posters/signage Staff training Other (write in) *$2,000 fines for patients*		**staff & visitors** "Smokefree affects patients' mental health" **Planning & resource issues** Staff workload/resourcing Smoking cessation services Pharmacotherapies **Communication issues** Health professional's-Patient's relationship **Other factors** Other	*recognise that any text will only ever convey or produce a partial perspective of reality.* **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Government

		Inclusion criteria not reported Exclusion criteria not reported % participation agreement not reported				
Authors *Karan* **Year** 1993 **Aim of study** *Not reported.* **Study design** Case study **Quality score** -	**What was/were the research questions:** Not applicable **What theoretical approach does the study take:** Case study(ies) **Setting** *Inpatient unit of the Division of Substance Abuse at the Medical College of Virginia. A tertiary care facility serving a primarily indigent population from across the state. The unit specialises in caring for complicated patients who cannot otherwise be served by community resources. These patients typically have late-stage addiction and/or compounding medical, psychiatric and obstetric issues.* **How were the data collected: What method(s):** Not stated **When:** Not stated	**Country** USA **Secondary Care Setting** Mental Health	**Smokefree: Implementation stage:** Smokefree in place **Fieldwork stage:** After implementation – single time-point **Where:** Mental Health **Coverage:** Smokefree building(s) Other *in-patients required to be abstinent from smoking.* **Supporting strategies:** Patient appointment letters Cessation support Pharmacotherapies/NRT Staff training Other *Information sessions and educational materials for staff*	**Brief description of method and process of analysis:** *Not reported.*	**Key themes/findings relevant to this review: Attitudes to smokefree** Staff Other group(s) **Beliefs - people's rights** Smokers' right to smoke **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree results in changed patient aggression/management issues" "Smokefree affects patient recruitment & retention" **Planning & resource issues** Staff workload/resourcing Structural issues Other planning & resource issues **Communication issues** Health professional's-Patient's relationship **Other factors** Safety issues Other	**Limitations identified by author(s):** None identified by author(s) **Evidence gaps:** *Further knowledge about the use of pharmacologic agents including transdermal nicotine, and even possibly nicotine maintenance is needed for persons who are chemically dependent.* **Source of funding:** Not reported

	By Whom: Not stated					
Authors *Kotz* **Year** 1993 **Aim of study** *Case study* **Study design** Case study **Quality score** -	**What was/were the research questions:** Not applicable **What theoretical approach does the study take:** Case study(ies) **Setting** *20-bed chemical dependency unit in a 1,000 bed tertiary care setting.* **How were the data collected: What method(s):** Not stated **When:** Not stated **By Whom:** Not stated	**Country** USA **Secondary Care Setting** Mental Health	**Smokefree: Implementation stage:** Smokefree in place **Fieldwork stage:** After implementation – multiple time-points **Where:** Mental Health **Coverage:** Smokefree building(s) **Supporting strategies:** Cessation support Staff training Removal from treatment (patient) Other *Party to celebrate 'independence from nicotine'.* *Patient lounges equipped with board games etc to encourage patients to come back to the rooms.* *Educational materials for patients about nicotine addiction.*	**Brief description of method and process of analysis:** *Not reported*	**Key themes/findings relevant to this review: Attitudes to smokefree** Other group(s) **Beliefs - people's rights** Smokers' right to smoke **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree affects patient recruitment & retention" Other views on smokefree effects **Planning & resource issues** Smoking cessation services Other planning & resource issues **Communication issues** Health professional's-Patient's relationship **Other factors** Safety issues	**Limitations identified by author(s):** None identified by author(s) **Limitations identified by review team:** *This is a case study with no information on data collection, study methodology, so it has a low quality appraisal score.* **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Not reported
Authors *Mental Health Foundation* **Year** 2009 **Aim of study** *To assess how*	**What was/were the research questions:** *1. Do you believe the smoking ban in psychiatric units has been* *(a) wholly effective* *(b) partially effective* *(c) not effective at all* *2. If (a) above, what have*	**Country** England **Secondary Care Setting** Mental Health **What population were the sample recruited from:** Staff	**Smokefree: Implementation stage:** Smokefree in place *July 2008* **Fieldwork stage:** After implementation – single time-point *Autumn 2008*	**Brief description of method and process of analysis:** *Responses were analysed thematically, with conclusions and recommendations drawn from the findings.*	**Key themes/findings relevant to this review: Attitudes to smokefree** Patients **Beliefs - people's rights** Smokers' right to smoke **Beliefs - effects of smokefree on patients,**	**Limitations identified by author(s):** *No attempt was made to receive responses from all psychiatric units in England, or from a unit within every*

effectively the prohibition on smoking had been implemented (in terms of no smoking in enclosed spaces as required by law), the factors that had led to greater or lesser success and what extra support might be required for full effective implementation **Study design** Cross-sectional study Other *Over and above the returned questionnaires, the Foundation also received a small number of email responses commenting on the issue of smoking in psychiatric units.* **Quality score** +	*been the main factors in achieving this?* *3. If (b) or (c) above, what have been the main factors in the ban not being wholly effective?* *4. What extra support do you think patients and staff need to ensure a wholly effective ban on smoking in psychiatric units?* **What theoretical approach does the study take:** Not stated **Setting** Setting details *psychiatric units* **How were the data collected: What method(s):** Questionnaires: open-ended questions **When:** *Questionnaires were circulated in the last week of October 2008 and responses invited by 27 November 2008.* Not applicable **By Whom:** Not applicable	*Psychiatric unit staff* **Source population demographics** None reported **How were they recruited:** Recruitment method *A short questionnaire was given to members of the National Acute Steering Group, with an invitation to circulate it more widely to psychiatric units (the Steering Group is a sub-group of the National Acute Inpatient Mental Health Project Board, whose core aim is to provide a collective focus between national and local stakeholders on acute inpatient care in England). Through the offices of the National Association of Psychiatric Intensive Care Units (NAPICU) a copy was also circulated to the PICU membership.* **How many participants were recruited:** Total sample *109 surveys from England (100 NHS and 9 private sector).* *NHS responses came from across 40 NHS Trusts.* *[It is possible that a small number of the 100 responses from NHS units in England are from*	**Where:** Mental Health **Coverage:** Smokefree building(s) **Supporting strategies:** Not reported		**staff & visitors** "Smokefree results in changed patient aggression/management issues" Other views on smokefree effects **Planning & resource issues** Staff workload/resourcing Smoking cessation services Structural issues Other planning & resource issues **Communication issues** Availability of information Staffs' familiarity/understanding of policy Health professional's-Patient's relationship Other communication issues **Other factors** Safety issues	*NHS mental health trust (of 75 NHS mental health trusts in England, response were received from units within 40 of them). The questionnaire relied on its circulation by members of the National Acute Steering Group and NAPICU, and contained no obligation to respond. The findings therefore represent a snapshot as at the end of November 2008, some five months after the smoking prohibition had come into effect.* *Other than some of the questionnaires being sent specifically to PICUs, information was not sought on the type, size or layout of unit that was responding. It is likely that the nature of different units (for example, the level of illness of patients in different units,*

		different staff in the same unit, ie responses came from fewer than 100 NHS units.] **Were there specific inclusion/exclusion criteria:** Inclusion criteria not applicable Exclusion criteria not applicable % participation agreement not reported *It is not reported/known how many units the questionnaire was distributed to.*				*length of patient stay in a unit, level of security, and physical layout of the unit) will impact on how effective the ban has been, but no analysis of this was possible.* *No record was kept of which units received a copy of the questionnaire nor which member of staff.* *Respondents were not asked to state their job title or responsibilities. Some did, however, suggesting that the majority of responses were completed by ward staff and ward managers with a few completed by consultant psychiatrists or hospital or Trust managers. Nor were respondents asked to state whether they were themselves smokers or not, which may have been influential in determining their replies. What was*

						and what wasn't considered "effective" may have been interpreted differently by different respondents – indeed, two respondents specifically queried what "effective" meant. A number of respondents indicated that their comments were given in a personal capacity rather than an organisational one. **Limitations identified by review team:** *Although the methodology is flawed, the data is rich.* **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Voluntary/Charity
Authors *Parle et al* **Year** 2004	**What was/were the research questions:** Not reported **What theoretical approach does the study**	**Country** Canada **Secondary Care Setting** Mental Health	**Smokefree: Implementation stage:** Smokefree in place *Ban in place from May 2003*	**Brief description of method and process of analysis:** *Not reported*	**Key themes/findings relevant to this review: Attitudes to smokefree** Staff Patients	**Limitations identified by author(s):** None identified by author(s)

Aim of study *To discuss the operational, health and safety, clinical and ethical issues surrounding the decision of a mental health centre to go smokefree.* **Study design** Case study **Quality score** -	**take:** Case study(ies) **Setting** *291 bed psychiatric hospital* **How were the data collected: What method(s):** Not stated **When:** Not stated **By Whom:** Not stated		**Fieldwork stage:** After implementation – single time-point **Where:** Mental Health **Coverage:** Smokefree building(s) Smokefree grounds **Supporting strategies:** Posters/signage Cessation support *Financial support package to assist staff with the purchase of cessation aids.* Pharmacotherapies/NRT Other *Self-help materials.* *Contests to promote awareness and voluntary cessation.* *Extra recreational activities to assist in avoiding boredom and inactivity in the three to four weeks following implementation of the ban.* *Low calorie snacks were provided to assist with cravings and to discourage snacking on high calorie foods.*		Other group(s) **Beliefs - people's rights** Smokers' right to smoke **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree affects patients' mental health" "Smokefree results in changed patient aggression/management issues" "Smokefree results in changed medication issues" "Smokefree affects patient recruitment & retention" Other views on smokefree effects **Planning & resource issues** Other planning & resource issues **Communication issues** Availability of information **Other factors** Safety issues	**Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Not reported
Authors *Patterson et al* **Year** 2008	**What was/were the research questions:** Not reported *The interviews focused on the security staff*	**Country** Canada **Secondary Care Setting** Both	**Fieldwork stage:** After implementation – single time-point *March- July 2002*	**Brief description of method and process of analysis:** *Thematic analysis.*	**Communication issues** Health professional's-Patient's relationship	**Limitations identified by author(s):** *'Although researcher selected*

Aim of study *To explore the occupational culture of hospital security staff tasked with implementing a restrictive smoking policy.* **Study design** Interview study Participant observation **Quality score** ++	*members' attitudes toward enforcing the new tobacco policy* **What theoretical approach does the study take:** Ethnography **Setting** *A 700-bed hospital with 7,500 staff.* **How were the data collected: What method(s):** Depth interviews (one-to-one) *30 min-1 hour* Observation **When:** Working hours/Work break **By Whom:** Author/Researcher	**What population were the sample recruited from:** Staff *Hospital security staff* **Source population demographics** Occupation *Security staff* **How were they recruited:** *Opportunistic* **How many participants were recruited:** Total sample *Total: 19* *Full time staff: 12* *Part time staff: 3* *Supervisors: 4* **Were there specific inclusion/exclusion criteria:** Inclusion criteria not applicable Exclusion criteria not applicable % participation agreement not reported	**Where:** Both **Coverage:** Smokefree building(s) **Supporting strategies:** Not reported			*days and times when observations were conducted, he could not be sure that specific members of staff would be available to participate.'* **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Government
Authors *Pritchard & McNeill* **Year** 2008 **Aim of study** *To investigate the implementation of a smoke-free policy for buildings and grounds in a large*	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Not stated **Setting** *A large mental health trust in England. The trust*	**Country** England **Secondary Care Setting** Mental Health **What population were the sample recruited from:** Staff Other(s) *patient advocates*	**Smokefree: Implementation stage:** Smokefree in place **Fieldwork stage:** After implementation – single time-point *March 2007* **Where:** Mental Health **Coverage:**	**Brief description of method and process of analysis:** *Interviews were digitally recorded (except where participants did not agree to this), and transcribed verbatim. Thematic analysis.*	**Beliefs - people's rights** Smokers' right to smoke **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree results in changed patient aggression/management issues" **Planning & resource**	**Limitations identified by author(s):** None identified by author(s) **Evidence gaps and/or recommendations for future research:**

mental health trust in England. **Study design** Interview study **Quality score** ++	*concerned included a spectrum of low to high-secure premises across three areas of local, forensic and corporate services. Local services incorporated community and acute-based services for adults, children and adolescents, people with learning disabilities and older people.* **How were the data collected: What method(s):** Interviews **When:** Working hours/Work break **By Whom:** Author/Researcher	**Source population demographics** None reported **How were they recruited:** *Prior to each interview an information sheet was sent to participants, outlining the role and purpose of the research and a consent form.* **How many participants were recruited:** Total sample *19.* *Interviews included four patient advocates and 15 members of staff including nursing (n=10), consultants (n=2), and others (n=3). The respondents were from across the directorates categorised into corporate services (n=1), adult mental health (n=5), forensics (n=6), learning disabilities (n=2), children and adolescents (n=1), and older people (n=4). Eight were male and 11 female.* **Were there specific inclusion/exclusion criteria:** Inclusion criteria not applicable Exclusion criteria not applicable % participation	Smokefree building(s) Smokefree grounds **Supporting strategies:** Written policy(ies) Cessation support Pharmacotherapies/NRT Staff training Other (write in) *Information materials*		**issues** Staff workload/resourcing Staff training Smoking cessation services Structural issues Other planning & resource issues **Other factors** Safety issues Other	None reported **Source of funding:** Government

		agreement not reported				
Authors *Ratschen, Britton & McNeill* **Year** 2008 *Smoke-free hospitals – the English experience: results from a survey, interviews, and site visits* 2009 *[A further paper, focussed on the study's mental health data]Implementation of smoke-free policies in mental health in-patient settings in England* **Aim of study** *To determine the extent of smoke-free policy implementation in English NHS acute and mental health Trusts, and to explore challenges and impacts related to policy implementation* **Study design** Cross-sectional study Interview study	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Not stated **Setting** *English NHS Trusts providing acute and/or mental health services in inpatient facilities* **How were the data collected: What method(s):** Depth interviews (one-to-one) *~30 min, semi-structured* **When:** Not stated **By Whom:** Not stated	**Country** England **Secondary Care Setting** Both **What population were the sample recruited from:** Staff *Trust Human Resources Directors, Trust Chief Executives* **Source population demographics** Occupation *Trust Human Resources Directors, Trust Chief Executives* **How were they recruited:** *83 survey respondents had indicated their availability for a telephone interview. A 30% sample (25 Trusts) was taken, stratified according to trust type, of which 22 agreed to participate and were interviewed after obtaining informed consent.* **How many participants were recruited:** Total sample *n=22 (n=15 acute Trust staff n=7 mental health setting staff)* **Were there specific**	**Smokefree: Implementation stage:** Smokefree in place *98% respondents reported smokefree policies were implemented, pre-national legislation (1 Jul '07) [from the survey results]* Smokefree impending *2% respondents reported date set for smokefree policies to be in place before 1 Jul '07 [from the survey results]* **Fieldwork stage:** After implementation – single time-point *For 98% respondents* **Where:** Both **Coverage:** Smokefree building(s) *16% smokefree buildings (Acute Trusts); 29% smokefree buildings (Mental Health settings) [from the survey results]* Ban exclusions (write in) *Mental Health Settings (78%); Acute Trusts (50%) (for bereaved/distressed relatives (45%), sheltered outdoor areas (25%), smoking rooms (6%)); for psychiatric patients in 15% Acute Trusts, 65% in mental health settings*	**Brief description of method and process of analysis:** *Responses allocated to predefined/emerging categories in the interview guide.*	**Key themes/findings relevant to this review: Attitudes to smokefree** Staff **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree results in changed patient aggression/management issues" Other views on smokefree effects **Planning & resource issues** Staff workload/resourcing Smoking cessation services **Communication issues** Availability of information Other communication issues **Other factors** Safety issues Other	**Limitations identified by author(s):** *There may be a small degree of reporting bias to the study (study participants largely responsible for implementation); 21% study population did not respond thus limiting the generalizability of results; self-selection bias may affect interview data.* **Evidence gaps:** *A set of defined smoke-free indicators would be useful to assess policy implementation in future, including objective measures of exposure to tobacco smoke* **Source of funding:** Other

Participant observation **Quality score** +		**inclusion/exclusion criteria:** Inclusion criteria *Human Resources Directors of the Trusts were identified as potential study participants. Where no Human Resources Director or alternative main personnel contact could be identified, Chief Executives were chosen instead.* Exclusion criteria not reported % participation agreement *88% (88% acute Trusts, 100% mental health settings)*	*[from the survey results]* Other (write in) *84% smokefree buildings and grounds, including 41% without exemptions (Acute Trusts); 64% smokefree whole premises, including 13% without exemptions (Mental Health settings); 7% smokefree parts of buildings (Mental Health settings) [from the survey results]* **Supporting strategies:** Posters/signage Staff meetings *Almost 75% Trusts informed staff by disseminating information in meetings or special events [from results section]* Staff letters/payslip notes *Emails, newsletters or Trust intranet* Cessation support *Onsite cessation support for patients, 73% Trusts; cessation classes offered for staff, 95% Trusts [from results section]* Pharmacotherapies/NRT *For patients from the hospital pharmacy, 77% Trusts; For staff, free or reduced NRT, 55% Trusts [from results section]* Other			

			Admissions assessments, 45% Trusts; implementation budget, 24% acute Trusts and 19% mental health settings; [from results section]			
Authors *Ratschen et al* **Year** 2009 **Aim of study** *To explore the practical implications of, and the problems arising from, the implementation of a comprehensive smoke-free policy in acute adult inpatient mental health wards.* **Study design** Cross-sectional study Interview study **Quality score** ++	**What was/were the research questions:** Question(s) *A semi-structured interview guide was drafted to explore the following themes:* *1. Attitude towards the smoke-free policy* *2. Arrangements to enforce the policy and support offered to patients* *3. Perceived impacts of the smoke-free policy* *4. Perceptions of patients' smoking* *5. Options for more structured support for patients addressing smoking.* **What theoretical approach does the study take:** *The interview guide was drafted on the basis of the social–cognitive theory, which is a psychosocial model of human behaviour.* **Setting** Setting details (write in) *Two mixed-gender 21-bed*	**Country** England **Secondary Care Setting** Mental Health **What population were the sample recruited from:** Staff *20 nurses; 16 healthcare assistants; 4 consultants; 4 senior house officers; 2 occupational therapists; 2 occupational therapy assistants; 2 ward managers.* **Source population demographics** Occupation *20 nurses; 16 healthcare assistants; 4 consultants; 4 senior house officers; 2 occupational therapists; 2 occupational therapy assistants; 2 ward managers.* **How were they recruited:** Recruitment method *Participants were chosen by sampling within strata defined on purpose to capture the full range of staff groups*	**Smokefree: Implementation stage:** Smokefree in place *Implemented in March 2006* **Fieldwork stage:** After implementation – single time-point **Where:** Mental Health **Coverage:** Smokefree building(s) Smokefree grounds Other *Exceptions to the policy were permitted on a documented case-by-case basis for patients, if criteria defined to address the local circumstances of the respective ward were met.* **Supporting strategies:** Not reported	**Brief description of method and process of analysis:** *Interview data were analysed in a framework approach incorporating the above themes and using Nvivo 7 software. The interviewer familiarized herself with raw data by listening to interview tapes and iterative reading of transcripts to identify all subthemes and emerging issues, and then indexed the data accordingly. All transcripts were also independently read, and themes were identified by another researcher. The indexed data were allocated to the themes of the framework, and the contents of each theme were distilled and summarized.*	**Key themes/findings relevant to this review: Attitudes to smokefree** Staff **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree affects patients' mental health" "Smokefree results in changed patient aggression/management issues" "Smokefree results in changed medication issues" Other views on smokefree effects **Planning & resource issues** Staff workload/resourcing Staff training Smoking cessation services Pharmacotherapies **Communication issues** Patients' familiarity/understanding of policy Health professional's-Patient's relationship	**Limitations identified by author(s):** *'Given that our results refer to two wards of one mental health trust in England, their generalizability may be limited; however, the themes identified were raised by respondents sampled across all professional groups and are likely to be broadly representative of settings similar to the study environment.'* **Evidence gaps and/or recommendations for future research:** Future research recommendations *Previous studies have shown that exposure to ETS in mental health settings decreased*

	acute adult mental health wards in a local mental health trust. **How were the data collected: What method(s):** Depth interviews (one-to-one) *30-45 minutes* **When:** *February-April 2008.* **By Whom:** Author/Researcher	*involved in patient care.* **How many participants were recruited:** Total sample *n=16* *6 male, 10 female.* *Two nurses and two health-care assistants per ward; one consultant and one senior house officer from each ward;* *one occupational therapist and one occupational* *therapy (OT) assistant working across both wards* *were chosen at random. In addition, the ward manager and one health-care assistant employed in one ward to facilitate patient escorts were sampled purposively.* **Were there specific inclusion/exclusion criteria:** Inclusion criteria not applicable Exclusion criteria not applicable % participation agreement *One person declined to take part and was substituted by a participant chosen from the same stratum at random.*			**Other factors** Safety issues	*with the implementation of a smoke-free policy. It is ironic that, in this study, several believed that ETS had increased following implementation of the smoke-free policy, although no objective data were collected to validate this view. Previous evidence also indicates no lasting increase in violence and aggression after the implementation of smoke-free policies in inpatient settings; however, many respondents in our study reported frequent verbal abuse and aggression related to smoking 1 year after policy implementation. It seems plausible that some of the agitation cited resulted from a lack of support in coping with nicotine withdrawal. The difficulty of distinguishing between symptoms*

						of nicotine withdrawal from illness-related symptoms has been described previously, and the perception in our study that withdrawal symptoms were sometimes treated as symptoms of mental illness calls for further exploration. Further research into these issues, especially qualitative research with inpatients, will be vital in understanding how smoke-free policies can be implemented optimally. **Source of funding:** Not reported
Authors *Ratschen et al* **Year** 2010 **Aim of study** *To explore patients' experience, smoking behaviour and symptoms of nicotine withdrawal in the*	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Not stated **Setting** *Two acute adult mental health wards housing 16 female and 16 male inpatients respectively,*	**Country** England **Secondary Care Setting** Mental Health **What population were the sample recruited from:** Patients **Source population demographics** Smoking status	**Smokefree: Implementation stage:** Smokefree in place *March 2007* **Fieldwork stage:** After implementation – single time-point *May-June 2008* **Where:** Mental Health **Coverage:**	**Brief description of method and process of analysis:** *Structured data from the interviews were collated in Microsoft Excel data files. Notes of the exploratory interview part were transcribed into verbatim text (wherever possible, depending on the patient's organization of speech) and analysed in*	**Key themes/findings relevant to this review: Attitudes to smokefree** Patients **Beliefs - people's rights** Smokers' right to smoke **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree affects patients' mental health" **Planning & resource**	**Limitations identified by author(s):** *The study was conducted on three wards located at one site, and in a small sample using qualitative methods. The generalizability of results is therefore limited, and*

context of a comprehensive smokefree policy on mental health acute wards, and to identify options for the future to promote and support smoking cessation and/or reduction in these settings. **Study design** Cross-sectional study Interview study **Quality score** ++	*and one 10-bed intensive care unit, all of which were located at the same site.* **How were the data collected: What method(s):** Depth interviews (one-to-one) **When:** *May-June 2008* **By Whom:** Author/Researcher	*smokers* **How were they recruited:** *Participants were chosen on the basis of a criterion sampling technique by approaching every inpatient who fulfilled the inclusion criteria. Recruitment was continued until it was felt that no novel issues related to the main subject of patients' experience with the smoke-free policy and patients' smoking behaviour on the trust premises were emerging – i.e. the point of data saturation in view of the focus of the study had been reached. Ward staff were consulted on the eligibility of patients and introduced the researcher to potential participants.* **How many participants were recruited:** Total sample *n=15* *9 male, 6 female* *Mean age 42.3 years (range 27-61)* *Mean time on ward (days) 151 days (range 2-990)* *Mean years of smoking 30.2 (range 10-52)* *Diagnosis: Schizophrenia, schizotypal and delusional disorders n=5; Mood and*	Smokefree building(s) Smokefree grounds Ban exclusions *Formally, patients were not allowed to smoke anywhere on the premises; however, since the premises bordered a busy main road and were opposite a school, smoking in front of the entrance to the wards on trust grounds was condoned for non-detained smokers. Those detained on the two acute wards were escorted off the premises by staff to smoke. Patients on the intensive care unit were allowed to smoke in the open courtyard ad libitum.* **Supporting strategies:** Pharmacotherapies/NRT	*a framework approach using NVivo 7 software. The transcripts were read repeatedly by the main researcher and another researcher, and data were allocated to predefined categories of the interview guide and newly emerging themes. The coded data were then ascribed to the higher-order categories 'health behaviour', 'individual factors (cognitive and affective)', and 'environmental factors' of social cognitive theory, and the analysis undertaken with a special focus on environmental and cognitive and affective individual factors facilitating or impeding health behavioural change.*	**issues** Pharmacotherapies **Communication issues** Patients' familiarity/understanding of policy **Other factors** Safety issues	*particularly results referring to the measurement of structured data need to be regarded as preliminary, with no statistical tests carried out due to very small sample sizes.* **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Other

		affective disorders n=7; Neurotic, stress-related and somatoform disorders n=1; Organic disorder n=1. **Were there specific inclusion/exclusion criteria:** Inclusion criteria *Smoker. Capable of giving informed consent and participate in the study without this posing risks to the patient's condition or the researcher.* Exclusion criteria not applicable % participation agreement *54% On the two acute adult mental health wards, five of the 11 female smokers and seven of the 13 male smokers who were approached agreed to participate in the study, and no exclusions due to the severity of the mental health condition were made on either ward. Three of the four patients deemed eligible under clinical and security considerations on the intensive care units (one female and two male) were recruited.*				
Authors *Schultz et al.*	**What was/were the research questions:** *Patients: respondents' use*	**Country** Canada	**Smokefree: Implementation stage:** Smokefree in place	**Brief description of method and process of analysis:**	**Key themes/findings relevant to this review: Attitudes to smokefree**	**Limitations identified by author(s):**

Year 2011 **Aim of study** *To determine the consequences of policies mandating smoke-free hospital property in two Canadian acute-care hospitals by eliciting lived experiences of the people faced with enacting the policies.* **Study design** Cross-sectional study Focus group study *Registered Nurses and Other Healthcare Providers* Interview study *Patients, Policy-makers, Support staff* **Quality score** ++	*of tobacco and treatment for tobacco dependence while in hospital, and their impressions of the policy. Healthcare professionals: their perceptions of the policy and the management of tobacco use among patients. Policy-makers & support staff: the development and implementation of the policy, and ongoing concerns.* **What theoretical approach does the study take:** Ethnography **Setting** *2 Canadian tertiary acute-care hospitals in provinces with similar weather conditions* **How were the data collected: What method(s):** Focus groups *Audio-recorded, 60-90mins* Depth interviews (one-to-one) *Audio-recorded, 10-30mins (patients) 30-90mins (policymakers, support staff)* Observation *6hrs/site* **When:** *Dec 08 - May 09 (6m)*	*Alberta, Manitoba* **Secondary Care Setting** Not Mental Health (Acute and/or Maternity) **What population were the sample recruited from:** Patients Staff *Healthcare professionals, policy-makers, hospital support staff (housekeepers, security guards, groundskeepers)* **Source population demographics** Health status *Patients: inpatients with acute/chronic health conditions* Smoking status *Smokers & non-smokers* Age *Adult* **How were they recruited:** Recruitment method *Patients & healthcare providers: convenience and stratified quota strategies (advertising posters and pamphlets) Policy-makers and hospital support staff: purposive and stratified quota strategies (invitation)* **How many participants were recruited:**	*"At each site, three years before our study began, a policy for smoke-free property had been implemented under the direction of local health authorities and in response to city bylaws mandating smoke-free public places."* **Fieldwork stage:** After implementation – single time-point **Where:** Not Mental Health **Coverage:** Smokefree building(s) Smokefree doorways/entrances Ban exclusions (write in) *"Wards providing palliative, hospice or psychiatric care or care for chemical-dependence were exempt from the smoke-free policies. At one hospital, patients of the emergency department were allowed to smoke outside under supervision."* Other (write in) *Parking lots* *Spaces adjacent to air uptake vents* **Supporting strategies:** Written policy(ies) *Copies of smokefree*	*Data from verbatim transcriptions, documents from study wards and field observation notes analysed using a nonlinear process to generate themes inductively. Themes were reviewed throughout the process with 85% agreement on blind coding of a sample of 1/3 using the final scheme. Data from the demographic questionnaires underwent descriptive statistical analysis.*	Staff Patients **Beliefs - people's rights** Smokers' right to smoke **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree results in changed patient aggression/management issues" **Planning & resource issues** Staff workload/resourcing Staff training Smoking cessation services Pharmacotherapies Other planning & resource issues **Communication issues** Patients' familiarity/understanding of policy Other communication issues **Other factors** Safety issues	*Unable to assess how the smoke-free policies and their impact on patients have evolved over time.* **Evidence gaps and/or recommendations for future research:** Future research recommendations *Studies in other settings are" warranted to capture the diverse array of wards, populations and settings beyond those represented in this study".* **Source of funding:** Government Voluntary/Charity

	By Whom: Author/Researcher	Total sample *Total n=186 (Patients n=82, Registered Nurses n=54, Other Healthcare Providers n=27, Policy-makers n=9, Support staff n=14)* *Sample characteristics: Patients (60% male, 54.7 years, 28% current smoker, 53% former smoker, 20% non smoker); Registered Nurses (19% male, 39.2 years, 15% current smoker, 15% former smoker, 70% non smoker); Other Healthcare Providers (19% male, 34.8 years, 19% current smoker, 22% former smoker, 56% non smoker); Policy-makers (22% male, 50.6 years, 11% current smoker, 56% former smoker, 33% non smoker); Support staff (64% male, 50.0 years, 7% current smoker, 36% former smoker, 57% non smoker)* **Were there specific inclusion/exclusion criteria:** Inclusion criteria *Patients: ability to speak and understand English and provide informed consent* *Healthcare professionals: all health professionals*	*property policy available in ward binders* Posters/signage Cessation support Pharmacotherapies/NRT Removal ashtrays/shelters *"lack of ashtrays" (p.1337)* Other *Repeated noncompliance was to be reported to the hospital administration (1 site)* *Community resources: 2 wards displayed information about local smoker's help line; 1 ward displayed poster for a local tobacco-cessation program*			

		working on the ward *Policy-makers & hospital support staff: not reported* Exclusion criteria not reported % participation agreement *Policy-makers & hospital support staff: all who were invited agreed to be interviewed except 2 policy-makers due to unavailability* *Patients and healthcare providers: not reported*				
Authors *Seymour* **Year** 2000 **Aim of study** *To provide real life examples of effective smokefree policies that could be shared and learnt from.* **Study design** Case study Interview study **Quality score** -	**What was/were the research questions:** *1. when was the policy written?* *2. how regularly is the policy reviewed/updated?* *3. date of last review/update* *4. Please describe the steps you took for establishing the tobacco policy requirements for your organisation, including: 1) getting evidence 2) consultation 3) communication about change 4) Implementation 5) monitoring performance* *5. Please outline how you consulted and communicated with employees before and during implementation of*	**Country** England **Secondary Care Setting** Both **How were they recruited:** *A questionnaire was sent to every health authority and trust in England.*	**Smokefree: Implementation stage:** Smokefree in place **Fieldwork stage:** After implementation – single time-point **Where:** Both **Coverage:** Smokefree building(s) Smokefree grounds *Not all Trusts/Authorities had a ban that included grounds.*	**Brief description of method and process of analysis:** *Not reported*	**Key themes/findings relevant to this review: Attitudes to smokefree** Staff **Planning & resource issues** Smoking cessation services Other planning & resource issues **Communication issues** Other communication issues **Other factors** Other	**Limitations identified by author(s):** None identified by author(s) **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Government

	the policy *6. How are current employees kept updated and new employees informed of the tobacco policy?* *7. How have you addressed the needs of staff who smoke?* *8. Do you offer smoking cessation services? If yes, please describe below* *9. Do you have any provision for patient/visitor smoking? If yes, please describe below.* *10. Please describe below how you monitor your process for policy monitoring (including who is responsible for policy monitoring)* *11. How are policy breaches handled?* *12. What plans do you have for developing/extending your policy in the future?* **What theoretical approach does the study take:** Case study(ies) **Setting** *Several English Health Authorities/Trusts: Tameside Acute Care Blackburn, Hydburn and Ribble Valley Health Care NHS Trust (focus on staff*					

	smoking ban) *Hull and East Yorkshire NHS Trust (focus on a NRT initiative)* *West Suffolk Hospitals Trust* *Sandwell Healthcare NHS Trust (focus on smoking cessation services)* *Ashworth Hospital Authority* **How were the data collected: What method(s):** Interviews *Follow up interviews with representative from each short-listed Trust.* Questionnaires: open-ended questions **When:** Not stated **By Whom:** Not stated					
Authors *Sheffer, Stitzer & Wheeler* **Year** 2009 **Aim of study** *The aim of the study was to characterize the perceived concerns and sources of support and resistance reported by the Chief*	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Not stated **Setting** *Arkansas medical facilities. The number of beds at the medical facilities ranged from 0 to 791, with a mean of 132, a median of 77, and a*	**Country** USA **Secondary Care Setting** Both **What population were the sample recruited from:** *Chief Executive Officers (CEOs) and administrators of Arkansas medical facilities.* **Source population demographics** Occupation	**Smokefree: Implementation stage:** Smokefree in place *From October 2005* **Fieldwork stage:** Before implementation – single time-point *April/May 2005* After implementation – single time-point *October 2006* **Where:** Both	**Brief description of method and process of analysis:** *Open-ended responses were categorized and summarized by similar words, meanings, and/or themes.*	**Key themes/findings relevant to this review: Attitudes to smokefree** Staff **Planning & resource issues** Staff workload/resourcing Planning/Timing-specific issues	**Limitations identified by author(s):** *Subjective views not objectively validated by observational or corroborative data. Possibility of participation bias. Results may not be generalisable to other settings.* **Evidence gaps**

Executive Officers (CEOs) and administrators of Arkansas medical facilities before and after smokefree legislation became effective. **Study design** Before-and-after study (with same sample after intervention) Interview study **Quality score** +	*mode of 25. The majority of facilities had no psychiatric or alcohol and drug beds (n=68; 64.76%), with 27.62% (n=29) maintaining some psychiatric and alcohol and drug beds, and 7.62% (n=8) maintaining only psychiatric and/or alcohol and drug beds. The majority of medical facilities were private non-profit (56.36%), with 26.36% under corporate control, and 17.27% under city, county, state, or federal government control.* **How were the data collected: What method(s):** Interviews **When:** Not stated **By Whom:** Not stated	*Chief Executive Officers (CEOs) and administrators of Arkansas medical facilities.* **How were they recruited:** Recruitment method *A list of member medical facilities and CEO/administrators was obtained from the Arkansas Hospital Association. Three additional facilities were subsequently identified through contact with hospital CEOs.* **How many participants were recruited:** Total sample *113 hospital CEOs/administrators.* **Were there specific inclusion/exclusion criteria:** Inclusion criteria not applicable Exclusion criteria not applicable % participation agreement *Pre-implementation survey: 87.61%* *Post-implementation survey: 69.02%*	**Coverage:** Smokefree building(s) Smokefree grounds **Supporting strategies:** Other (write in) *Smoke-Free Hospital Toolkit comprised of a booklet to guide implementation and a resource CD. Numerous written resources were provided on the CD including administrative and clinical guidelines, examples of policy statements, signage, training activities, and problem-solving.*			**and/or recommendations for future research:** None reported **Source of funding:** Not reported
Authors *Tillgren et al* **Year** 1998	**What was/were the research questions:** Not reported **What theoretical**	**Country** Sweden **Secondary Care Setting** Not reported	**Smokefree: Implementation stage:** Smokefree in place *1 July 1993*	**Brief description of method and process of analysis:** *Not reported.*	**Key themes/findings relevant to this review: Attitudes to smokefree** Staff	**Limitations identified by author(s):** None identified by

Aim of study *To study how a policy decision about implementing a smokefree hospital was adhered to 4 years after its introduction.* **Study design** Interview study **Quality score** -	**approach does the study take:** Not stated **Setting** *A large University hospital that focuses on healthcare, training and research. The hospital provides qualified emergency and specialist care for Stockholm. In1995, the total number of consultations was 54,000. The number of outpatients visits was 550,000 and the staff numbered 5,900 full time employees.* **How were the data collected: What method(s):** Interviews **When:** Not stated **By Whom:** Not stated	**What population were the sample recruited from:** Staff *Professional groups who worked both inside the hospital and outdoors in the hospital park. Not healthcare staff. Gardeners, cleaners, hostesses/hosts* **Source population demographics** Occupation *Gardeners, cleaners, hostesses/hosts* **How were they recruited:** Not reported **How many participants were recruited:** Total sample *n=15* *Gardeners n=5 All middle aged men who had been in the same job for at least 5 years.* *Cleaners n=5 All middle aged women who had worked at the hospital for a minimum of 2 years.* *Hosts/hostesses n=5 4 women/1 man. 65-70 years. Had worked as volunteers for the Swedish Red Cross for at least 10 years.* **Were there specific inclusion/exclusion criteria:**	**Fieldwork stage:** After implementation – single time-point **Where:** Not reported **Coverage:** Smokefree building(s) **Supporting strategies:** Posters/signage		**Planning & resource issues** Smoking cessation services **Other factors** Other	author(s) **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Not reported

		Inclusion criteria *Gardeners, cleaners, hostesses/hosts* Exclusion criteria not reported % participation agreement not reported				
Authors *Wareing & Gray* **Year** Unpublished **Aim of study** *To investigate the application of smokefree legislation to mental health settings after two years of implementation.* **Study design** Non-participant observation **Quality score** +	**What was/were the research questions:** *The primary areas of observational investigation were:* *a) Compliance with the smokefree legislation and* *b) What has happened to smoking?* **What theoretical approach does the study take:** Not stated **Setting** *A broad range of mental health facilities across England, both independent and NHS.* **How were the data collected: What method(s):** Observation *The investigators started each visit with a recording sheet covering selected areas which had been identified as the key issues to be observed/discussed. A scoring system was developed in order to be able to compare and*	**Country** England **Secondary Care Setting** Mental Health **What population were the sample recruited from:** Not applicable **How were they recruited:** *The selection of sites for visiting was determined against the following criteria:* *Type of facility – to represent the range* *Geographically by region NHS/Independent* *Critique of the questionnaires i.e. indication of* *o exceptional practice* *o likely non-compliance* *o non return.* **How many participants were recruited:** Total sample *28 mental health units* **Were there specific inclusion/exclusion criteria:** Inclusion criteria not	**Smokefree: Implementation stage:** Smokefree in place *Implemented July 2008.* **Fieldwork stage:** After implementation – single time-point **Where:** Mental Health **Coverage:** Smokefree building(s) **Supporting strategies:** Not reported	**Brief description of method and process of analysis:** *The investigators started each visit with a recording sheet covering selected areas which had been identified as the key issues to be observed/discussed. A scoring system was developed in order to be able to compare and contrast.* *Scores were allocated independently by each investigator over ten areas, with a maximum of five points in each, which affected both the compliance with the legislation and management of smoking in each of the units. The maximum score that could be achieved was 50.*	**Planning & resource issues** Smoking cessation services Other planning & resource issues **Other factors** Other	**Limitations identified by author(s):** None identified by author(s) **Evidence gaps and/or recommendations for future research:** None reported **Source of funding:** Government

	contrast. *Scores were allocated independently by each investigator over ten areas, with a maximum of five points in each, which affected both the compliance with the legislation and management of smoking in each of the units. The maximum score that could be achieved was 50.* **When:** Not stated **By Whom:** Author/Researcher	applicable Exclusion criteria not applicable				
Authors *Wheeler et al.* **Year** 2007 **Aim of study** *To measure the impact of the new smoke-free campus policies on employees and patients at the two institutions on the hospital campus.* **Study design** Focus group study Interview study *Key informant interviews* **Quality score** -	**What was/were the research questions:** Not reported **What theoretical approach does the study take:** Not stated **Setting** *Two sites: 1) Arkansas's university hospital and academic medical center and 2) a smaller, private children's hospital that uses the university's faculty and residents for its medical staff* **How were the data collected: What method(s):** Focus groups Interviews	**Country** USA **Secondary Care Setting** Not Mental Health (Acute and/or Maternity) **What population were the sample recruited from:** Staff **Source population demographics** Occupation *Administrators, supervisors, security force staff* **How were they recruited:** *Eight hospital administrators were identified by the evaluation workgroup as being knowledgeable*	**Smokefree: Implementation stage:** Smokefree in place *Site 1: announced 29th Oct 03, implemented 4th Jul 04; Site 2: announced Spring 04, implemented 6 months later (employees) and Spring 05 (12 months later) (employees, visitors, patients)* **Fieldwork stage:** Before implementation – single time-point *Site 1: Apr 04 (questionnaire), Jul 03-Jun 04 monthly mean (hospital utilisation), Jan 04 (employee resignations, terminations, hires); Site 2: 2 months after*	**Brief description of method and process of analysis:** *Not reported*	**Key themes/findings relevant to this review: Attitudes to smokefree** Staff **Beliefs - effects of smokefree on patients, staff & visitors** "Smokefree results in changed patient aggression/management issues" "Smokefree affects patient recruitment & retention" "Smokefree affects staff" **Planning & resource issues** Other planning & resource issues **Other factors**	**Limitations identified by author(s):** *Study restricted to two hospital campuses and not all outcomes were measured on both campuses. Efforts to enroll other regional hospitals were limited by the hesitancy of institutions to commit to smoke-free and concerns about sharing proprietary information about employment statistics.*

	Key informant interviews **When:** Not stated **By Whom:** Not stated	*about the effects of the policy on employees and consumers and were individually interviewed after the UAMS smoking ban was implemented. Seven supervisors identified by the human resources office and four members of the security force identified by the Chief of Police participated in two separate focus groups.* **How many participants were recruited:** Total sample *n=19* *Eight hospital administrators were identified by the evaluation workgroup as being knowledgeable about the effects of the policy on employees and consumers and were individually interviewed after the UAMS smoking ban was implemented. Seven supervisors identified by the human resources office and four members of the security force identified by the Chief of Police participated in two separate focus groups.* **Were there specific inclusion/exclusion criteria:**	*employee only ban (= 4 months pre-full smokefree) (questionnaire), May 04-Oct 04 monthly mean (hospital utilisation)* After implementation – single time-point *Site 1: May 05 (questionnaire), Aug 04-Jul 05 monthly mean (hospital utilisation), Jan 05 (employee resignations, terminations, hires); Site 2: May 05-Oct 05 monthly mean (hospital utilisation)* **Where:** Not Mental Health **Coverage:** Smokefree building(s) Smokefree vehicles Smokefree grounds Other (write in) *All property owned or leased.* **Supporting strategies:** Written policy(ies) Implementation committee Posters/signage Staff meetings Staff letters/payslip notes Patient appointment letters Cessation support Pharmacotherapies/NRT		Safety issues Other	**Evidence gaps:** *"Reasons that hospitals have not volunteered to go smoke-free have not been carefully studied"* **Source of funding:** Government Voluntary/Charity

		Inclusion criteria not reported Exclusion criteria not reported % participation agreement not reported	*Site 1: free to employees for 6m (Apr-Sep 04), on sale on campus to non-employees. Site 2: free to employees (open-ended), n sale on campus to non-employees.* Other *Staff appointed (site 1: wellness director, site 2: tobacco control specialist with cessation expertise); Site 1: portable pagers in emergency dept. for patrons/visitors who needed to leave campus to smoke; Scripts for staff to deal with patrons smoking; Staff violations dealt with by HR dept.; Written policy in new employees packs; Neighbouring businesses notified; Announcements in local media.*			

APPENDIX 8: Evidence Tables for Review 7 Included Quantitative Studies

Study details	Population and setting	Method of allocation to intervention or control	Outcomes and methods of analysis	Results	Notes
Authors *Arack et al* **Year** 2009 **Aim of study** *To explore the effects of a complete smoking ban at an NHS trust, focusing on the attitudes, compliance and smoking behaviour of NHS staff on the smoke-free NHS policy.* **Study design** Cross-sectional study **Quality score** - **External validity score** -	**Country** England **Urban/rural setting** Not reported **Secondary Care setting** Both *NHS Acute trust* **Source population** Staff *Trust workforce = 11,000 people.* **Source population demographics** Occupation *NHS Acute Trust staff* **Recruitment** *'Opportunity sample'. Participants recruited through hospital wards and departments who demonstrated an interest in taking part.* **Population selection criteria** Inclusion criteria not reported Exclusion criteria not reported % participation agreement *45% response rate.* **Potential sources of bias (association)** Not reported **Setting** *Isle of Wight NHS Acute Trust.*	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree in place *From January 2006.* **When assessed** After implementation – single time-point *May 2007.* **Where** Both *NHS Acute Trust* **Smokefree coverage** Not reported **Supporting strategies/interventions** Not reported **Sample size** Total sample *n=160* *89% female.* *91% Caucasian, 4.5% Asian-Indian, 1.3% Asian-other, 1.3% black African, 0.6% other.* *48.4% never smokers, 27% ex-smokers, 19.5% smokers, 5%*	**Primary outcomes** Attitudinal outcomes *Support for smoking ban on hospital grounds.* *Opinions about hospital smoking ban implementation.* **Follow-up periods** Not applicable **Method of analysis** Not reported	**Attitudes to smokefree: Staff** *78.3% of respondents supported the smoking ban on hospital grounds.* *63.3% of respondents felt that the hospital had not strictly enforced the ban.* **Attrition** Not applicable	**Limitations identified by author(s)** *Possibility of participation bias.* *Limited sample size.* *No objective measures of health behaviour.* **Future research recommendations** *Further research on the effects of the smoking ban: objective measures of health and focus groups to collect information on attitudes, compliance and health behaviour of NHS staff.* *Studies targeting different ethnic groups.* *Development of a standardised attitude scale on smoking behaviour to help support and evaluate workplace smokefree policies.* **Source of funding** Not reported

		occasional smokers. Occupational groups: 38% nursing, 30.9% admin/clerical, 17.8% allied health professions, 2.0% science and professional, 5.3% technical, 3.9% medical, 1.3% auxiliary. **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported			
Authors *Baile et al* **Year** 1991 **Aim of study** *To investigate the impact of a complete smoking ban on the employees of a cancer treatment centre.* **Study design** Cross-sectional study **Quality score** + **External validity score** -	**Country** USA **Urban/rural setting** Not reported **Secondary Care setting** Not Mental Health (Acute and/or Maternity) **Source population** Staff *~500* **Source population demographics** Smoking status *smokers and non-smokers approx. 24% smokers.* **Recruitment** *Questionnaires were distributed to employees during regularly scheduled departmental staff meetings.*	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree in place. **When assessed** After implementation – single time-point **Where** Not Mental Health **Smokefree coverage** Smokefree building(s) **Supporting strategies/interventions** Cessation support **Sample size** Total sample *266 non-smokers. 79% female*	**Primary outcomes** Attitudinal outcomes *Beliefs about employer's right to ban smoking from work and non-work environments.* **Follow-up periods** Not applicable **Method of analysis** Not reported	**Beliefs - people's rights: Other rights issues** *Non-smokers overwhelmingly agreed that employers have a right to ban smoking on the worksite (93%) and that employers do not have a right to ban smoking off the worksite (89%).* **Attrition** Not applicable	**Limitations identified by author(s)** None identified by author(s) **Evidence gaps/future research recommendations** None reported **Source of funding** Not reported

	Population selection criteria Inclusion criteria *All non-smoker employees.* Exclusion criteria not applicable % participation not reported **Potential sources of bias (association)** Not reported **Setting** *Cancer treatment centre.*	*Average age 32.3 years (SD = 8.6)* *52% married* *23% graduate degrees* *22% high school degrees* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable			
Authors *Bloor, Meeson & Crome* **Year** 2006 **Aim of study** *To audit the effectiveness of a non-smoking policy in a mental health hospital in Stoke on Trent, a city in the UK Midlands; and to investigate the impact of the policy on nursing staff smoking behaviour and attitudes.* **Study design** Cross-sectional study **Quality score** + **External validity score** +	**Country** England **Urban/rural setting** Urban *a city (Stoke on Trent) in the Midlands, UK* **Secondary Care setting** Mental Health **Source population** Staff **Source population demographics** Occupation *Nursing grade A–D 30.3% (n=50), Nursing grade E 31.5% (n=52), Nursing grade F 12.7% (n=21), Nursing grade G 20.0% (n=33), Nursing grade H 3.0% (n=5), Nursing grade I 0.6% (n=1), Senior Manager 1.8% (n=3)* Age *<21 years n=0, 21-30 years 12.7% (n=21), 31-40 years 38.2% (n=63), 41-50 years 35.8% (n=59), >50 years 13.3% (n=22)*	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place *Unit implemented a total-site no smoking policy upon opening in 2001.* **When assessed** After implementation – single time-point **Where** Mental Health **Smokefree coverage** Not reported **Supporting strategies/interventions** Written policy(ies) *With 8 objectives (see*	**Primary outcomes** Attitudinal outcomes *Level of agreement/disagreement with: "A restrictive smoking policy in hospitals is a good idea"; "I support the smoking policy of the Health Trust"; "Health Trusts have to fulfil an exemplary role in the field of worksite non-smoking policies"; "Staff should have the right to smoke if they wish"; "It is unfair to allow patients, but not staff, to smoke on site"; "I feel the non-smoking policy is unfair to staff"; "I feel the non-smoking policy is unfair to patients"; "A non-smoking policy violates the personal freedom of smokers"; "I feel that smokers are victimised by the non-*	**Attitudes to smokefree: Staff** *Overall, 57.7% nursing staff respondents (40.61% smokers, 62.6% former smokers and 71.4% never smokers) agreed with the statement "A restrictive smoking policy in hospitals is a good idea". Overall, 44.6% nursing staff respondents (15.61% smokers, 53.1% former smokers and 53.6% never smokers) agreed with the statement "I support the smoking policy of the Health Trust". Overall, 41.3% nursing staff respondents (59.1% smokers, 43.7% former smokers and 46.5% never smokers) agreed with the statement "Health Trusts have to fulfil an exemplary role in the field of worksite non-smoking policies". No further statistical information is available.* **Beliefs - people's rights: Smokers' right to smoke** *Overall, 82.53% nursing staff respondents (96.9% smokers, 68.7% former smokers and 82.1% never smokers) agreed with the statement "Staff should have the right to smoke if they wish". Overall, 78.2% nursing staff respondents (93.8% smokers, 75.1% former smokers and 64.3% never smokers) agreed with the statement "It is unfair to allow patients, but not staff, to*	**Limitations identified by author(s)** *The self-reported questionnaires open to respondent bias. No smoking behaviour demographics available for non-respondents to compare how representative the selected sample was.* **Limitations identified by review team** *Limited reporting of analysis and any confounders makes internal validity unclear; no control group. Source population's demographics provided - excluding smoking behaviour.* **Evidence gaps/future research recommendations** None reported

	Sex *Male 27.9% (n=46), Female 72.1% (n=119)* Ethnicity *White 97.6% (n=161), Mixed race n=0, Asian/British Asian 0.6% (n=1), Black/Black British 1.8% (n=3), Chinese/other n=0* **Recruitment** *Questionnaires were distributed by internal post, addressed to a specific member of the nursing staff. Names were supplied by the personnel department.* **Population selection criteria** Inclusion criteria *All nursing staff* Exclusion criteria not reported % participation agreement *58%* **Potential sources of bias (association)** *No smoking behaviour demographics for non-responders. Authors report ethnic profile matched that for the city and study setting; comparatively fewer nursing Grade F and above responded but age, gender, marital status, ethnicity and other grades representative.* **Setting** *A modern, purpose-built psychiatric unit in Stoke on Trent, UK*	*Table 1)* **Sample size** Total sample *n=92* *Sample characteristics: Nursing grade A–D 44.6% (n=41), Nursing grade E 25.0% (n=23), Nursing grade F 7.6% (n=7), Nursing grade G 7.6% (n=7), Nursing grade H 1.1% (n=1), Nursing grade I n=0, Senior Manager n=0, Did not specify 14.1% (n=13); Smokers 34.78%, Former Smokers 34.78%, Never smokers 30.43%; <21 years n=0, 21-30 years 22.8% (n=21), 31-40 years 29.3% (n=27), 41-50 years 31.5% (n=29), >50 years 16.3% (n=15); Male 33.7% (n=31), Female 65.2% (n=60), Did not specify 1.1% (n=1); White 97.8% (n=90), Mixed race n=0, Asian/British n=0, Black/Black British 2.2% (n=2), Chinese/other n=0.* **Baseline comparison** Not applicable **Study sufficiently powered? (association)**	*smoking policy"; "A workplace smoking restriction increases the stress levels of nurses who smoke"; "The non-smoking policy protects non-smokers from passive smoking at work"; "A non-smoking policy encourages staff to quit smoking"; "A workplace non-smoking policy motivates smokers to quit smoking"; "The non-smoking policy is easy to enforce".* **Follow-up periods** Not applicable **Method of analysis** *Attitude statements elicited responses on a 5-point scale, from 'strongly agree' to 'strongly disagree', which were allocated a score from 1 to 5, with 1 being positive in all cases.*	*smoke on site". Overall, 69.6% nursing staff respondents (84.4% smokers, 68.8% former smokers and 53.5% never smokers) agreed with the statement "I feel the non-smoking policy is unfair to staff". Overall, 53.3% nursing staff respondents (50.0% smokers, 46.9% former smokers and 35.7% never smokers) agreed with the statement "I feel the non-smoking policy is unfair to patients". Overall, 68.5% nursing staff respondents (93.7% smokers, 62.5% former smokers and 46.5% never smokers) agreed with the statement "A non-smoking policy violates the personal freedom of smokers". Overall, 66.3% nursing staff respondents (93.7% smokers, 59.4% former smokers and 42.9% never smokers) agreed with the statement "I feel that smokers are victimised by the non-smoking policy". No further statistical information is available.* **Beliefs - effects of smokefree: "Smokefree affects staff"** *Overall, 66.3% nursing staff respondents (75.0% smokers, 71.9% former smokers and 50.0% never smokers) agreed with the statement "A workplace smoking restriction increases the stress levels of nurses who smoke". Overall, 56.5% nursing staff respondents (46.9% smokers, 65.7% former smokers and 64.3% never smokers) agreed with the statement "The non-smoking policy protects non-smokers from passive smoking at work". Overall, 32.5% nursing staff respondents (15.67% smokers, 37.5% former smokers and 50.0% never smokers) agreed with the statement "A non-smoking policy encourages staff to quit smoking". Overall, 28.2% nursing staff respondents (9.4% smokers, 28.1% former smokers and*	**Source of funding** Not reported

		Not reported *No info given on power or statistical analysis*		*50.0% never smokers) agreed with the statement "A workplace non-smoking policy motivates smokers to quit smoking". No further statistical information is available.* **Planning & resource issues: Staff workload/resourcing** *Overall, 30.0% nursing staff respondents (21.8 smokers, 34.4% former smokers and 35.7% never smokers) agreed with the statement "The non-smoking policy is easy to enforce". No further statistical information is available.* **Attrition** Not applicable	
Authors *Cormac et al.* **Year** 2010 **Aim of study** *To evaluate the impact of a total smoking ban in buildings and grounds in a high secure psychiatric hospital.* **Study design** Before-and-after study (with different sample after intervention) *No control group. Pre- and post-ban responses not linked but most sample the same (n=298 patients for study*	**Country** England **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Patients Staff **Source population demographics** Smoking status *72.8% patients resident in the hospital for the full evaluation period were smokers before the ban.* **Recruitment** Recruitment method *Postal survey sent to all staff and all patients (resident at the time)* **Population selection criteria**	**Method of allocation** Not applicable Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place **When assessed** Before implementation – single time-point *Feb 07* After implementation – single time-point *Jul 07* **Where** Mental Health **Smokefree coverage** Smokefree building(s) Smokefree grounds **Supporting**	**Primary outcomes** Attitudinal outcomes *In favour of the ban (staff & patients); mental health would be/had been adversely affected by the ban (patients); physical health would be/had been adversely affected by the ban (patients); patients would be/are more aggressive if they could/can not smoke (staff); more likely to/had self-harm(ed) if they could not smoke (staff); patients would need/had needed more medication because they could not smoke (staff).* **Follow-up periods** Follow-up period(s) *8 months*	**Attitudes to smokefree: Staff** *In favour of the ban: staff pre-ban 528/1038 (50.9%) staff post-ban 404/670 (60.3%). Changed in favour of smokefree. No further statistical information is available.* **Attitudes to smokefree: Patients** *In favour of the ban: patients pre-ban 40/175 (22.9%) patients post-ban 29/115 (25.2%). Changed in favour of smokefree. No further statistical information is available.* **Beliefs - effects of smokefree: "Smokefree affects patients' mental health"** *Belief mental health adversely affected: patients pre-ban 93/175 (53.1%) patients post-ban 45/115 (39.1%). Changed in favour of smokefree. No further statistical information is available.* **Beliefs - effects of smokefree: "Smokefree affects patients' physical health"** *Belief physical health adversely affected:*	**Limitations identified by author(s)** *As the questionnaires were anonymous it was not possible to link the pre-ban responses to the post-ban responses for either patients or staff.* **Future research recommendations** *A long-term evaluation of the health benefits of smoke-free environments to patients in long-stay NHS facilities.* **Source of funding** Not reported

duration) **Quality score** + **External validity score** +	Inclusion criteria *All patients resident in the hospital and all staff.* Exclusion criteria not applicable % participation agreement *Patients 51% (pre-ban) 35% (post-ban); Staff 55.7% (pre-ban) 34% (post-ban)* **Potential sources of bias (association)** + *Selection bias possible for the staff/patient survey - most motivated to complete the survey.* **Setting** *A high secure, long-stay psychiatric hospital for patients with complex mental health disorders who are a grave and immediate danger to the public or themselves (the majority have committed serious offences).*	**strategies/interventions** Cessation support Pharmacotherapies/ NRT Staff training Other (write in) *Information provision (without further detail) Surrender of smoking materials (in-patients) On the weekend of policy introduction, all wards were fully staffed and additional activities were provided as a distraction.* **Sample size** Total sample *Patients n=175 (pre-ban) n=115 (post-ban); Staff n=1038 (pre-ban) n=670 (post-ban)* *Sample characteristics: Patients pre-ban (89% male, 70% smokers pre-ban). Patients post-ban (85% male, 87% smokers pre-ban); Staff pre-ban (46% male, 23% smokers pre-ban, 61% nursing staff). Staff post-ban (38% male, 22% smokers pre-ban, 54% nursing staff).* **Baseline comparison**	**Method of analysis** Method(s) of analysis (write in) *Not reported*	*patients pre-ban 47/175 (26.9%) patients post-ban 29/115 (25.2%). Changed in favour of smokefree. No further statistical information is available.* **Beliefs - effects of smokefree: "Smokefree results in changed patient aggression/management issues"** *Belief patients more aggressive: all staff pre-ban 573/1038 (55.2%) all staff post-ban 100/670 (14.9%); nursing staff pre-ban 409/538 (76%) nursing staff post-ban 69/286 (24.1%). Changed in favour of smokefree. No further statistical information is available.* **Beliefs - effects of smokefree: "Smokefree results in changed medication issues"** *Belief patients need more medication: all staff pre-ban 477/1038 (46%) all staff post-ban 85/670 (12.7%); nursing staff pre-ban 362/538 (67.3%) nursing staff post-ban 66/286 of nurses (23.1%). Changed in favour of smokefree. No further statistical information is available.* **Beliefs - effects of smokefree: Other views on smokefree effects** *Belief patients more likely to self-harm: all staff pre-ban 491/1038 (47.3%) all staff post-ban 55/670 of all staff (8.2%); nursing staff pre-ban 359/538 (66.7%) nursing staff post-ban 36/286 (12.6%). Changed in favour of smokefree. No further statistical information is available.* **Attrition** Not applicable	

		Not reported *Gender, smoking status and (for staff only) whether nurse or not were reported at both time-points as %, but no comparisons made by authors.* **Study sufficiently powered? (association)** Not reported			
Authors *Daughton et al.* **Year** 1992 **Aim of study** *To examine the early and long-term influence of a total indoor smoking ban on institutional smoking cessation rates, as well as on smoker behaviour and comfort in a hospital setting.* **Study design** *Cross-sectional study (2 time-points after implementation)* **Quality score** - **External validity score** -	**Country** USA *Nebraska* **Urban/rural setting** Not reported **Secondary Care setting** Not Mental Health (Acute and/or Maternity) **Source population** Staff *Hospital employees* **Source population demographics** None reported **Recruitment** *Survey 1: Hospital departments circulated a 1-page questionnaire generally accompanied by a letter of support from a department representative. Isolated employees who indicated they had not received a department questionnaire were provided with one. Survey 2: the first survey, although anonymous, had space for*	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place *No implementation date reported* **When assessed** After implementation – multiple time-points *Post-ban Survey 1 (1 year after policy announced, 5 months after implementation); Post-ban Survey 2 (2 years after policy announced, 17 months after implementation)* **Where** Not Mental Health **Smokefree coverage** Smokefree building(s)	**Primary outcomes** Attitudinal outcomes *Survey 1: Support for the smoking ban; Difficulty complying with the ban* *Survey 2: Long-term support for the smoking ban* **Follow-up periods** Follow-up period(s) *1 year* **Method of analysis** *Fisher's exact test was used to analyse categorical data and Student's t test for continuous data. Comparison values are expressed as means ± standard error of the mean.*	**Attitudes to smokefree: Staff** *Support for the smoking ban: Five months after implementation of a total indoor ban on smoking, and one year after it was announced, 89% non-smokers staff (n=523), 86% ex-smokers (those who quit before the ban was announced) (n=245), 81% of ban-year quitters (n=13) and 45% smokers (n=82) supported the ban. Significant sub-group differences: Five months after implementation of a total indoor ban on smoking, only 27% of heavy smokers staff (≥30 cigs/day) (n=6) compared with 64% of light smokers (<10 cigs/day) (n=34) favoured the policy (p<0.05). Five months after implementation of a total indoor ban on smoking, 74% staff smokers who wanted to stop smoking "a lot" (n=26) compared with only 15% smokers who did not wish to quit (n=8), supported the ban (p<0.001).* *Long-term support for the smoking ban: Seventeen months after implementation of a total indoor ban on smoking at the hospital, and 2 years after the policy was announced, 82% staff smokers who*	**Limitations identified by author(s)** *Results may have been influenced by limitations of study design e.g. anonymous initial survey hindered long-term follow-up assessment; incomplete/ unreturned questionnaires may have introduced a selection bias; smoking level subgroups may have been over- or under-represented.* **Limitations identified by review team** *Demographic data not collected; no control group. Source population not described; potential selection/respondent bias* **Evidence gaps/future research recommendations** None reported **Source of funding**

	contact details if willing to be re-contacted. **Population selection criteria** Inclusion criteria *Survey 1 – all employees (those working in departments and isolated employees); Survey 2 – smokers who participated in Survey 1 who had provided contact details.* Exclusion criteria *Survey 1: Pipe and cigar smokers (n=7), individuals in process of quitting (<5 months abstinence). Survey 2: those no longer employed by hospital (n=11)* % participation agreement *"approximately one-third" Survey 1; 47% Survey 2* **Potential sources of bias (association)** - *Self-selection response to survey; low participation ("approx. a third"); follow-up relies on first survey respondents providing contact details (preventing anonymity); no demographics for non-responders.* **Setting** *"In a hospital setting"*	*A "total indoor smoking ban"* **Supporting strategies/interventions** Implementation committee *32-member Smoke-Free Campus Task Force* Staff letters/payslip notes *Employee bulletins and newsletters* Cessation support *Hospital-promoted cessation programs, and offer to subsidise costs of locally available cessation programs.* Other (write in) *In-house media campaign* **Sample size** Total sample *Survey 1: n=1070* *Sample characteristics: n=589 non-smokers, n=284 ex-smokers (self-report abstinent for >5 months prior to ban announcement), n=16 ban-year quitters (self-report abstinent for ≥3 months), n=181 smokers (n=55 light smokers <10 cigs/day, n=110 moderate*		*completed both surveys (n=72) maintained their original support for the ban. 16% changed their (n=14) changed from position of non-support 5 months post-implementation to support for the policy one year later.* **Planning & resource issues: Compliance/Enforcement issues** *Difficulty complying with the ban: Five months after implementation of a total indoor ban on smoking, 30% staff smokers (n=52) indicated that they found it difficult to observe the hospital's smoke-free policy. Sub group differences: Five months after implementation of a total indoor ban on smoking, more heavy smokers staff (≥30 cigs/day) (55%) than moderate (10-29 cigs/day) (33%) or light smokers (<10 cigs/day) (13%) reported they found it difficult to comply with the ban (p=0.0008).* *Seventeen months after implementation of a total indoor ban on smoking at the hospital, and 2 years after the policy was announced, 49% staff smokers reported that the smoking ban was easier to observe during the second policy year.* **Attrition** Not applicable	Not reported

		smokers 10-29 cigs/day, n=22 heavy smokers ≥30 cigs/day). Occupations (of those who identified themselves) included: physicians, nurses, cafeteria workers, painters, mail room clerks, laboratory technicians, administrators, secretaries, researchers and environmental service workers. *Survey 2: n=88* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported			
Authors *Donchin & Baras* **Year** 2004 **Aim of study** *A process and outcome evaluation of implementation of a complete smoking ban at a hospital in Israel.* **Study design** Before-and-after study (with different sample after	**Country** Israel **Urban/rural setting** Urban *City* **Secondary Care setting** Not Mental Health (Acute and/or Maternity) **Source population** Staff *Hospital's general employee population on payroll July 2000 (n=3670)* **Source population demographics**	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place *Implemented 1 Nov '00* **When assessed** Before implementation – single time-point *3 months pre-policy*	**Primary outcomes** Attitudinal outcomes *Attitude toward current hospital smoking regulations (Should be more restrictions, There is too much restriction, Are appropriate, Unfamiliar with the regulations); Attitudes towards smoking in the workplace (% agreement with the statement "The hospital should be completely 'smoke-free'")*	**Attitudes to smokefree: Staff** *Attitude toward current hospital smoking regulations: pre-policy implementation, 54.2% of respondents agreed that there should be more smoking restrictions dropping to 24.3% agreeing there should be more restrictions post-policy. 60.5% of all respondents agreed that the post-policy regulations were appropriate (an increase from 34.9% pre-policy). This change in opinion, corresponding to a change in policy, was statistically significant (p<0.0001). Staff reporting that they were unaware of any smoking policy dropped from 7.6% to 2.8% post-implementation.*	**Limitations identified by author(s)** None identified **Limitations identified by review team** *No control group for temporal confounders.* **Evidence gaps** *Collecting specific data as to whom the covert smokers might be (hospital staff, or patients and visitors to the hospital) and how common the practice really is would be helpful*

intervention) **Quality score** + **External validity score** +	Occupation *Doctors and dentists 18.0%, nurses 30.3%, administrators and clerks 16.9%, technicians 22.8%, unskilled workers 12.0%* Age *<35 years 24.5%, 35– 44 years 27.8%, 45– 54 years 29.4%, 55+ years 18.3%* Sex *Males 36.5%* **Recruitment** *Simple random sampling method was used: pre-policy survey based on a sample of 11% of 3,670 hospital workers; the post-policy survey drew a 12% sample of 3,705 workers employed at that time to allow for the exclusion of workers who already participated in the first survey. Surveys conducted by hospital's occupational health unit and school of public health. Interviewers sought out every worker entering each sample survey, presenting them with the questionnaire that was completed immediately and returned directly to interviewers. Confidentiality was promised though the questionnaires were not anonymous.* **Population selection criteria** Inclusion criteria *All salaried employees on the payroll in July 2000 (pre-policy sample) and April 2001 (post-policy sample) were eligible*	After implementation – single time-point *6-9 months post-policy* **Where** Not Mental Health **Smokefree coverage** Smokefree building(s) **Supporting strategies/interventions** Implementation committee Cessation support *Employees* Other (write in) *Smoking shelters ("booths") erected outside the hospital building; sale of tobacco products banned on site; Information campaign (2 months pre-policy) and press conference launch; Fines for violations authorised* **Sample size** Total sample *n=368 staff (pre-policy), n=364 (post-policy)* *Sample characteristics (pre- and post-policy): Doctors and dentists 17.1% (pre-) 13.5% (post-), nurses 27.4% 31.9%, administrators and clerks 14.9%*	**Follow-up periods** Follow-up period(s) *9-12 months* **Method of analysis** *36 employees participated in both surveys. Their data were included in the pre-policy survey findings only. Univariate comparisons between pre- and post-policy responses between the two surveys or between 'smoker' and 'non-smoker' responses within each survey were made using Fisher's Exact test for dichotomies and chi-square tests for categorical variables with more than two categories. Wherever a table contained a cell with an expected frequency <5, the P value reported is exact and not asymptotic. Logistic regression was the main tool used for multivariate analysis.*	*Attitude toward current hospital smoking regulations, sub-group differences: Non-smokers made up the bulk of the policy supporters in both the pre- and post-policy surveys (p<0.0001). Male non-smokers were more likely to support stricter regulations than female non-smokers: 41.2% vs. 22.7%, respectively (p<0.005).* *Attitudes towards smoking in the workplace (% agreement with the statement "The hospital should be completely 'smoke-free'"): There were differing response rates from smokers and non-smokers in both the pre- (45.7% and 84.5%, respectively) and post-policy surveys (60.0% and 87.0%, respectively) (p<0.0001) with smokers being less likely to agree with the statement, "The hospital should be completely 'smoke-free'". The increase in smokers who agreed with this statement from pre- to post-policy was not statistically significant.* *In the pre-policy survey, controlling for personal smoking status, unskilled workers and clerks were most likely to agree with the statement, "The hospital should be completely 'smoke-free'", while doctors, nurses, and technicians were least likely to (no data reported).* **Communication issues: Staffs' familiarity/understanding of policy** *Staff reporting that they were unaware of any smoking policy dropped from 7.6% to 2.8% post-implementation.* **Attrition** Not applicable	*to tailor-make further interventions aimed at eliminating smoking in the hospital.* **Source of funding** Not reported

	Exclusion criteria not reported % participation agreement *90.4% (pre-policy), 92.8% (post-policy)* **Potential sources of bias (association)** ++ *Authors state pre- and post-samples are representative of eligible population; comparable demographics in Table 1 (no statistical analysis).* **Setting** *A 959-bed university hospital in Jerusalem, employing over 3,700 salaried workers and accommodating 42,580 inpatients and 201,185 outpatient visits (2001).*	*17.0%,technicians 28.0% 26.6%, unskilled workers 12.5% 11.0%; <35 years 23.1% (pre-) 22.5% (post-), 35– 44 years 26.9% 28.3%, 45– 54 years 29.3% 27.7%, 55+ years 20.7% 21.4%; Males 36.1% (pre-) 30.2% (post-); 0-12 years of education 23.2% (pre-) 25.4% (post-), 13-15 years of education 23.5% 18.5%, 16+ years of education 53.3% 56.1%. Smoking status: current smokers 19% (pre-) 19.5% (post-), past smokers 12.5% 19.5%.* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported			
Authors *Erwin & Biordi* **Year** 1991 **Aim of study** *This study presents the reactions of nursing staff members on two VA inpatient psychiatric wards who experienced the*	**Country** USA *Illinois* **Urban/rural setting** Urban **Secondary Care setting** Mental Health **Source population** Staff *Nursing staff* **Source population**	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place *Implemented 1 Mar '90 (announced 2 months earlier)*	**Primary outcomes** Attitudinal outcomes *Nursing staff support for a smokefree ward* **Follow-up periods** Follow-up period(s) *<3 months (date of baseline survey not stated)* **Method of analysis** Not reported	**Attitudes to smokefree: Staff** *Nursing staff support for a smokefree ward: Pre-implementation, 44% Ward A nursing staff and 61% Ward B nursing staff reported to prefer a smoke-free ward. One week after smokefree implementation support for a smokefree ward was 60% Ward A and 60% Ward B, and 63% Ward A and 60% Ward B 4 weeks after smokefree implementation. (No p values calculated)* **Attrition**	**Limitations identified by author(s)** None identified by author(s) **Limitations identified by review team** *No description of analysis or significance values. Data analysis unreported.* **Evidence gaps** *Few articles document the*

transition to smoke-free status. **Study design** Before-and-after study (with same sample after intervention) **Quality score** - **External validity score** +	**demographics** Occupation *Ward A: 12 registered nurses, 2 licensed practical nurses, 2 nurses aides* *Ward B: 7 registered nurses, 3 licensed practical nurses, 3 nurses aides* **Recruitment** *Memos and reminders sent by head nurses to nursing staff to collect questionnaire from a confidential site.* **Population selection criteria** Inclusion criteria *All nursing staff members on the two acute psychiatric wards* Exclusion criteria not reported % participation agreement *100% (Pre-ban ward A), 100% (Pre-ban ward B), 63% (1 week post-ban ward A), 50% (1 week post-ban ward B), 100% (4 weeks post-ban ward A), 77% (4 weeks post-ban ward B)* **Potential sources of bias (association)** + *100% before; 50-63% 1wk after; 77-100% 4wk after; self-selection, small convenience sample* **Setting** *A VA (US Dept. of Veterans Affairs) hospital in an urban centre in Illinois. Two 21-bed acute care psychiatric wards for veterans with diagnose including schizophrenia, depression and*	**When assessed** Before implementation – single time-point *No date* After implementation – multiple time-points *1 week following implementation and 4 weeks following implementation* **Where** Mental Health **Smokefree coverage** *Smokefree acute psychiatric wards (presume from the paper's introduction, the rest of hospital is smokefree)* **Supporting strategies/interventions** Cessation support *Nursing interventions included "Encouraged patients to participate in smoking cessation groups"* Other *Interventions by nursing staff that address patients with the urge to smoke on the psychiatric ward (e.g. encouraging activities that foster energy replenishment/use;*		Not applicable	*effects of establishing smokefree psychiatric units (1991)* **Source of funding** Not reported

	post-traumatic stress disorder	*promoting physical benefits of not smoking and preventing harm; individualising care (p.r.n. medications, time outs); involving significant others in care).* **Sample size** Total sample *n=29* *Sample characteristics: 66% (n=19) registered nurses, 17% (n=5) licensed practical nurses, 17% (n=5) nurses aides* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported			
Authors *Etter, Khan & Etter* **Year** 2008 **Aim of study** *To compare the acceptability and efficacy of a partial smoking ban and total ban in an in-patient psychiatric hospital.* **Study design** Before-and-after	**Country** Switzerland **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Patients Staff Specific Ward(s)/Department(s) **Source population demographics** Health status	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree in place *Implemented in Jan 06* **When assessed** Before implementation – multiple time-points *Oct 03 (pre ban), Apr 04 (2 months post-partial ban), Dec 05 (20 months post-*	**Primary outcomes** Attitudinal outcomes *Knowledge of smokefree policy; Opinion of rules about smoking (staff and patients)* **Follow-up periods** Follow-up period(s) *29-31 months* **Method of analysis** *Chi-square tests and odds ratios to compare proportions, and independent-sample t*	**Attitudes to smokefree: Staff** *Opinion of rules about smoking: Between 2003 (no ban) and 2006 (total ban), there was a significant increase in the percentage of staff reporting that "Rules about smoking at the hospital are too strict" (7.0% to 59.6%, p<0.001), there was a decrease in the percentage of staff reporting that "Rules about smoking at the hospital are adequate" (71.9% to 36.8%, p value not given).* **Attitudes to smokefree: Patients** *Opinion of rules about smoking: Between 2003 (no ban) and 2006 (total ban), there was a significant increase in the*	**Limitations identified by author(s)** *Self-reports are subject to social desirability bias. Independent sample t-tests are too conservative and may underestimate the statistical significance (as many of the same staff took part in several surveys). The 2006 survey was conducted 3 months after implementation and may not reflect long-term acceptability and impact.*

study (with different sample after intervention) *(The staff sample consisted of largely the same people who answered successive surveys, although results not linked)* **Quality score** + **External validity score** +	*Patients had mainly psychotic disorders, depression and personality disorders.* Age *Adults* **Recruitment** *A physician, nurse or psychologist distributed self-report questionnaires to patients and staff after explaining the study and obtaining written informed consent. Patients answered the survey as soon as their condition allowed (about 1 week after admission for most). The distributing staffcompleted the questionnaires with patients who were unable to answer by themselves.* **Population selection criteria** Inclusion criteria *All patients and staff present at the time of data collection* Exclusion criteria not reported % participation agreement *Patients: 86.0% (2003 no ban), 67.5% (2006 total ban); Staff: 100% (2003 no ban), 91.9% (2006 total ban)* **Potential sources of bias (association)** + *staff 92-100% participation ('03, '06), patients 86-68%. No data on non-responders. Small sample size.* **Setting** *Two in-patient, adult units of the Psychiatry Department of the*	*partial ban/pre-total ban)* After implementation – single time-point *Mar-May 06 (3-5 months post-total ban)* **Where** Mental Health **Smokefree coverage** Smokefree building(s) *Patients (except those in locked rooms) and staff were allowed to leave the unit to smoke outside* **Supporting strategies/interventions** Posters/signage Cessation support Pharmacotherapies/NRT *NRT free for patients, not for staff.* Closure of smoking rooms Staff training **Sample size** Total sample *2003 (no ban) n=106 (n=49 patients, n=57 staff), 2006 (total ban) n=134 (n=77 patients, n=57 staff)* *Sample characteristics: Patients 2003 (no ban) 91.8% Ever smoked 100+ cigarettes, Daily*	*tests to compare means.*	*percentage of patients reporting that "Rules about smoking at the hospital are too strict" (12.2% to 49.4%, p<0.001), there was a decrease in the percentage of patients reporting that "Rules about smoking at the hospital are adequate" (73.5% to 46.8%, p value not given).* **Communication issues: Staffs' familiarity/understanding of policy** *Knowledge of policy: In 2006 (total ban), 93% staff correctly answered that "smoking was prohibited everywhere in the clinic".* **Communication issues: Patients' familiarity/understanding of policy** *Knowledge of policy: In 2006 (total ban), 90% patients correctly answered that "smoking was prohibited everywhere in the clinic".* **Attrition** Not applicable	*The sample size was relatively small, which increases the risk of type II error. Without a control group, naturally occurring time trends could not be distinguished.* **Limitations identified by review team** *Follow-up measures taken 3-5 months post-total ban, subject selection was consistent with no significant differences between group demographics. Small sample size.* **Evidence gaps** *"The acceptability and impact of total smoking bans in psychiatry hospitals is incompletely documented, in particular in Europe."* **Source of funding** Other

	Geneva University Hospitals: an admission and short-stay unit (16 beds, mean duration of stays=17 days, median=7 days) and a medium-stay unit (16 beds, mean duration of stays=37 days, median=15 days). Patients had mainly psychotic disorders, depression and personality disorders.	*smokers 73.5%, Occasional (non-daily) smokers 6.1%, Former smokers 12.2%, Never smokers 8.2%, 2006 (total ban) 81.6% Ever smoked 100+ cigarettes, Daily smokers 65.8%, Occasional (non-daily) smokers 2.6%, Former smokers 15.8%, Never smokers 15.8%; Staff 2003 (no ban) 64.9% Ever smoked 100+ cigarettes, Daily smokers 26.3%, Occasional (non-daily) smokers 7.0%, Former smokers 22.8%, Never smokers 43.9%, 2006 (total ban) 57.9% Ever smoked 100+ cigarettes, Daily smokers 26.3%, Occasional (non-daily) smokers 7.0%, Former smokers 22.8%, Never smokers 43.9%. Patients 2003 (no ban) mean age 39.9 years, 2006 (total ban) mean age 41.0 years; Staff 2003 (no ban) mean age 38.8 years, 2006 (total ban) mean age 40.7 years. Patients 2003 (no ban) 59.2% men, 2006 (total ban) 60.0% men; Staff 2003 (no ban) 35.1% men,*			

		2006 (total ban) 37.5% men. **Baseline comparison** Not applicable **Study sufficiently powered? (association)** - *Authors note that the sample size was relatively small, which increases the risk of type II error.*			
Authors *Fitzpatrick et al* **Year** 2009 **Aim of study** *To collect data on staff and patient attitudes to a planned campus-wide smoking ban t an acute general hospital.* **Study design** Cross-sectional study **Quality score** + **External validity score** +	**Country** Ireland **Urban/rural setting** Not reported **Secondary Care setting** Both **Source population** Patients *In-patients (520 hospital beds)* Staff *2928 staff on payroll* **Source population demographics** None reported **Recruitment** Recruitment method *Not reported* **Population selection criteria** Inclusion criteria not reported Exclusion criteria not reported % participation agreement *In-patients 81%* *Staff 100%*	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree in place *Indoor ban implemented in 2004* Smokefree impending *Campus wide ban to be implemented in 2009* **When assessed** Before implementation – single time-point *2006: Before implementation of campus-wide ban (after implementation of indoor ban)* *Staff: December 2006* *Patients: July 2006* **Where** Not reported	**Primary outcomes** Attitudinal outcomes *Attitudes towards campus total smoking ban.* **Follow-up periods** Not applicable **Method of analysis** Not reported	**Attitudes to smokefree: Staff** *Would you agree with the introduction of a total campus-wide smoking ban indoor and outdoor?* *Yes: 52.4%* *No: 38.2%* *Don't know: 9.3%* *If it was introduced, would you support its implementation?* *Yes: 74.7%* *No: 14.2%* *Don't know: 11.1%* *Results breakdown by age, gender and occupation.* **Attitudes to smokefree: Patients** *Do you think the hospital should go completely smokefree, including the grounds?* *Yes: 51.9%* *No: 40.9%* *Don't know: 7.3%* *Results breakdown by gender, age and GMS entitlement.*	**Limitations identified by author(s)** None identified by author(s) **Evidence gaps/future research recommendations** None reported **Source of funding** Government

	Potential sources of bias (association) + **Setting** *Acute general hospital with between 350 and 520 in-patient beds.*	**Smokefree coverage** Smokefree building(s) Smokefree grounds *Due to be implemented in 2009* **Supporting strategies/interventions** Not reported **Sample size** Total sample *Patients: 295* *Staff: 225* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable		**Attrition** Not applicable	
Authors *Garg et al.* **Year** 2009 **Aim of study** *To explore staff attitudes to a smoking ban in a psychiatric unit and to ascertain if they had experienced any difficulties in imposing the ban four months after its introduction.* **Study design** Cross-sectional study	**Country** England **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Staff **Source population demographics** None reported **Recruitment** *Staff on duty available between 09:00 and 17:00hrs during a 3 week period in Nov '07 were approached. Those who agreed to participate were interviewed*	**Method of allocation** Investigator did not assign exposure **Smokefree implementation stage** Smokefree in place *Implemented 1 Jul '07* **When assessed** After implementation – single time-point **Where** Mental Health **Smokefree coverage** Smokefree building(s) **Supporting strategies/interventions**	**Primary outcomes** Attitudinal outcomes *Support for the smoking ban; Whether staff feel the ban has been successfully implemented; Whether the ban had any positive effects (encouraged patients or staff to think about giving up smoking, smoking rooms were being used for other clinical activities, working atmosphere was cleaner, most patients were sleeping at night)* **Follow-up periods**	**Attitudes to smokefree: Staff** *Support for the smoking ban: 75% psychiatrists (9/12) and 62.5% nursing staff (qualified and unqualified) (65/104) answered yes, they support the smoking ban. There was no significant difference between the views of psychiatrists and nursing staff (p=0.53).* *Smokers were significantly less likely to support the ban than non-smokers (p = 0.0001).* **Beliefs - effects of smokefree: "Smokefree affects staff"** *Whether the ban had any positive effects: 65% (n=76) of staff reported positive effects due to the smoking ban. 91.7% psychiatrists (11/12) and 62.5% nursing staff (qualified and unqualified) (65/104) answered 'yes' to 'Has the smoking ban*	**Limitations identified by author(s)** None identified by author(s) **Limitations identified by review team** *Reliability and validation of outcome measures limited; social desirability/interviewer bias may be a factor; no control group.* *No demographics for non-responders but self-report smoking rates of respondents (30%) slightly higher than UK general population.*

Quality score + **External validity score** +	*using a semi-structured questionnaire.* **Population selection criteria** Inclusion criteria *All members of nursing and medical staff on duty during the study period* Exclusion criteria not reported % participation agreement *65%* **Potential sources of bias (association)** + *65% participation; daytime staff only; no demographics for non-responders* **Setting** *A 90 bed regional medium secure psychiatric unit in West Yorkshire.*	Closure of smoking rooms Other (write in) *Smoking shelters and courtyard areas for smoking pre- and post-ban* **Sample size** Total sample *n=116 (60% qualified nurses (n=70), 29% unqualified nursing staff (n=34), 10% doctors/psychiatrists (n=12))* *Sample characteristics: 39% men (n=45), mean age 37 (SD 9.62) years, 30% (self-reported) current smokers (n=35). Current smokers: psychiatrists 16.7%, qualified nurses 34.3%, unqualified nurses 26.5%. There were no statistical differences of smoking rates [sic] between the doctors and the nurses (p=0.34) or between qualified and unqualified nursing staff (p=0.5).* **Baseline comparison** Not applicable **Study sufficiently powered? (association)**	Not applicable **Method of analysis** *SPSS v.11 software used, but tests not reported. p values given for occupation, smoking status proportions and comparisons for nurses' vs. doctors' views.*	*had any positive effects?' There was no significant difference between the views of psychiatrists and nursing staff (p=0.06). Of those who reported positive effects, 21% (n=16) felt that it had encouraged staff to think about giving up smoking.* **Beliefs - effects of smokefree: Other views on smokefree effects** *Whether the ban had any positive effects: 65% (n=76) of staff reported positive effects due to the smoking ban. 91.7% psychiatrists (11/12) and 62.5% nursing staff (qualified and unqualified) (65/104) answered 'yes' to 'Has the smoking ban had any positive effects?' There was no significant difference between the views of psychiatrists and nursing staff (p=0.06). Of those who reported positive effects, 51% (n=39) felt that it had encouraged patients to think about giving up smoking.* **Planning & resource issues: Structural issues** *Whether the ban had any positive effects: 65% (n=76) of staff reported positive effects due to the smoking ban. 91.7% psychiatrists (11/12) and 62.5% nursing staff (qualified and unqualified) (65/104) answered 'yes' to 'Has the smoking ban had any positive effects?' There was no significant difference between the views of psychiatrists and nursing staff (p=0.06). Of those who reported positive effects, 18% (n=14) said that smoking rooms were being used for other clinical activities, 23% felt that the working atmosphere was cleaner and 60% (n=46) felt that most patients were sleeping at night as designated smoking areas were closed at night ("It was striking to note that closing the designated smoking area at night helped many patients sleep. Anecdotal*	**Future research recommendations** *A repeat of the survey when complete smokefree is in place (including outdoors).* **Source of funding** Government

		Not reported		*evidence suggested that prior to the ban many patients were sleeping during the day and staying up at night smoking" p.379).* **Other factors: Success of implementation** *Success of implementation: Of all staff, 41% (n=48) felt that the ban was successfully implemented. 66.7% psychiatrists (8/12) and 69% nursing staff (qualified and unqualified) (60/104) answered 'no' to 'Do you feel the ban has been successfully implemented?' There was no significant difference between the views of psychiatrists and nursing staff (p=0.76).* **Attrition** Not applicable	
Authors *Haller, McNiel & Binder* **Year** 1996 **Aim of study** *To study the effects of a complete smoking ban on a locked psychiatric unit.* **Study design** Before-and-after study (with different sample after intervention) *Likely that most of the staff sample were the same pre- and post-ban* **Quality score**	**Country** USA *California* **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Patients Staff **Source population demographics** Health status *PATIENTS Diagnosis: Schizophrenia 19% (pre-ban) 32% (post-ban), Mood disorder 48% (pre-ban) 28% (post-ban), Other (pre-ban) 33% (post-ban) 40%* Speciality care *PATIENTS 83% of the patients*	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place *Yes (implementation date not reported, early 1990s)* **When assessed** Before implementation – single time-point *1 month pre-ban (staff, patients)* After implementation – single time-point *1 month post-ban*	**Primary outcomes** Attitudinal outcomes *Agreement/disagreement with statements (Likert scale) to measure attitudes towards the desirability of the smoking ban and its perceived impact on aspects of patients' mental status and the ward milieu: smoking should be entirely banned in a hospital setting; ban is unfair and cruel for involuntarily hospitalised patients; non-smoking patients appreciate the ban; patients would be too fragile to cope with smoking withdrawal; patients would become*	**Attitudes to smokefree: Staff** *Pre-ban implementation, 57% staff (38/67) agreed that smoking should be entirely banned in a hospital setting, rising to 70% (37/53) agreement post-ban.* *Sub-group comparisons: After the ban implementation, patients were significantly more likely than staff to disagree that smoking should be entirely banned in a hospital setting (t=-3.45, df=144, p<0.001).* **Attitudes to smokefree: Patients** *Pre-ban implementation, 33% patients (7/21) agreed that smoking should be entirely banned in a hospital setting, changing little post-ban to 35% (33/93) agreement.* *Sub-group comparisons: After the ban implementation, patients were significantly more likely than staff to disagree that smoking should be entirely banned in a hospital setting (t=-3.45, df=144, p<0.001).*	**Limitations identified by author(s)** *The study was completed in an area with a reputation for "health consciousness" (San Francisco), and only half the patients were current smokers. Smoking rates may differ across the country.* **Limitations identified by review team** *Risk of self-selection bias, unvalidated outcome measures, no control group.* **Evidence gaps/future research recommendations** Evidence gaps

+ **External validity score** +	*discharged over the 5 months of the study were civilly committed* Smoking status *PATIENTS Current smoker: Yes 41% (pre-ban) 53% (post-ban), No 59% (pre-ban) 47% (post-ban)* Age *PATIENTS Mean age 44 years (pre-ban) 42 years (post-ban)* Sex *PATIENTS Male 41% (pre-ban) 57% (post-ban)* Ethnicity *PATIENTS White 63% (pre-ban) 71% (post-ban), Non-white 37% (pre-ban) 29% (post-ban)* None reported *Rev 7: for Staff* **Recruitment** *Patients asked at time of discharge to complete an anonymous survey about the perceived impact of a no-smoking policy; staff recruitment method not reported.* **Population selection criteria** Inclusion criteria (write in) *All patients discharged 1 month before and 2-4 months after ban implementation; staff from all disciplines.* Exclusion criteria not reported % participation agreement *Patients 78% (pre-ban) 85% (post-ban), staff 81% (pre-ban) 64% (post-ban)* **Potential sources of bias (association)** ++	*(staff), 2-4 months post-ban (patients)* **Where** Mental Health *Locked inpatient unit* **Smokefree coverage** Smokefree building(s) Smokefree grounds **Supporting strategies/interventions** Pharmacotherapies/NRT *Prescriptions for patients* Other (write in) *Staff education to recognize and treat nicotine withdrawal symptoms/cigarette cravings; written information for patients (use of nicotine gum and how to manage cravings)* **Sample size** Total sample *Rev 6: n=27 (pre-ban), n=26 (1 month post-ban), n=30 (2 months post-ban), n=36 (3 months post-ban), n=43 (4 months post-ban) (n=135 total post-ban)* *Sample characteristics = Source population characteristics. No statistically significant*	*restless; patients would need more medication; patients would leave the unit against medical advice; patients would try to elope; patients would want to be transferred to an unlocked unit; nicotine replacement would successfully control withdrawal symptoms. (Survey designed by authors.)* **Follow-up periods** Follow-up period(s) *3-5 months* **Method of analysis** Method(s) of analysis (write in) *Pre-post comparisons and comparisons between ratings by patients and staff were analysed with t-test (two-tailed).*	**Beliefs - people's rights: Smokers' right to smoke** *Compared with their attitudes pre-ban implementation, post-ban patients felt significantly less strongly that the ban was unfair and cruel (t=2.26, df=111, p<0.03).* *Sub-group comparisons post-ban: After the ban implementation, patients were significantly more likely than staff to agree that the ban was unfair and cruel for involuntarily hospitalised patients (t=2.39, df=144, p<0.02).* **Beliefs - people's rights: Non-smokers' right to smokefree** *Sub-group comparisons post-ban: After the ban implementation, patients were significantly more likely than staff to disagree that non-smoking patients would appreciate the ban (t=-3.27, df=140, p<0.001).* **Beliefs - effects of smokefree: "Smokefree affects patients' mental health"** *Compared with their attitudes pre-ban implementation, post-ban staff were significantly less concerned about patients being too fragile to cope with smoking withdrawal (t=2.50, df=117, p<0.02).* **Beliefs - effects of smokefree: "Smokefree results in changed patient aggression/management issues"** *Compared with their attitudes pre-ban implementation, post-ban staff were significantly less concerned about patients becoming restless (t=2.49, df=117, p<0.02).* **Beliefs - effects of smokefree: "Smokefree results in changed medication issues"**	*Studies of smoking bans in psychiatric facilities which do not permit smoking in specified areas or smoking passes* **Source of funding** Not reported

	patients 78% (pre-ban) 85% (post-ban), staff 81% (pre-ban) 64% (post-ban) participation; chart data for 100% patients **Setting** *A 16-bed locked inpatient unit in San Francisco, CA, with a 2 week mean length of stay.*	*differences in demographic and clinical features between the pre-ban sample and the total post-ban sample.* *STAFF n=67 (pre-ban) n= 53(post-ban) Sample characteristics - Occupation: nurses 36 (pre-ban) 32 (post-ban), physicians 13 (pre-) 6 (post-), other staff 18 (pre-) 15 (post). Current smokers 5 (pre-) 4 (post-).* *PATIENTS n=21 (pre-ban) n=93 (post-ban) Sample characteristics not reported* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported		*Compared with their attitudes pre-ban implementation, staff were significantly less concerned post-ban about patients needing more medication (t=-6.96, df=86, p<0.001).* *Compared with their attitudes pre-ban implementation, patients felt significantly less strongly that extra doses of psychiatric medications would be needed (t=-2.73, df=108, p<0.01) and that total medication doses would need to be increased (t=2.39, df=44, p<0.02).* **Beliefs - effects of smokefree: "Smokefree affects patient recruitment & retention"** *Compared with their attitudes pre-ban implementation, post-ban staff were significantly less concerned about patients leaving the unit against medical advice (t=6.51, df=118, p<0.001) and patients trying to elope (t=3.99, df=118, p<0.001).* *Sub-group comparisons post-ban: After the ban implementation, patients were significantly more likely than staff to agree that more patients would want to be transferred to an unlocked unit (t=7.25, df=139, p<0.001).* **Planning & resource issues: Pharmacotherapies** *After the ban implementation, patients were significantly more likely than staff to disagree that nicotine replacement would successfully control withdrawal symptoms (t=-1.98, df=140, p<0.05).* **Attrition** Not applicable	
Authors	**Country**	**Method of allocation**	**Primary outcomes** Attitudinal outcomes	**Beliefs - effects of smokefree: "Smokefree affects patient recruitment**	**Limitations identified by author(s)**

Hill et al **Year** 2007 **Aim of study** *To investigate the attitudes of patients and staff on an in-patient drug and alcohol dependence treatment service towards the proposed policy to ban smoking within substance use in-patient treatment facilities.* **Study design** Cross-sectional study **Quality score** ++ **External validity score** ++	England **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Patients Staff **Source population demographics** Speciality care *Patients: individuals in treatment for drug dependence, alcohol dependence, or both disorders.* **Recruitment** *Patients currently in treatment were asked to complete the questionnaires and questionnaires were returned to the research team on a weekly basis. Telephone interviews were conducted with patients awaiting admission.* *Staff questionnaires were distributed by post to all multidisciplinary staff on the addiction in-patient wards.* **Population selection criteria** Inclusion criteria *Patients currently in treatment, patients awaiting admission.* *All staff.* Exclusion criteria not applicable % participation not reported **Potential sources of bias (association)** ++	Not applicable **Smokefree implementation stage** Smokefree impending *July 2008* **When assessed** Before implementation – single time-point *October/November 2005* **Where** Mental Health **Smokefree coverage** Smokefree building(s) **Supporting strategies/interventions** Not reported **Sample size** Total sample *n=77* *38 patients (10 awaiting admission); 39 staff* *More than half of the patients (52%, n=20) were receiving treatment on the in-patient alcohol treatment unit, 24% (n=9) on the in-patient drug treatment unit, and 24% (n=9) on the in-patient acute assessment unit. The mean age of the patient sample was 38*	*Willingness to accept treatment with a no smoking policy; difficulty of treatment for drug and/or alcohol dependence with a no smoking policy; success of treatment with a no-smoking policy.* **Follow-up periods** Not applicable **Method of analysis** *Staff and patient responses to structured questions were entered into SPSS database for analysis.*	**& retention"** *Two-thirds (63%) of staff believed that patients would be unlikely to accept treatment if there was a no smoking policy.* *Patients: Almost three-quarters (73%) of the smokers felt that they would be unlikely to accept treatment if there was a no smoking policy.* **Beliefs - effects of smokefree: Other views on smokefree effects** *Nearly all staff (97%) believed that patients would find treatment 'more difficult' and that treatment would be 'less successful' (87%).* *Patients: Nearly all those asked (92%) believed that treatment for drug and/or alcohol dependence with a no smoking policy would be 'more difficult' and almost three-quarters (71%) felt that treatment would be 'less successful'.* **Attrition** Not applicable	*The study was a small-scale project that was undertaken to gain some advance information about the possible effects of a no smoking policy on substance misuse inpatients.* *Although the study sample was drawn from both staff and patients in alcohol- and drug-dependence treatment services, and included some patients awaiting admission, the sample sizes were rather small, and a larger-scale survey would be needed to increase the strength of our findings. Also, the findings represent expressed views about future events and responses. The question of how the introduction of a no-smoking policy may affect treatment seeking and treatment responses in practice will need to be measured.* **Future research recommendations** *The question of how the introduction of a no-smoking policy may affect treatment seeking and treatment responses in practice will need to be measured.* **Source of funding**

	Setting *Three specialist substance use treatment wards that were providing treatment for drug dependence, alcohol dependence, or both disorders.*	*years (SD=8.6; range 18–55 years); 52% (n=20) were male. The majority of the patient sample (92%, n=35) were current smokers; 5% (n=2) were former smokers and one person had never smoked. Those patients who were smokers reported smoking an average of 22.1 cigarettes per day (SD=10.57; range 0–40 per day) and had smoked for an average of 23 years (SD=9.62; range 0–47 years). Staff: 44% (n=17) were working on the in-patient alcohol treatment unit, 28% (n=11) on the in-patient drug treatment unit, and 28% (n=11) on the in-patient acute assessment unit. The response rates for these three wards were 68, 38, and 52% respectively. Staff had a mean age of 38.6 years (SD=10.3; range 25–73 years); just under half (44%) were male. A range of occupational groups responded to the questionnaire: this included nursing staff*			Not reported

		(64%); medical staff (10%); administrative staff (10%); occupational therapy staff (8%); and psychology (8%). Staff had been working in the addictions field for an average of 4.4 years (SD54.25; range 0–15 years). Just under a third of staff (31%) were current smokers; one-third (33%) were former smokers and just over one-third (36%) had never smoked. **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable			
Authors *Hudzinski & Frohlich* **Year** 1990 **Aim of study** *To research how tobacco smoke affects employees and patients of a healthcare institution, the acceptance of a no-smoking policy before and after its implementation, and*	**Country** USA *Louisiana* **Urban/rural setting** Not reported **Secondary Care setting** Both **Source population** Patients Staff *Employees and staff physicians* **Source population demographics**	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place *Implemented 1986* **When assessed** Before implementation – single time-point	**Primary outcomes** Attitudinal outcomes *Support for the ban (staff and patients) using Likert-scales* **Follow-up periods** Follow-up period(s) *12 months and 18 months* **Method of analysis** *Responses (nominal and ordinal data) were coded and the "data were analysed using survey statistical*	**Attitudes to smokefree: Staff** *Support for the ban: Pre-policy, 77% of all hospital staff favoured the no-smoking policy, 75% favoured the policy 6 months after implementation, increasing to 84% of all hospital staff who favoured the policy 12 months after implementation.* **Attitudes to smokefree: Patients** *Support for the ban: Pre-policy, 82% of hospital patients surveyed favoured the no-smoking policy, 93% favoured the policy 6 months after implementation, and 80% favoured the policy 12 months after implementation.* **Attrition**	**Limitations identified by author(s)** *Uncontrolled factors may have influenced the results; repetitive questionnaires may have sensitized employees and patients in their responses; smoking cessation programs may have influenced employees' attitudes rather than the policy itself or the national trend in stopping smoking.* **Limitations identified by**

the consequences of the policy on the smoker (particularly confined to responses of employees). **Study design** Before-and-after study (with same sample after intervention) **Quality score** + **External validity score** +	None reported **Recruitment** *Questionnaire (including statement of purpose and completion instructions) mailed to all employees and to +2000 randomly selected patients. The same individuals were re-contacted and invited to respond to a similar questionnaire 6 and 12 months later.* **Population selection criteria** Inclusion criteria *All employees (including medical and scientific staff)* Inclusion criteria not reported *For patients* Exclusion criteria not reported % participation agreement *Employees: 46% (pre-ban), 38% (6m post-ban), 16% (12m post-ban)* % participation not reported *For patients* **Potential sources of bias (association)** - *low staff response rate (same sample): 46% (pre-ban), 38% (6m post-ban), 16% (12m post-ban); no patient response rate reported; excl criteria NR for patients; no data for non-responders* **Setting** *A health care institution (clinic and medical foundation) with inpatient units employing staff*	*6 months pre-ban* After implementation – multiple time-points *6 months post-ban and 12 months post-ban* **Where** Not Mental Health **Smokefree coverage** Smokefree building(s) Ban exclusions (write in) *Permitted on the acute psychiatry inpatient unit by physician approval* Other (write in) *A "comprehensive campus-wide smokefree environment"* **Supporting strategies/interventions** Implementation committee *Smoke-Free Task Force (included clinicians, psychologists, and administrative personnel from public affairs and employee relations departments)* **Sample size** Total sample *Employees: n=1946 (pre-ban), n=1608 (6m post-ban), n=684 (12m post-ban)*	*methods (Rosenberg 1986)". All physician data were collapsed into the employee response category.*	Not applicable	**review team** *Same sample but may have become desensitised to questionnaire; no control group.* **Evidence gaps/future research recommendations** None reported **Source of funding** Not reported

	physicians and psychologists.	*Sample characteristics: At 12 months follow-up: 18% physicians 82% other employee; 4% <35years, 29% 35-44 years, 27% ≥45 years; 29% male.* *Patients: n=607 (pre-ban), n=397 (6m post-ban), n=600 (12m post-ban)* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported			
Authors *Jones & Williams* **Year** 2010 **Aim of study** *The aims of this study were (i) to determine smoking prevalence by employees of The Queen Elizabeth Hospital and to compare this with employees of other hospitals and (ii) to ascertain employees' perspectives regarding smoking on hospital grounds.* **Study design**	**Country** Australia **Urban/rural setting** Urban *Royal Adelaide Hospital (RAH)* *Flinders Medical Centre (FMC)* *The Queen Elizabeth Hospital (TQEH)* Rural *Alice Springs Hospital (ASH)* **Secondary Care setting** Both **Source population** Staff *TQEH: Approx. 2200 staff* *ASH: 725 staff* *RAH: 3640 staff* *FMC: 2920 staff* **Source population**	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree in place **When assessed** After implementation – single time-point *FMC and ASH - 2004* *RAH - 2005* *TQEH - 2007* **Where** Not reported **Smokefree coverage** Smokefree building(s) **Supporting strategies/interventions** Cessation support	**Primary outcomes** Attitudinal outcomes *Questionnaires asked about:* *1) Perceptions on the acceptability of smoking in areas visible to the public* *2) Support for complete ban on smoking on campus* *3) Support for providing areas where smoking is allowed* **Follow-up periods** Not applicable **Method of analysis** Not reported	**Attitudes to smokefree: Staff** *Area should be provided (%): ASH 92.9%; FMC 92.4%; RAH 87.7%; TQEH 92.1%.* *Support complete ban (%): ASH 5.5%; FMC 14.3%; RAH 19.9%; TQEH 15.0%.* *Not acceptable to smoke visibly (%): ASH 45.3%; FMC 67.6%; RAH 57.6%; TQEH 62.0%.* **Attrition** Not applicable	**Limitations identified by author(s)** *One limitation of our study was the self-reported nature of the surveys. Given the awareness of the harmful effects of tobacco smoking reported by employees in these surveys, it is likely that more smokers than non-smokers would not complete the questionnaire. The surveys were conducted in a similar fashion (namely the same questions asked, the same financial incentives offered, etc.) at each hospital, but it is likely that local differences (e.g. pay slips not being*

Cross-sectional study **Quality score** + **External validity score** +	**demographics** None reported **Recruitment** *Employee names were obtained from the respective pay office or human resource departments of each hospital and a single-page questionnaire was forwarded either directly to each employee through internal mail or attached to pay slips.* **Population selection criteria** Inclusion criteria *All staff* Exclusion criteria not applicable % participation agreement *TQEH: 54-59%* *RAH: 43%* *FMC: 50%* *ASH: 39%* **Potential sources of bias (association)** ++ **Setting** *Four South Australian/Northern Territory hospitals.* *Royal Adelaide Hospital (RAH): approximately 550 beds.* *Flinders Medical Centre (FMC): approximately 480 beds.* *The Queen Elizabeth Hospital (TQEH): approximately 320 beds.* *Alice Springs Hospital (ASH)*	*TQEH* Pharmacotherapies/NRT *TQEH* **Sample size** Total sample *Not reported.* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable			*delivered to employees of ASH) may have differently affected response rates.* **Evidence gaps/future research recommendations** None reported **Source of funding** Other
Authors *Kannegaard et al* **Year**	**Country** Denmark **Urban/rural setting**	**Method of allocation** Not applicable **Smokefree**	**Primary outcomes** Attitudinal outcomes • *Satisfaction with*	**Attitudes to smokefree: Staff** *Satisfaction with prohibition on smoking in the hospital compared with smoking*	**Limitations identified by author(s)** *'When our study was*

2005 **Aim of study** *The purposes of this study are the following: (1) to illustrate smoking habits and attitudes to smoking among a hospital staff and (2) to illustrate possible changes in these subjects over a 2-year period before an announced status for the hospital as a non-smoking hospital* **Study design** *Cross-sectional study (2 time-points before implementation)* **Quality score** ++ **External validity score** ++	Not reported **Secondary Care setting** Not reported **Source population** Staff **Source population demographics** None reported **Recruitment** *In both of the surveys, an anonymous questionnaire was sent to every member of the staff with an addressed envelope thereby facilitating the return of the questionnaire. Questionnaires were sent by internal post.* **Population selection criteria** Inclusion criteria (write in) *Full and part-time hospital staff.* Exclusion criteria not reported % participation agreement *1999: 76%* *2001: 75.2%* **Potential sources of bias (association)** ++ **Setting** *A Danish hospital.*	**implementation stage** Smokefree impending *Jan 2002* **When assessed** Before implementation – multiple time-points *June 1999* *June 2001* **Where** Not reported **Smokefree coverage** Smokefree building(s) **Supporting strategies/interventions** Not reported **Sample size** Total sample *1999: n=729* *2001: n=729* *Approximately 85% of the staff are women and almost 15% were men in both studies. In 1999, 33% of the staff answered that they were smokers, while in 2001 only slightly more than 26% were smoking daily or nondaily.* **Baseline comparison** Not applicable **Study sufficiently powered? (association)**	*smoking prohibition in the hospital* *• Attitudes towards implementing sanctions towards staff who broke smoking prohibitions (after only)* **Follow-up periods** Follow-up period(s) *2 years.* **Method of analysis** *Statistical significance was evaluated using both chi square-tests and partial gamma coefficients for ordinal data.*	*status of responder* *1999* *Smoker, daily: satisfied 48.5% (N = 94); not satisfied 51.5% (N = 100); total 100.0% (N = 194)* *Smoker, non-daily: satisfied 87.8% (N = 36); not satisfied 12.2% (N = 5); total 100.0% (N = 41)* *Ex-smoker: satisfied 88.2% (N = 157); not satisfied 11.8% (N = 21); total 100.0% (N = 178)* *Never smoked: satisfied 95.2% (N = 277); not satisfied 4.8% (N = 14); total 100.0% (N = 291)* *Total: satisfied 80.1% (N = 564); not satisfied 19.9% (N = 140); total 100.0% (N = 704)* *2001* *Smoker, daily: satisfied 21.1% (N = 43); not satisfied 70.9% (N = 105); total 100.0% (N = 148)* *Smoker, non-daily; satisfied 90.3% (N = 28); not satisfied 9.7% (N = 3); total 100.0% (N = 31)* *Ex-smoker: satisfied 87.2% (N = 164); not satisfied 12.8% (N = 24); total 100.0% (N = 188)* *Never smoked; satisfied 96.6% (N = 311); not satisfied 3.4% (N = 11); total 100.0% (N = 322)* *Total: satisfied 79.2% (N = 546); not satisfied 20.8% (N = 143); total 100.0% (N = 689)* *( ) indicates the actual number.* *P < 0.0005 in 1999 and 2001.* **Other factors: Other** *Attitudes towards sanctions on staff who brake smoking prohibition.* *2001 study only. Of 91.6% of respondents who answered this question, 33.5% think*	*conducted in 2001, only half a year remained before the hospital became a no-smoking hospital. After the first study in 1999, many initiatives were made to focus on the importance of smoking cessation, such as posters, information, competition and free smoking cessation courses for the staff. Not everyone was satisfied with the decision to turn the hospital into a no-smoking workplace. Our study could not show that the staff's attitude towards smoking has been changed due to the special preventive effort at the hospital over this 2-year period. The aim for the preventive work has been to change the staff's knowledge on smoking and thereby their smoking habits. Results show that the habits have changed, whereas the data are not able to show any effect on the staff's attitude.'* **Evidence gaps/future research recommendations** None reported

		Not reported		*that sanctions should be implemented towards staff who broke the prohibition of smoking at the hospital.* *Taking gender into consideration, the numbers show a higher level of acceptance of sanctions among men than women. A significant (P < 0.008) higher number of women have a negative attitude towards sanctions. 68.6% of the female staff say No to sanctions whereas only 54.5% of the male staff say No.* **Attrition** Not applicable	**Source of funding** Not reported
Authors *Lewis, Shin & Davies* **Year** 2011 **Aim of study** *To estimate the current smoking habits of health care professionals (HCPs) in a country with active tobacco control measures, and to record their attitudes to national and hospital tobacco bans.* **Study design** Cross-sectional study *A simple questionnaire that took less than 5 minutes to complete.* **Quality score** + **External validity**	**Country** Wales **Urban/rural setting** Not reported **Secondary Care setting** Both **Source population** Staff *All healthcare professionals and medical nursing students in the health board.* **Source population demographics** Occupation *All healthcare professionals and medical nursing students in the health board.* **Recruitment** Recruitment method *Opportunistic sampling: Healthcare professionals approached during breaks or staff change-overs and invited to take part.*	**Method of allocation** Not reported **Smokefree implementation stage** Smokefree in place **When assessed** After implementation – single time-point **Where** Both *Secondary care of all specialities.* **Smokefree coverage** Smokefree building(s) Smokefree grounds **Supporting strategies/interventions** Cessation support **Sample size** Total sample *n=500* *The mean (SD) age of the responders was*	**Primary outcomes** Attitudinal outcomes *Support for hospital ban.* **Follow-up periods** Not applicable **Method of analysis** *We used the Statistical Package for Social Sciences, Version 17.0 and Stata v11.1. Following tests for normality, continuous data were described with means and standard deviations (SDs), or medians and interquartile ranges (IQRs), and categorical data were compared with the χ2 test. Odds ratios (ORs) were calculated using the cci function, the 95% confidence intervals (CI) are exact and P values are Fisher's exact two-*	**Attitudes to smokefree: Staff** *Overall, 57% of HCPs wanted a complete ban on smoking in hospital grounds and 40% preferred a partial ban, with designated smoking areas on hospital grounds; 1% thought there should be no ban and 3% declined to answer.* *There was only one statistically significant difference between HCP groups with regard to the attitude to bans on hospital premises. The very small numbers supporting no ban, five in total, were combined with those supporting a partial ban. This combined group was compared with those supporting a complete ban. Doctors had the highest support for a total ban (68.5%), followed by students (59.0%), AHPs (57.8%) and nurses (52.0%). The difference between doctors and nurses was statistically significant (OR 2.01, 95% CI 1.14–3.56, P = 0.01).* **Attrition** Not applicable	**Limitations identified by author(s)** *We had very few responses from psychiatric health workers; this reflects their geographical separation from the main hospitals where the student researcher worked, rather than response bias.* *Our selection of participants was not a random sample, but was opportunistic. Thus it could be biased to those who, for example, like to take longer breaks and—perhaps representing a bias towards smokers—staff who take longer in handovers or are more likely to attend post-graduate meetings.* **Evidence gaps/future research**

score +	**Population selection criteria** Inclusion criteria *All healthcare professionals and medical nursing students in the health board.* Exclusion criteria not reported % participation agreement *500/607 = 83%* **Potential sources of bias (association)** - *Opportunistic sampling. This may have resulted in a biased sample.* **Setting** *All seven hospitals of Hywel Dda Health Board, providing health care to a population of around 372 000 people in Wales.*	*36.4 (11.9) years (range 18–70); 72% were female. Overall, 7% of responders said they were current smokers, 21% were ex-smokers and 71% reported never smoking (defined as fewer than 100 cigarettes in their lifetime).* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable	*sided.*		**recommendations** None reported **Source of funding** Not reported
Authors *Matthews et al.* **Year** 2005 **Aim of study** *To evaluate implementation of a smoking ban on an acute crisis stabilization (psychiatric) unit for men.* **Study design** Before-and-after study (with different sample after intervention) **Quality score** -	**Country** USA *North Carolina* **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Staff *Nursing staff* Specific Ward(s)/Department(s) *Male acute crisis stabilization unit* **Source population demographics** None reported **Recruitment** *Not reported.*	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place *Implemented 21 Oct '02* **When assessed** Before implementation – single time-point *Date of pre-ban staff survey not reported* After implementation – single time-point	**Primary outcomes** Attitudinal outcomes *Staff: the ban's benefits, ethics, and problems they expected and encountered* **Follow-up periods** Not reported **Method of analysis** *Categorical data by Chi Square except in cases of a low frequency in one of the cells, when Fischer's exact (two-tailed) test was substituted. Continuous data were assessed using a Student's t test.*	**Attitudes to smokefree: Staff** *Pre-implementation, 6 of the 14 nursing staff respondents believed banning smoking would be helpful, increasing to 13 of 13 respondents post-implementation who respondents believed the intervention had been helpful (p=0.002). [Direction of effect supports smokefree]* **Beliefs - people's rights: Other rights issues** *Pre-implementation, 5 of the 11 nursing staff respondents believed banning smoking was ethical (3 non-responders), increasing to 10 of 12 respondents post-implementation who believed it was ethical (1 non-responder) (p=0.089). [Direction of effect supports smokefree]* **Other factors: Success of implementation** *Pre-implementation, 8 of the 14 nursing staff respondents were concerned about*	**Limitations identified by author(s)** *Staff perceptions of increased contraband, not supported by the data, may suggest problems with data collection.* **Limitations identified by review team** *Paper lacks detail on methods/analysis* **Future research recommendations** *To determine whether there are any post-discharge benefits or possible risks from abrupt smoking cessation in acute psychiatric patients.* **Source of funding**

External validity score -	**Population selection criteria** Inclusion criteria not reported Exclusion criteria not reported % participation agreement *Staff 58% (pre-ban) 54% (post-ban)* **Potential sources of bias (association)** - *NA for patient data (no recruitment, data taken from records); No inclusion/exclusion for staff, low participation rate: 58% (pre-ban) 54% (post-ban)* **Setting** *An 18-bed acute crisis stabilization unit where all male patients are first admitted, for up to 3 days, by which time patients are either discharged or referred to the male acute treatment unit. The unit is within Dorothea Dix State Psychiatric Hospital, which provides care to people in the south central region of North Carolina. Approx. 3,000 patients (1,800 men, 1,200 women) are admitted to adult psychiatry service per year (approx. 95% involuntarily).*	*Date of post-ban staff survey not reported* **Where** Mental Health **Smokefree coverage** Not reported *Described as "smoking ban"* **Supporting strategies/interventions** Cessation support *Patients - education about nicotine addiction and withdrawal* Pharmacotherapies/NRT *Patients - given nicotine gum (up to 12 mg per day was typically prescribed) or patches (offered in 7 mg, 14 mg, or 21 mg strengths (depending on the number of cigarettes the patients had reported smoking prior to admission)) to ease withdrawal symptoms.* **Sample size** Total sample *Nursing staff n=14 (pre-ban) n=13 (post-ban)* **Baseline comparison** Not applicable		*problems they anticipated related to the intervention, decreasing to none of the 13 respondents being concerned post-implementation (p=0.002). [Direction of effect supports smokefree]* **Attrition** Not applicable	Not reported

		Study sufficiently powered? (association) Not reported			
Authors *Parks et al* **Year** 2009 **Aim of study** *To investigate the problem of resistance to smoking restrictions and specifically compliance with smoke-free policy.* **Study design** Cross-sectional study **Quality score** + **External validity score** ++	**Country** England **Urban/rural setting** Not reported **Secondary Care setting** Both **Source population** Staff *All hospital staff n=6981* **Source population demographics** None reported **Recruitment** *Staff were made aware of the study through the hospital's Communications Department and a prize draw was offered as an incentive. The questionnaire could be completed either online, via the hospital intranet using Apollo (an original, secure, online survey application) or as a paper copy, available to those members of staff who had no access to computers in order to maximise returns.* **Population selection criteria** Inclusion criteria *All staff eligible* **Potential sources of bias (association)** ++	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree in place *January 2006* *Six months after data collection (March 2008), the hospital formally relaxed its smoking policy and reintroduced smoking shelters.* **When assessed** After implementation – single time-point *March 2008* **Where** Not reported **Smokefree coverage** Smokefree building(s) Smokefree grounds **Supporting strategies/interventions** Not reported **Sample size** Total sample *n=704* *The demographic composition of our sample was largely representative of the*	**Primary outcomes** Attitudinal outcomes *Attitudes towards smoke-free policy.* **Follow-up periods** Not applicable **Method of analysis** *The demographic information gathered from respondents was analysed and described for gender, age, job and ethnicity. Comparison between compliant and non-compliant smokers was made based on calculated scores for the Fagerström test, Horn-Waingrow scale and level of agreement with questions about attitudes. For ordinal data, a linear-by-linear association test was used to assess whether there was a significant difference between the two groups of smokers. For the Horn-Waingrow scale, the Mann-Whitney test was used to determine any significant differences in two non-parametric independent variables.*	**Attitudes to smokefree: Staff** *The hospital is right to have such a policy: non-smokers 85.3%; compliant smokers 36.8%; non-compliant smokers 34.4%* **Beliefs - effects of smokefree: Other views on smokefree effects** *The policy protects people against passive smoke: non-smokers 61.6%; compliant smokers 35.8%; non-compliant smokers 48.4%* **Planning & resource issues: Smoking cessation services** *Smokers don't get enough help from the hospital if they want to quit: non-smokers 16.1%; compliant smokers 43.5%; non-compliant smokers 37.5%* **Communication issues: Staffs' familiarity/understanding of policy** *I am aware of this policy: non-smokers 100%; complaint smokers 100%; non-compliant smokers 100%* **Other factors: Other** *The policy is adequately enforced: non-smokers 20.7%; compliant smokers 18.8%; non-compliant smokers 46.9%* **Attrition** Not applicable	**Limitations identified by author(s)** '*The study is limited by the size of our sample, which represents only one tenth of the eligible population. Larger responses would have been difficult to achieve in this setting, as effective communication within a sizeable teaching hospital can be difficult. Despite anonymity and dissociation from their employer, recall bias will inevitably have affected the way the staff answered questions about compliance and smoking behaviour for fear of repercussions. We are further limited by our failure to include incomplete questionnaires in the analysis but, given there were only 35 smokers amongst the incomplete questionnaires and no method for handling missing data is without limitation, the impact of this is likely to*

	Setting *Addenbrooke's Hospital: a large NHS quaternary referral centre with 1,170 beds and 6,981 staff (2007/8), located in Cambridge, UK.*	*hospital's working population for gender, age, job profile and ethnicity. There were however differences: those aged 25 years or under were over-represented compared to those aged 26 to 45 years, men were over-represented and healthcare staff (professional and auxiliary) were under-represented. In terms of reported smoking profile, 14.3% (95% CI, 12.0 – 17.1%) were smokers, 21.7% (95% CI 18.8 – 24.9%) were ex-smokers and 63.9% (95% CI 60.3 – 67.3%) had never smoked.* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable	*For questions relating to attitudes, the Fisher's Exact test was used to test for any association between smoking status, compliance and agreement to the questions. The 95% confidence intervals (CI) for proportions were estimated by approximation to the binomial distribution and the use of exact methods. A p value of less than 0.05 was considered to be significant.*		*be minimal.'* **Future research recommendations** *'We advocate further observational studies to examine the impact of proactive interventions that specifically address nicotine dependence and psychological addiction amongst non-compliant smokers.'* **Source of funding** Voluntary/Charity
Authors *Patten et al.* **Year** 1995 **Aim of study** *To evaluate the effects of the*	**Country** USA *Minnesota* **Urban/rural setting** Not reported **Secondary Care setting**	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree**	**Primary outcomes** Attitudinal outcomes *Staff support for the policy; comparison of what expected with what observed following implementation.*	**Attitudes to smokefree: Staff** *Support for the policy: Pre-implementation, 49% of all staff were in favour of the smokefree policy, 44% did not support the policy and 7% were undecided or did not give a response.* *Post-implementation, different outcomes*	**Limitations identified by author(s)** *Low response rate at follow-up limits the extent to which findings can be generalised. No biochemical validation of psychiatric patients'*

smokefree policy on the behavioural functioning of patients and on staff attitudes. Also to examine long term smoking status of patients who were admitted to hospital after implementation of the smokefree policy **Study design** Before-and-after study (with different sample after intervention) Cross-sectional study **Quality score** + **External validity score** +	Mental Health **Source population** Staff **Source population demographics** None reported. **Recruitment** *Staff survey distributed to staff in the units (no further details).* Not applicable **Population selection criteria** Inclusion criteria *Staff survey – all staff in the 3 adult psychiatric units at Saint Marys Hospital (1 locked, 2 open units)* Exclusion criteria not reported % participation agreement *Staff survey 67% (pre-ban) 56% (post-ban)* **Potential sources of bias (association)** - *NA for patient data (no recruitment, data taken from records); unlikely for the staff and follow-up patient surveys - self-selecting and no detail of non-responders. Although reports responses from a range of staff occupations across the wards.* **Setting** *A 28-bed locked adult inpatient psychiatric unit in Saint Marys Hospital, Rochester, Minnesota.*	**implementation stage** Smokefree in place *Implemented 1 Jan '91* **When assessed** Before implementation – single time-point *Staff survey 6 months pre-implementation* After implementation – single time-point *Patient survey 16-18 months post-discharge; Staff survey 6 months post-implementation* **Where** Mental Health *Locked inpatient psychiatric unit* **Smokefree coverage** Smokefree building(s) Smokefree grounds Ban exclusions *Patients with off-unit privileges, at an appropriate level, were granted brief passes to leave the building unaccompanied to smoke ("very few patients")* **Supporting strategies/interventions** Implementation committee Cessation support	**Follow-up periods** Not applicable *patient survey* **Method of analysis** Not reported *Survey data presented as proportions only (no p values)*	*were measured to indicate the level of staff support for the policy. 76% of all staff agreed that they 'Would recommend that other adult psychiatric units be smokefree', 13% of all staff responded they would not. 71% of all staff responded that they would not 'Recommend that the adult psychiatric units not remain smokefree', 21% of all staff responded they would. Sub-group differences by smoking status: 78% of current staff smokers (76% former staff smokers, 81% staff never smokers) agreed that they 'Would recommend that other adult psychiatric units be smokefree', no current staff smokers (21% former staff smokers, 13% staff never smokers) responded they would not. 44% of current staff smokers (82% former staff smokers, 75% staff never smokers) responded that they would not 'Recommend that the adult psychiatric units not remain smokefree', 44% of current staff smokers (18% former staff smokers, 20% staff never smokers) responded they would.* **Other factors: Success of implementation** *What expected with what observed following implementation: Asked to compare what they had expected to what they had observed about smokefree implementation in the adult psychiatric (locked and unlocked) units, 62% all staff post-implementation responded it was much or somewhat easier, 22% responded it was neither more difficult nor easier, 6% responded it was somewhat more difficult than expected, and 10% did not respond.* *61% of all staff post-implementation, reported that the smokefree policy was 'working well' in the adult psychiatric*	*smoking status.* **Limitations identified by review team** *Risk of self-selection bias, unvalidated outcome measures, no control group* **Evidence gaps** *Little known about the long term smoking status of psychiatric patients after hospital admission in a smokefree unit* **Future research recommendations** *Research to determine which smoking cessation procedures are most effective and acceptable to psychiatric patients.* **Source of funding** Not reported

		Patients' weekly support group led by Nicotine Dependence Center Pharmacotherapies/NRT *Nicotine gum (patients)* Other *Staff education sessions on the treatment of nicotine dependence; written information for patients* **Sample size** Total sample *STAFF (survey sample) n=137 (pre-ban) n=126 (post-ban)* *Sample characteristics - Smoking status: Current smokers 9.5% (pre-) 7% (post-), former smokers 36.5% (pre-) 26% (post-), never smokers 52.0% (pre-) 63% (post-), no response 2.0% (pre-) 4% (post-).* *Occupation: Responses from staff psychiatrists and psychologists, resident physicians, nurses, nurse clinicians, psychiatric social workers, activity therapists and unit assistants from all 3 units (pre-). 90% (post-*		*(locked and unlocked) units, 19% indicated that it was 'working alright', 12% indicated it was 'not working well', and 9% were undecided or did not respond.* **Attrition** Not applicable	

		) work involved direct contact with patients in the psychiatric units. **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported			
Authors *Praveen et al* **Year** 2009 **Aim of study** *To explore attitudes of in-patient mental health staff to smoking and a smoking ban.* **Study design** Cross-sectional study **Quality score** + **External validity score** -	**Country** England **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Staff **Source population demographics** None reported **Recruitment** *Questionnaires distributed to staff in the mental health units where the researchers worked.* **Population selection criteria** Inclusion criteria not reported Exclusion criteria not reported % participation agreement *68.4%* **Potential sources of bias (association)** - *Did not use random sampling* **Setting** *In-patient mental health units*	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree impending *Due to be implemented in July 2008.* **When assessed** Before implementation – single time-point *December 2006-February 2007.* **Where** Mental Health **Smokefree coverage** Smokefree building(s) **Supporting strategies/interventions** Not reported **Sample size** Total sample *n=308* *55.5% female; 37.3% male; 7.1% no response*	**Primary outcomes** Attitudinal outcomes • *'Should service users be allowed to smoke on the ward?'* • *'Where should staff and service users be allowed to smoke? (designated indoor areas, outdoors, total ban)* • *'Should staff be allowed to smoke with service users?'* • *'Are there any benefits in allowing staff to smoke with service users?'* • *'Should cigarettes be given to service users to achieve therapeutic goals?'* • *'Do service users become more agitated or deteriorate in their mental health if they are not allowed to smoke?'* • *'Which aspect of service users health will benefit from the smoking ban?' (mental*	**Attitudes to smokefree: Staff** *Where should staff and service users be allowed to smoke?* *Designated indoor areas (smoke room): 148 (48.1%) all staff: 49 (15.9%*) smokers; 97 (31.5%*) non-smokers; 9 (52.9%) managers; 59 (50.9%) registered nurses; 22 (53.7%) doctors; 53 (44.2%) others.* *Outdoors: 132 (42.9%) all staff: 37 (12.0%*) smokers; 95 (30.8%*) non-smokers; 7 (41.2%) managers; 53 (45.7%) registered nurses; 17 (41.5%) doctors; 46 (38.3%) others.* *Total ban: 70 (22.7%) all staff; 2 (0.6%*) smokers; 68 (22.1%*) non-smokers; 5 (29.4%) managers; 23 (19.8%) registered nurses; 8 (19.5%) doctors; 33 (27.5%) others.* *No response: 2 (0.6%) all staff; 1 (0.3%*) smokers; 1 (0.3%*) non-smokers; 0 managers; 1 (0.9%) registered nurses; 0 doctors; 1 (0.8%) others.* **proportion of all respondents* **Beliefs - people's rights: Smokers' right to smoke** *Should service users be allowed to smoke on the ward?*	**Limitations identified by author(s)** *Random sampling was not used, which might have led to sampling bias.* *There might have been a self-report bias among respondents and it could be argued that staff with strong views on the smoking ban, or those affected by it, were more likely to respond.* *Also, some would argue that using a questionnaire with tick-box options might limit the range of responses.* **Evidence gaps/future research recommendations** None reported **Source of funding** Not reported

	(acute adult wards, rehabilitation wards, elderly wards and low secure units) in 3 locations.	*Occupation: 5.5.% managers; 37.7% registered nurses; 13.3% doctors; 38.9 other; 4.5% no response* *Age groups (years): 16-25 10.1%; 26-35 32.8%; 36-45 25.9%; 46-55 19.2%; 56-65 8.8%; No response 3.2%.* *23.1% smokers; 76.3% non-smokers; 0.6% no response.* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable	*health, physical health, both, neither)* • *'How will the efficiency of staff who smoke be affected by the smoking ban policy?' (improved, reduced)* **Follow-up periods** Not applicable **Method of analysis** Not reported	*Yes: 143 (46.4%) all staff; 53 (17.2%*) smokers; 88 (28.6%*)non-smokers* *No: 157 (50.9%) all staff; 15 (4.9%*) smokers; 142 (46.1%*) non-smokers* *No response: 8 (2.6%) all staff; 3 (0.9%*) smokers; 5 (1.6%*) non-smokers* **proportion of all respondents* **Beliefs - effects of smokefree: "Smokefree affects patients' mental health"** *Do service users become more agitated or deteriorate* *in their mental health if they are not allowed to smoke?* *Yes: 243 (78.9%) all staff; 66 (21.4%*) smokers; 175 (56.8%*) non-smokers* *No: 41 (13.3%) all staff; 1 (0.3%*) smokers; 40 (12.9%*) non-smokers* *No response: 24 (7.8%) all staff; 4 (1.3%*) smokers; 20 (6.5%*) non-smokers.* *Which aspect of service users' health will benefit from* *smoking ban?* *Mental health: 45 (14.6%) all staff; 2 (0.6%*) smokers; 43 (13.9%*) non-smokers* *Physical health: 196 (63.6%) all staff; 21 (6.8%*) smokers; 173 (56.2%*) non-smokers* *Both: 95 (30.8%) all staff; 40 (12.9%*) smokers; 45 (14.6%*) non-smokers* *Neither: 13 (4.2%) all staff; 10 (3.3%*) smokers; 3 (0.9%*) non-smokers* *No response: 14 (4.5%) all staff; 9 (2.9%*) smokers; 5 (1.6%*) non-smokers* **proportion of all respondents* **Beliefs - effects of smokefree: "Smokefree affects patients' physical health"** *Which aspect of service users' health will*	

				benefit from *smoking ban?* *Mental health: 45 (14.6%) all staff; 2 (0.6%*) smokers; 43 (13.9%*) non-smokers* *Physical health: 196 (63.6%) all staff; 21 (6.8%*) smokers; 173 (56.2%*) non-smokers* *Both: 95 (30.8%) all staff; 40 (12.9%*) smokers; 45 (14.6%*) non-smokers* *Neither: 13 (4.2%) all staff; 10 (3.3%*) smokers; 3 (0.9%*) non-smokers* *No response: 14 (4.5%) all staff; 9 (2.9%*) smokers; 5 (1.6%*) non-smokers* **proportion of all respondents* **Planning & resource issues: Other planning & resource issues** *How will the efficiency of staff who smoke be* *affected by the smoking ban policy?* *Improved: 107 (34.7%) all staff; 3 (0.9%*) smokers; 104 (33.8%*) non-smoking* *Reduced: 105 (34.1%) all staff; 27 (8.8%*) smokers; 78 (25.3%*) non-smokers* *No response: 96 (31.2%) all staff; 41 (13.3%*) smokers; 53 (17.2%*) non-smokers* **proportion of all respondents.* Measured but not reported **Communication issues: Staffs' familiarity/understanding of policy** *Almost all staff (95.4%) were aware of the proposed* *smoking ban.* **Communication issues: Health professional's-Patient's relationship** *Should staff be allowed to smoke with service users?* *Yes: 89 (28.9%) all staff; 30 (9.7%*) smokers; 57 (18.5%*) non-smokers*	

				No: 215 (69.8%) all staff; 40 (12.9%) smokers; 175 (56.8%*) non-smokers* *No response: 4 (1.3%) all staff; 1 (0.3%*) smokers; 3 (0.9%*) non-smokers.* *Are there any benefits in allowing staff to smoke with service users?* *Yes: 119 (38.6%) all staff; 46 (14.9%*) smokers; 71 (23.1%*) non-smokers* *No: 167 (54.2%) all staff; 24 (7.8%*) smokers; 143 (46.4%*) non-smokers* *No response: 22 (7.1%); all staff; 1 (0.3%*) smokers; 21 (6.8%*) non-smokers* **proportion of all respondents.* **Other factors: Other** *Should cigarettes be given to service users to achieve therapeutic goals?* *Yes: 51 (16.6%) all staff; 16 (5.2%*) smokers; 33 (10.7%*) non-smokers* *No: 249 (80.8%) all staff; 52 (16.9%*); smokers; 197 (63.9%*) non-smokers* *No response: 8 (2.6%) all staff; 3 (0.9%*) smokers; 5 (1.6%*) non-smokers* **proportion of all respondents* **Attrition** Not applicable	
Authors *Ratschen, Britton & McNeill* **Year** 2008 *Smoke-free hospitals – the English experience: results from a survey, interviews, and site visits*	**Country** England **Urban/rural setting** Not reported **Secondary Care setting** Both **Source population** Staff *Survey & Interviews: Trust Human Resources Directors or*	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place *98% respondents reported smokefree*	**Secondary outcomes** Attitudinal outcomes *Survey + Semi-structure interviews - views referring to selected aspects of policy development; and most frequently named success factors and challenges related to policy implementation*	**Attitudes to smokefree: Staff** *Survey data: Post-implementation of smokefree, representatives from mental health settings in NHS Trusts in England (n=54) were surveyed: 52% respondents believed that the level of policy support by staff differed among staff groups, with nurses being most frequently identified as the least supportive group (32%).* *55% respondents (n=12) participating in semi-structured telephone interviews on*	**Limitations identified by author(s)** *There may be a small degree of reporting bias to the study (formal data requests, study participants largely responsible for implementation); 21% study population did not respond and site visits limited to a small*

2009 *[A further paper, focussed on the study's mental health data]Implementation of smoke-free policies in mental health in-patient settings in England* **Aim of study** *To determine the extent of smoke-free policy implementation in English NHS acute and mental health Trusts, and to explore challenges and impacts related to policy implementation* **Study design** Cross-sectional study Interview study Participant observation *Site visits to triangulate data where possible* **Quality score** + **External validity score** +	*Trust Chief Executives to complete survey on behalf of the trust* **Source population demographics** None reported **Recruitment** Recruitment method *Survey: A list of all English NHS Trusts providing acute and/or mental health services in inpatient facilities was purchased. Questionnaire issued all 245 Trusts by post (also accessible for online completion) in Feb '07. Two reminder letters were sent to non-respondents after 3 and 6 weeks. Formal EIR data request made after 10 weeks.* *Semi-structured telephone interviews: a 30% sample of survey respondents who indicated availability for an interview were re-contacted.* *Rev 6 only: Site visits: Trust sites chosen due to their easy accessibility to the investigator* **Population selection criteria** Inclusion criteria *Survey & Interviews: HR Directors or Chief Executives of English NHS Trusts providing acute and/or mental health services in inpatient facilities.* *Rev 6 only: Site visits: easily accessible by investigator* Exclusion criteria *Primary healthcare trusts that did not provide mental health in-*	*policies were implemented, pre-national legislation (1 Jul '07) [from the survey results]* Smokefree impending *2% respondents reported date set for smokefree policies to be in place before 1 Jul '07 [from the survey results]* **When assessed** After implementation – single time-point *For 98% respondents* **Where** Both **Smokefree coverage** Smokefree building(s) *16% smokefree buildings (Acute Trusts); 29% smokefree buildings (Mental Health settings) [from the survey results]* Ban exclusions *Mental Health Settings (78%); Acute Trusts (50%) (for bereaved/distressed relatives (45%), sheltered outdoor areas (25%), smoking rooms (6%)); for psychiatric patients in 15% Acute Trusts, 65% in mental health*	**Follow-up periods** Not applicable **Method of analysis** *Survey: responses coded and entered into SPSS (v.14.0) to generate outcome measures; free text comments summarised according to recurring themes.* *Interviews: responses allocated to predefined/emerging categories.*	*the experience of smokefree implementation in NHS Trusts in England, believed that a changed attitude towards smoking in public places after July 2007 would facilitate enforcement in the future.* **Beliefs - effects of smokefree: "Smokefree affects patients' mental health"** *Survey data: Post-implementation of smokefree, representatives from mental health settings in NHS Trusts in England (n=54) were surveyed: 17% respondents believed that the aggravation of mental health problems posed implementation difficulties.* **Beliefs - effects of smokefree: "Smokefree results in changed patient aggression/management issues"** *68% respondents (n=15) participating in semi-structured telephone interviews on the experience of smokefree implementation in NHS Trusts in England, stated concerns regarding aggression and abuse, when challenging patients and visitors who smoked onsite, to explain the reluctance of staff to engage actively in enforcement.* **Beliefs - effects of smokefree: "Smokefree results in changed medication issues"** *Survey data: Post-implementation of smokefree, representatives from mental health settings in NHS Trusts in England (n=54) were surveyed: 34% respondents believed that problems related to the dosage of antipsychotic medication in the context of changed smoking behaviour posed implementation difficulties.* **Planning & resource issues: Staff workload/resourcing**	*subsample, thus limiting the generalzsability of results; self-selection bias may affect interview data; mental health settings site visits would have benefited from permission to access non-public areas for detailed observation.* **Limitations identified by review team** *Possible respondent reporting bias. Reasonable interview and survey response rate however based on 1 employee's observations per hospital (survey); triangulated study design* **Evidence gaps** *A set of defined smoke-free indicators would be useful to assess policy implementation in future, including objective measures of exposure to tobacco smoke* **Source of funding** Other

	patient facilities % participation agreement *Survey: 77% (76% acute Trusts, 79% mental health settings (87% mental health trusts, 46% primary healthcare trusts with mental health in-patient facilities))* *Interviews: 88% (88% acute Trusts, 100% mental health settings)* **Potential sources of bias (association)** + *76% acute Trusts, 79% mental health settings; site visits to convenience subsample* **Setting** *English NHS Trusts providing acute and/or mental health services in inpatient facilities*	*settings [from the survey results]* Other *84% smokefree buildings and grounds, including 41% without exemptions (Acute Trusts); 64% smokefree whole premises, including 13% without exemptions (Mental Health settings); 7% smokefree parts of buildings (Mental Health settings) [from the survey results]* **Supporting strategies/interventions** Posters/signage Staff meetings *Almost 75% Trusts informed staff by disseminating information in meetings or special events [from results section]* Staff letters/payslip notes *Emails, newsletters or Trust intranet* Cessation support *Onsite cessation support for patients, 73% Trusts; cessation classes offered for staff, 95% Trusts [from*		*68% respondents (n=15) participating in semi-structured telephone interviews on the experience of smokefree implementation in NHS Trusts in England, named the 'active involvement of all staff members' as central to policy enforcement.* **Planning & resource issues: Smoking cessation services** *All Trusts with respondents participating in semi-structured telephone interviews on the experience of smokefree implementation in NHS Trusts in England (n=22), reported close collaboration with the NHS Stop Smoking Services.* *41% respondents (n=9) participating in semi-structured telephone interviews on the experience of smokefree implementation in NHS Trusts in England, believed that enhanced support with regard to smoking cessation might add to patients' motivation to stop smoking.* **Planning & resource issues: Structural issues** *55% respondents (n=12) participating in semi-structured telephone interviews on the experience of smokefree implementation in NHS Trusts in England, described litter from cigarette ends on Trust premises as a problem.* **Planning & resource issues: Compliance/Enforcement issues** *64% respondents (n=14) participating in semi-structured telephone interviews on the experience of smokefree implementation in NHS Trusts in England, found staff, patients and visitors "congregating" in front of Trust premises to smoke, and related adverse effects on*	

		results section] Pharmacotherapies/NRT *For patients from the hospital pharmacy, 77% Trusts; For staff, free or reduced NRT, 55% Trusts [from results section]* Other *Admissions assessments, 45% Trusts; implementation budget, 24% acute Trusts and 19% mental health settings; [from results section]* **Sample size** Total sample *Survey: n=186 Trusts* *Sample characteristics: n=132 acute Trusts (69% Trusts comprising >1 site) ; n=54 mental health settings (n=48 mental health trusts, n=6 primary healthcare trusts with providing mental health in-patient facilities) (100% Trusts comprising >1 site)* *Telephone interviews: n=22* *Sample characteristic: n=15 acute Trust staff n=7 mental health setting staff* **Baseline comparison**		*Trust image and environment, challenging.* **Communication issues: Availability of information** *77% respondents (n=17) participating in semi-structured telephone interviews on the experience of smokefree implementation in NHS Trusts in England, regarded 'extensive communication and promotion of the smokefree policy and its constant reinforcement' as crucial for policy success.* **Communication issues: Health professional's-Patient's relationship** *Survey data: Post-implementation of smokefree, representatives from mental health settings in NHS Trusts in England (n=54) were surveyed: 36% respondents believed that adverse effects of the smoke-free policy on the clinician–patient relationship posed implementation difficulties.* **Communication issues: Other communication issues** *68% respondents (n=15) participating in semi-structured telephone interviews on the experience of smokefree implementation in NHS Trusts in England, mentioned difficulties in sustaining policy enforcement in certain areas, such as entrances and A&E departments.* **Other factors: Safety issues** *Post-implementation of smokefree, representatives from mental health settings in NHS Trusts in England (n=54) were surveyed: 91% respondents agreed that 'psychiatric settings encountered specific problems with regard to smoke-free policy implementation': specifically, respondents believed that 'the high*	

		Not applicable **Study sufficiently powered? (association)** Not reported		*prevalence of smoking among service users' (81%) and concomitant 'safety issues' (70%) were of concern.* **Other factors: Success of implementation** *32% respondents reported that the policy's implementation had had a beneficial impact on the Trust's image.* **Other factors: Other** *23% respondents (n=5) participating in semi-structured telephone interviews on the experience of smokefree implementation in NHS Trusts in England, regarded the 'rigorous banning of smoking from premises without exemptions' as crucial for policy success.* **Attrition** Not applicable	
Authors *Ratschen et al* **Year** 2009 **Aim of study** *To investigate staff knowledge and attitudes relating to smoking prevalence, dependence, treatment and the relationship between smoking and mental illness.* **Study design** Cross-sectional study **Quality score** ++ **External validity score**	**Country** UK *UK nation not specified.* **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Staff *All clinical staff involved in patient treatment and care. n=675; 587 non-medical staff and 88 medical staff.* **Source population demographics** Occupation *Registered nurses, healthcare assistants, occupational and other therapists, psychiatrists (junior doctors and consultants)*	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree in place *March 2007* **When assessed** After implementation – single time-point **Where** Mental Health **Smokefree coverage** Smokefree building(s) Smokefree grounds **Supporting strategies/interventions** Staff training **Sample size**	**Primary outcomes** Attitudinal outcomes *Beliefs and attitudes related to the smoke-free policy in wards.* **Follow-up periods** Not applicable **Method of analysis** *Questionnaires were coded, entered and analysed in SPSS version 15 for Windows. Descriptive statistics were used to obtain means, standard deviations (S.D.), medians and proportions. Univariate analyses of categorical and continuous data were performed using chi-squared tests and t*	**Attitudes to smokefree: Staff** *When asked to indicate how important respondents believed it was to address smoking during mental health treatment (on an ascending numerical scale from 1 to 10), the median value ascribed to this was 5, with no significant differences detected between subgroups.* **Beliefs - people's rights: Non-smokers' right to smokefree** *Smokers were less likely to agree that protecting patients and staff from the harmful effects of second-hand smoke through the smoke-free policy was an important aim (59.3% vs. 75.1%, OR=0.48; P=.001).* **Beliefs - effects of smokefree: "Smokefree affects patients' mental health"** *Around two thirds of respondents (64.6%) expressed agreement that smoking*	**Limitations identified by author(s)** *Due to the reasonable overall response rate of the study (68%) and the inclusion of all clinical professions and all psychiatric specialties of a large Trust, the results are likely to be applicable to other mental health inpatient settings. However, although the Trust in question is one of the largest in the country, the generalizability of results to other inpatient settings might be limited due to specific circumstances pertaining to the Trust studied. Furthermore, the response rate from medical staff*

++	*and psychologists.* **Recruitment** *The names of all clinical staff involved in patient treatment and care were obtained from ward managers, and personalized letters inviting participation were issued to all. Questionnaire completion was encouraged by advertising the survey in the internal Trust magazine and intranet and by offering a £5 gift voucher to all respondents. Two follow-up letters were sent to all non-respondents.* **Population selection criteria** Inclusion criteria *All clinical staff involved in patient treatment or care.* Exclusion criteria not reported % participation agreement *68% overall: 70.9% non-medical staff; 44.3% medical staff.* **Potential sources of bias (association)** + **Setting** *25 inpatient mental health units of a UK National Health Service mental health Trust: 12 adult mental health wards, 8 older people's mental health wards, 1 child and adolescent mental health ward, 3 low-secure forensic wards and 1 inpatient drug and alcohol services ward.*	Total sample *n=459: non-medical staff n=416; medical staff n=39.* *64.5% of respondents were female; the mean age was 41.4 years (S.D. 10.9), and the median reported work experience was 11 years. Only six respondents (1.3%) were temporary agency staff, with all others being employed by the local Trust.* *Professional Groups* *Nonmedical staff: Healthcare assistants n=139; Nurses n=218;Occupational therapists n=17; Other n=42* *Medical staff: Consultants n=21; Junior doctors n=18; Not identified n= 4* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable	*tests or, in the case of non normal distribution of data, Mann–Whitney U tests, respectively, to detect differences (taken to be significant at P≤.05) in outcomes between subgroups.*	*constituted an important coping mechanism for patients, although significantly fewer medical staff than nonmedical staff (46.2% vs. 66.3%, OR=0.44; P=.012) did so.* **Planning & resource issues: Staff workload/resourcing** *Approximately half of the respondents (49.7%) agreed that they could make the time to deal with patients' nicotine dependence within their working routine, with smokers being significantly less likely to do so than non-smokers (35.3% vs. 54.6%, OR=0.45; Pb.001).* **Planning & resource issues: Compliance/Enforcement issues** *Less than half of the respondents (42.6%) agreed with the statement that it was their responsibility as a mental health professional to address patients' smoking, with significantly fewer smokers than non-smokers (P=.026; adjusted OR=0.6; 95% CI=0.39–0.94) and significantly fewer staff who had not attended training compared with those who had (P=.01; adjusted OR=0.6; 95% CI=0.41– 0.89) agreeing.* **Other factors: Other** *The median value ascribed to participants' perceived confidence in being able to support inpatient smokers effectively in smoking abstinence was 7 (ascending scale 1-10), again with no significant differences detected between subgroups.* **Attrition** Not applicable	*was lower (44.3%) than average, which may result in responses from this professional subgroup being influenced by self-selection bias to a greater extent than results from nonmedical staff.* *No specific details on the contents of the staff training referred to in the questionnaire were collected, the reason that this factor has been considered secondary in our analysis and the reason that the results relating to it need to be regarded with caution.* **Evidence gaps** *No specific details on the contents of the staff training referred to in the questionnaire were collected, the reason that this factor has been considered secondary in our analysis and the reason that the results relating to it need to be regarded with caution. Further investigation in this area would be useful before conclusions on its impact can be derived.* **Source of funding** Government Other

Authors *Rosen, McCarthy & Moskowitz* **Year** 1996 **Aim of study** *To evaluate a hospital non-smoking policy instituted in a tertiary teaching hospital from the patients' perspective.* **Study design** Cross-sectional study **Quality score** + **External validity score** +	**Country** USA *Massachusetts* **Urban/rural setting** Not reported **Secondary Care setting** Not Mental Health (Acute and/or Maternity) **Source population** Patients *Discharged patients from all service units of the hospital who had stayed at least overnight in the 3-month period* **Source population demographics** None reported **Recruitment** *Letter and survey sent to all patients 1 week after being discharged. Confidentiality assured but not anonymity; survey information merged with medical chart data. Follow-up reminder calls made 2 weeks later.* **Population selection criteria** Inclusion criteria *Discharged patients from all service units of the hospital who had stayed at least overnight in the 3-month period (Jul-May '92)* Exclusion criteria *Serious illness, death, language barriers, unknown/incorrect home address and illiteracy.* % participation agreement	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place *Implemented Oct '91* **When assessed** After implementation – single time-point *May-Jul '92 (7-9 months post-implementation)* **Where** Not Mental Health **Smokefree coverage** Smokefree building(s) Ban exclusions (write in) *Patients who were allowed to smoke for medical reason with the authorisation of a physician's prescription in a designated area outside the hospital.* **Supporting strategies/interventions** Implementation committee Posters/signage *Throughout hospital*	**Primary outcomes** Attitudinal outcomes *Satisfaction with the non-smoking policy; Preferred extent of non-smoking policy; Source of information about policy when hospitalised; Beliefs about the hospital's non-smoking policy (multiple choice answers)* **Follow-up periods** Not applicable **Method of analysis** *Chi-Square test, Fisher's exact test, Student's t-test and analysis of variance used to explore relationships among outcome measure and explanatory variables. Multiple logistic regression techniques used to assess in the individual and joint effects of individual variables. Odds ratios and 95% CI were calculated to determine significance. (Using SAS software, version 5.18)*	**Attitudes to smokefree: Patients** *Satisfaction with the non-smoking policy: When surveyed 1 week after being discharged from hospital, 75% of all patients were satisfied with the non-smoking policy at the hospital, 11% were dissatisfied and 14% were not sure. Sub-group differences: current smokers had the least satisfaction with the policy (55%) and the most dissatisfaction (34%), compared with former smokers (85% satisfied, 3% dissatisfied) and never smokers (72% satisfied, 8% dissatisfied) (Chi-square=56.4, df=12, p<0.0001).* *Preferred policy: When surveyed 1 week after being discharged from hospital, 14% of all patients would prefer tighter restrictions. Sub-group differences: current smokers (15%) were most likely to prefer fewer or no restrictions compared with former smokers (3%) and never smokers (4%) (p<0.0001).* **Communication issues: Availability of information** *Source of information: When surveyed 1 week after being discharged from hospital, most of the patients reported first learning about the non-smoking policy through signs at the hospital (60%), 15% patients reported that their admitting physician or nurse informed them of the policy on admission.* **Communication issues: Patients' familiarity/understanding of policy** *Beliefs about the hospital's non-smoking policy: Patients' knowledge or belief of the policy was assessed by asking respondents to identify rules about smoking in 9 locations in the hospital (patient rooms, cafeteria, patient lounges, restrooms,*	**Limitations identified by author(s)** *Data to verify smoking status was not collected at admission, so all data was self-reported. There was no control hospital to compare outcomes and uncontrolled factors may have influenced results. The response rate achieved allows the possibility of respondent bias. A group of non-responders "may have been too ill 1 week after discharge to follow through in returning the survey" [p.363].* **Limitations identified by review team** *Potential self selection bias; no control group for temporal confounders* **Evidence gaps/future research recommendations** Future research recommendations *Studies that examine a multidimensional approach to smoking cessation intervention will help support and clarify the factors affecting patients' smoking behaviour.* **Source of funding**

	58.5% **Potential sources of bias (association)** + *55.8% response allows possibility of respondent bias. Those who did not respond were less likely to have a smoking-related diagnosis. A group of non-responders "may have been too ill 1 week after discharge to follow through in returning the survey". Explicit incl/excl criteria.* **Setting** *A 379-bed tertiary teaching hospital*	*and at all entrances* Cessation support *Classes on-site for employees* Other (write in) *Articles in hospital newsletter; admitting staff encouraged to inform patients on admission about policy.* **Sample size** Total sample *N=329* *Sample characteristics: mean hospitalisations in past year 2.2 (SD=1.6); mean cigarettes per day 24 (SD=15), mean years smoked 27 (SD=14), mean smokers in house 0.8 (SD=0.9); mean age 58 (SD=16) years; female 48%; white 86%; college/higher education 37%; professional/manager 37%; employed 25%.* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported		*hallways or lobbies, nursing stations, examining rooms, and patient-care units). When surveyed 1 week after being discharged from hospital, current smokers (n=63) had significantly higher knowledge of the policy than never smokers (n=102) for all areas except private patient rooms, cafeteria and nursing stations (p<0.05). 58% of all patients answered 7 out of 9 locations correctly.* *When surveyed 1 week after being discharged from hospital, only 8% of all patients correctly answered that 'smoking is always permitted with a physician's prescription' to the question, "To the best of your knowledge, what is the current policy at the University Hospital regarding patient smoking with a physician's prescription?" Smoking status was not related to knowledge (no p value given).* **Attrition** Not applicable	Other
Authors *Sheffer, Stitzer &*	**Country** USA	**Method of allocation** Not applicable	**Primary outcomes** Attitudinal outcomes *Support for smokefree*	**Attitudes to smokefree: Other group(s)** *Results reported as mean (standard deviation)*	**Limitations identified by author(s)** *Subjective views not*

Wheeler **Year** 2009 **Aim of study** *To characterize the perceived concerns and sources of support and resistance reported by the Chief Executive Officers (CEOs) and administrators of Arkansas medical facilities before and after smokefree legislation became effective.* **Study design** Before-and-after study (with same sample after intervention) **Quality score** + **External validity score** +	**Urban/rural setting** Not reported **Secondary Care setting** Both **Source population** *Chief Executive Officers (CEOs) and administrators of Arkansas medical facilities.* **Source population demographics** None reported **Recruitment** *A list of member medical facilities and CEO/administrators was obtained from the Arkansas Hospital Association. Three additional facilities were subsequently identified through contact with hospital CEOs.* **Population selection criteria** Inclusion criteria not applicable Exclusion criteria not applicable % participation agreement *Pre-implementation survey: 87.61%* *Post-implementation survey: 69.02%* **Potential sources of bias (association)** Not reported **Setting** *Arkansas medical facilities. The number of beds at the medical facilities ranged from 0 to 791, with a mean of 132, a median of 77, and a mode of 25. The majority of facilities had no*	**Smokefree implementation stage** Smokefree in place *October 2005* **When assessed** Before implementation – single time-point *April/may 2005* After implementation – single time-point *October 2006* **Where** Both **Smokefree coverage** Smokefree building(s) Smokefree grounds **Supporting strategies/interventions** Other *Smoke-Free Hospital Toolkit comprised of a booklet to guide implementation and a resource CD. Numerous written resources were provided on the CD including administrative and clinical guidelines, examples of policy statements, signage, training activities, and problem-solving.* **Sample size** Total sample	*legislation.* *Support for smokefree legislation anticipated/experienced from: employees; patients; visitors; board; physicians; community?* *Resistance to smokefree legislation anticipated/experienced from employees; patients; visitors; board; physicians; community?* *Greatest challenges pre and post implementation: enforcement/communication.* *Effect on employee performance and retention.* **Follow-up periods** Not applicable **Method of analysis** Method(s) of analysis *Descriptive analyses were conducted on all variables. Progress, agreement, support, and resistance items were analyzed with a paired samples t-tests (alpha < 0.05).*	*Support for smoking ban. Measured on an 11 point-scale (0 = do not agree at all; 11 = total agreement).* *As an employer: Pre-ban 8.78 (2.38); Post-ban 9.22 (1.67)* *As a healthcare provider: Pre-ban 9.41 (1.77); Post-ban 9.80 (0.74)* *As a community member: Pre-ban 9.10 (1.95); Post-ban 9.47 (1.26)* *Support anticipated/experienced from the following people. Measured on an 11 point scale (0=none at al; 11 = the most possible).* *Employees: pre-ban 6.86 (1.84); post-ban 7.68 (1.50)* *Patients: pre-ban 5.96 (2.41); post-ban 6.81 (1.88)* *Visitors: pre-ban 5.66 (2.26); post-ban 6.13 (2.32)* *Board: pre-ban 9.42 (1.14); post-ban 9.84 (0.62)* *Physicians: pre-ban 8.94 (1.50); post-ban 9.54 (0.71)* *Community: pre-ban 7.35 (1.94); post-ban 7.83 (2.10)* *Resistance anticipated/experienced from the following people. Measured on an 11 point scale (0=none at all; 11=the most possible).* *Employees: pre-ban 4.62 (2.42); post-ban 3.64 (2.35)* *Patients: pre-ban 4.61 (2.46); post-ban 4.13 (2.93)* *Visitors: pre-ban 5.41 (2.40); post-ban 4.41 (2.45)* *Board: pre-ban 0.40 (0.83); post-ban 0.02 (0.14)* *Physicians: pre-ban 1.10 (1.37); post-ban 0.73 (1.40)*	*objectively validated by observational or corroborative data.* *Possibility of participation bias.* *Results may not be generalizable to other settings.* **Evidence gaps/future research recommendations** None reported **Source of funding** Not reported

	psychiatric or alcohol and drug beds (n=68; 64.76%), with 27.62% (n=29) maintaining some psychiatric and alcohol and drug beds, and 7.62% (n=8) maintaining only psychiatric and/or alcohol and drug beds. The majority of medical facilities were private non-profit (56.36%), with 26.36% under corporate control, and 17.27% under city, county, state, or federal government control.	*Pre-implementation: 84 hospital CEOs/administrators Post-implementation: 68 hospital CEOs/administrators.* **Baseline comparison** Not reported **Study sufficiently powered? (association)** Not applicable		*Community: pre-ban 2.74 (1.91); post-ban 2.00 (2.10)* **Planning & resource issues: Other planning & resource issues** *Greatest challenges.* *Pre-implementation n=76. Enforcement 55%; communication and/or education 26%.* *Post-implementation n=71. Enforcement 51%; communication and/or education 35%.* **Attrition** Not applicable	
Authors *Shipley & Allcock* **Year** 2008 **Aim of study** *To assess the behaviour of healthcare workers at a busy district general hospital NHS site in North East England in relation to implementation of smoke-free regulations; and to investigate the factors that alter the likelihood of members of staff challenging people seen smoking.* **Study design** Cross-sectional study **Quality score**	**Country** England **Urban/rural setting** Not reported **Secondary Care setting** Not Mental Health (Acute and/or Maternity) **Source population** Staff **Source population demographics** None reported **Recruitment** *Author visited acute medical wards at the Hospital during a 3-day period in March 2007. A questionnaire given to staff working during this time on a convenience basis (direct opportunistic approach). Staff given the questionnaire to complete and place in an envelope or to dispose of it.*	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place *Implemented 1 Oct '06* **When assessed** After implementation – single time-point *7 months post-implementation (Mar '07)* **Where** Not Mental Health **Smokefree coverage** *"Smoking was banned on Gateshead NHS trust sites" (sites=buildings and grounds?)*	**Primary outcomes** Attitudinal outcomes *Staff asked whether they would challenge a patient, visitor or member of staff smoking on the hospital site in future (only those who had not previously challenged smokers on the site); reasons why they would not challenge staff, patients or visitors to stop smoking.* **Follow-up periods** Not applicable **Method of analysis** *Chi-square test was used to analyse differences between reported behaviours of the subgroups when compared to the average of the study*	**Beliefs - people's rights: Smokers' right to smoke** *Staff asked whether they would challenge a patient, visitor or member of staff smoking on the hospital site in future (only those who had not previously challenged smokers on the site): n=18 (21%) study participants who had not previously challenged smokers on the site reported they would challenge all three groups of smokers (patients, visitors and staff) in the future. The remaining respondents were asked to report why they did not challenge smokers. Thirteen different reasons why staff would not challenge smokers on site were reported, one related to attitude to smokers' rights: respect for autonomy (n=5).* *[Reasons why they would not challenge smokers on site: n=27 fear of aggression; n=12 it was someone else's job; n=11 no reason offered; n=5 smokers should know rules; n=5 won't work; n=5 respect for autonomy; n=4 not bothered; n=4 unknown patient mental state; n=2 unsure of trust policy; n=2 too busy; n=1*	**Limitations identified by author(s)** *Study limited to staff working in one site. The region has above national average smoking rates and high admissions for smoking related illness. Subgroup size limited analysis of differences between subsets of data [by smoking status].* **Limitations identified by review team** *No control group for temporal trends.100% participation, full time acute nursing & medical staff only.* **Evidence gaps** *The difficulties in the enactment of smoke-free regulations on NHS sites* **Source of funding**

+ **External validity score** +	**Population selection criteria** Inclusion criteria *Full-time medical and nursing staff working in acute medicine at the Queen Elizabeth Hospital, Gateshead* Exclusion criteria *Part time, agency and voluntary staff, medical and nursing students and non-nursing staff from professions allied to medicine were excluded* % participation agreement *100% ("No staff declined to participate")* **Potential sources of bias (association)** ++ *100% participation - direct opportunistic approach used to minimise response bias; age and gender distribution approximated to workforce data supplied by hospital; all medical and nursing grades were included in sample* **Setting** *A busy district general hospital NHS site in North East England*	**Supporting strategies/interventions** Revised job description *Described as "all staff have a duty to support a NHS trust's smoke-free status to ensure this environment exists"* **Sample size** Total sample *N=85 hospital staff* *Sample characteristics: n=55 (65%) females; n=49 (58%) medical staff, n=36 (42%) nursing staff; n=12 (14%) smokers, n=12 (14%) ex smokers, n=61 (72%) never smokers; n=41 (48%) aged 25-34 years (sample range 18-65 years)* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported	*population. A P-value of <0.05 was accepted to identify key trends in the data.*	*"smoking on site should be allowed"; n=1 fire risk; n=1 legality of smoking ban; n=1 may affect working relationships.]* **Beliefs - effects of smokefree: Other views on smokefree effects** *Staff asked whether they would challenge a patient, visitor or member of staff smoking on the hospital site in future (only those who had not previously challenged smokers on the site): n=18 (21%) study participants who had not previously challenged smokers on the site reported they would challenge all three groups of smokers (patients, visitors and staff) in the future. The remaining respondents were asked to report why they did not challenge smokers. Thirteen different reasons why staff would not challenge smokers on site were reported, two related to beliefs on the effects of smokefree on patients, staff & visitors: fear of aggression (n=27); unknown patient mental state (n=4).* *[Reasons why they would not challenge smokers on site: n=27 fear of aggression; n=12 it was someone else's job; n=11 no reason offered; n=5 smokers should know rules; n=5 won't work; n=5 respect for autonomy; n=4 not bothered; n=4 unknown patient mental state; n=2 unsure of trust policy; n=2 too busy; n=1 "smoking on site should be allowed"; n=1 fire risk; n=1 legality of smoking ban; n=1 may affect working relationships.]* **Planning & resource issues: Staff workload/resourcing** *Staff asked whether they would challenge a patient, visitor or member of staff smoking on the hospital site in future (only those who had not previously challenged smokers on the site): n=18*	Other

				(21%) study participants who had not previously challenged smokers on the site reported they would challenge all three groups of smokers (patients, visitors and staff) in the future. The remaining respondents were asked to report why they did not challenge smokers. Thirteen different reasons why staff would not challenge smokers on site were reported, three related to views on staff resources: it was someone else's job (n=12); too busy (n=2) and may affect working relationships (n=1). *[Reasons why they would not challenge smokers on site: n=27 fear of aggression; n=12 it was someone else's job; n=11 no reason offered; n=5 smokers should know rules; n=5 won't work; n=5 respect for autonomy; n=4 not bothered; n=4 unknown patient mental state; n=2 unsure of trust policy; n=2 too busy; n=1 "smoking on site should be allowed"; n=1 fire risk; n=1 legality of smoking ban; n=1 may affect working relationships.]* **Planning & resource issues: Compliance/Enforcement issues** *Staff asked whether they would challenge a patient, visitor or member of staff smoking on the hospital site in future (only those who had not previously challenged smokers on the site): n=18 (21%) study participants who had not previously challenged smokers on the site reported they would challenge all three groups of smokers (patients, visitors and staff) in the future. The remaining respondents were asked to report why they did not challenge smokers. Thirteen different reasons why staff would not challenge smokers on site were reported, five related to attitudes to smokefree:*	

				smokers should know rules (n=5); won't work (n=5); not bothered (n=4); "smoking on site should be allowed" (n=1); and legality of smoking ban (n=1). *[Reasons why they would not challenge smokers on site: n=27 fear of aggression; n=12 it was someone else's job; n=11 no reason offered; n=5 smokers should know rules; n=5 won't work; n=5 respect for autonomy; n=4 not bothered; n=4 unknown patient mental state; n=2 unsure of trust policy; n=2 too busy; n=1 "smoking on site should be allowed"; n=1 fire risk; n=1 legality of smoking ban; n=1 may affect working relationships.]* **Communication issues: Staffs' familiarity/understanding of policy** *Staff asked whether they would challenge a patient, visitor or member of staff smoking on the hospital site in future (only those who had not previously challenged smokers on the site): n=18 (21%) study participants who had not previously challenged smokers on the site reported they would challenge all three groups of smokers (patients, visitors and staff) in the future. The remaining respondents were asked to report why they did not challenge smokers. Thirteen different reasons why staff would not challenge smokers on site were reported, one related to staff understanding the policy: unsure of trust policy (n=2).* *[Reasons why they would not challenge smokers on site: n=27 fear of aggression; n=12 it was someone else's job; n=11 no reason offered; n=5 smokers should know rules; n=5 won't work; n=5 respect for autonomy; n=4 not bothered; n=4 unknown patient mental state; n=2 unsure of trust policy; n=2 too busy; n=1*	

				"smoking on site should be allowed"; n=1 fire risk; n=1 legality of smoking ban; n=1 may affect working relationships.] **Other factors: Safety issues** *Staff asked whether they would challenge a patient, visitor or member of staff smoking on the hospital site in future (only those who had not previously challenged smokers on the site): n=18 (21%) study participants who had not previously challenged smokers on the site reported they would challenge all three groups of smokers (patients, visitors and staff) in the future. The remaining respondents were asked to report why they did not challenge smokers. Thirteen different reasons why staff would not challenge smokers on site were reported, one related to safety: fire risk (n=1). [Reasons why they would not challenge smokers on site: n=27 fear of aggression; n=12 it was someone else's job; n=11 no reason offered; n=5 smokers should know rules; n=5 won't work; n=5 respect for autonomy; n=4 not bothered; n=4 unknown patient mental state; n=2 unsure of trust policy; n=2 too busy; n=1 "smoking on site should be allowed"; n=1 fire risk; n=1 legality of smoking ban; n=1 may affect working relationships.]* **Attrition** Not applicable	
Authors *Smith and O'Callaghan* **Year** 2008 **Aim of study** *To explore the*	**Country** England **Urban/rural setting** Not reported **Secondary Care setting** Mental Health	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree impending *Due to be implemented July 2008*	**Primary outcomes** *Preferred smoking policy within the Trust.* **Follow-up periods** Not applicable **Method of analysis** *The results were analysed using SPSS*	**Attitudes to smokefree: Patients** *Preferred smoking policy within the Trust: Only 3.0% chose complete ban inside and on premises as their preferred smoking policy, 14.1% supported complete ban inside only, 71.1% supported a general non-smoking policy with designated smoking areas, 7.4% a general smoking*	**Limitations identified by author(s)** *There were some limitations to this study, namely volunteer bias, recall bias and slight environmental differences between wards. The*

smoking habits of in-patients on psychiatric wards, their beliefs about the effects of smoking on health, and their attitudes towards hospital and government smoking policies. **Study design** Cross-sectional study **Quality score** + **External validity score** ++	**Source population** Patients *n=243* **Source population demographics** Health status *in-patients on mental health units* **Recruitment** Recruitment method *Not reported.* **Population selection criteria** Inclusion criteria *All patients* Exclusion criteria *Patients were excluded from participation if their condition was too unstable.* % participation agreement *55.6% overall: 52.6% men; 47.4% women* **Potential sources of bias (association)** ++ **Setting** *Ten general adult and three functional old age wards in Mersey Care NHS Trust: a Trust providing mental health services for Liverpool, Sefton and Kirkby.*	**When assessed** Before implementation – single time-point *April/May 2006. Smokefree not implemented at time of study.* *At the time we surveyed its wards, the Trust had a general non-smoking policy. This entailed one or two smoking rooms on each ward with all other enclosed areas being non-smoking.* **Where** Mental Health **Smokefree coverage** Smokefree building(s) **Supporting strategies/interventions** Not reported **Sample size** Total sample *n=135* *The mean age of interviewees was 49.7 years (s.d.=16.7, range 18-86), with 76.3% aged less than 65 years. A total of 68.1% of the participants were in informal care and 15.6% had been in hospital for at least 6 months.*	*version 14.0 for Windows. Differences between smokers and non-smokers, under 65-year-olds and over 65-year-olds, and those detained and informal were tested with the Pearson chi-squared and Fisher's Exact tests, both two-tailed. Since there was a higher number of smokers among younger patients (w2=14.28, P50.001), results pertaining to age were standardised according to current smoking habits. Ex-smokers were reclassified as non-smokers to reduce the number of analyses.*	*policy with non-smoking areas and 4.4% would like no restrictions on smoking.* **Attrition** Not applicable	*number of hypothesis tests would have increased the likelihood of chance findings. Conversely, the small numbers in some groups may have meant insufficient power to detect additional significant differences. Lastly, ex-smokers were re-classified as non-smokers although these two groups may have had different views.* **Future research recommendations** *It would be interesting to know if these results are mirrored elsewhere in the country and whether patients' views are changing following the implementation of tighter smoking policies within NHS trusts. It would also be worth evaluating the level of compliance with such policies.* **Source of funding** Government

		The overall percentage of current smokers was 54.1%, with 54.8% smoking prior to admission. **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable			
Authors *Steiner* **Year** 1991 **Aim of study** *To describe the process of transforming a psychiatric day hospital into a non-smoking environment by means of a survey of staff and patients in anticipation of, and after the change in policy.* **Study design** Before-and-after study (with same sample after intervention) *Staff sample the same before and after.* Before-and-after study (with different	**Country** USA **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Patients *Pre-move: 20 patients* *Post-move: not reported* Staff *17 staff members.* **Source population demographics** None reported **Recruitment** *Both questionnaires distributed to staff and patients at community meetings.* **Population selection criteria** Inclusion criteria *All staff and all patients.* Exclusion criteria not applicable % participation agreement *Pre-move survey: patients 90%;*	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree in place *Instituted at the time of the move to a new freestanding facility (June 1990).* **When assessed** Before implementation – single time-point *One week before move to smokefree premises.* After implementation – single time-point *Two weeks after move to new smokefree premises.* **Where** Mental Health **Smokefree coverage** Smokefree building(s) **Supporting strategies/interventio**	**Primary outcomes** Attitudinal outcomes *Whether the smokefree policy was a good or bad idea.* **Follow-up periods** Follow-up period(s) *3 weeks.* **Method of analysis** Not reported	**Attitudes to smokefree: Staff** *Pre-move: All responding staff thought the smokefree policy was a 'good' or 'great' idea, that it would assist smokers to decrease smoking and it would improve the physical environment.* *Post-move: 94% indicated that they felt the policy change had been 'good' or 'great', and 100% thought that the physical environment had improved due to the lack of smoke.* **Attitudes to smokefree: Patients** *Pre-move: Patient opinion was evenly divided on whether the plan was a good or bad idea, and 53% thought it would assist smokers to decrease smoking. 71% of patients thought the physical environment would improve. Three patients expressed angry sentiments.* *Post-move: 67% of responders (which included all the non-smokers) thought that the policy change had been 'good' or 'great'. 86% of respondents felt that there had been an improvement in the physical environment.* **Beliefs - effects of smokefree: "Smokefree affects patients' mental health"**	**Limitations identified by author(s)** None identified by author(s) **Evidence gaps/future research recommendations** None reported **Source of funding** Not reported

sample after intervention) *Some overlap for patient survey before and after (47% of responders post-move survey also responded to first survey).* **Quality score** + **External validity score** +	*staff 88%* *Post-move survey: patients 83%; staff 100%.* **Potential sources of bias (association)** + **Setting** *The Connecticut Mental Health Centre (CMHC) Day Hospital is a short-term programme (30 days) for individuals who are making the transition from an inpatient facility to the community, or whom an 'alternative to hospitalisation' is indicated.*	**ns** *Patients informed of the decision to go smokefree at a community meeting one week beforehand, and were given the opportunity to express their thoughts and feelings about the change.* **Sample size** Total sample *Pre-ban: 17 patients (71% smokers; average habit 1.5 packs/day [range 0.5-3]); 15 staff (20% smokers)* *Post-ban: 15 patients; 17 staff* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable		*Post-move: 33% of staff thought that there had been a negative emotional impact on any of the group ('patients felt angry and left out'). 59% of staff were surprised by the positive response of patients and in particular, the 'lack of complaints'.* *Post-move: 69% of patients thought that there had been a negative emotional impact on some of their fellow patients (e.g. nervousness).* **Attrition** Not applicable	
Authors *Steiner, Weinberger & O'Malley* **Year** 2009 **Aim of study** *A staff survey was conducted to assess attitudes about smoking cessation programs in order to aid policy*	**Country** USA **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Staff *n=680* **Source population demographics**	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree impending *April 2008* **When assessed** Before implementation – single time-point *January 2007* **Where**	**Primary outcomes** Attitudinal outcomes *Attitudes toward the statement that entire facility and grounds should be smoke free.* **Follow-up periods** Not applicable **Method of analysis** *Chi square and one-way analysis of variance tests were used to compare*	**Attitudes to smokefree: Staff** *Respondents differed by smoking status in their agreement about whether the entire mental health center campus should become smoke free ($p<.05$). In addition, the overall regression model was significant ($\chi2=14.9$, $df=6$, $p<.05$). When the analysis controlled for age, gender, ethnicity, and job category, smoking status continued to predict attitudes about a smoke-free center. In general, compared with former smokers and current smokers, a larger proportion of*	**Limitations identified by author(s)** None identified by author(s) **Evidence gaps/future research recommendations** None reported **Source of funding** Government

development. **Study design** Cross-sectional study **Quality score** + **External validity score** +	None reported **Recruitment** *The anonymous survey was mailed to a random selection of one third (N=227) of the 680 staff members.* **Population selection criteria** Inclusion criteria not reported Exclusion criteria not reported % participation agreement *87% response rate* **Potential sources of bias (association)** + **Setting** *The Connecticut Mental Health Center is a state owned and state-operated facility with both inpatient and outpatient services, run jointly by the Connecticut Department of Mental Health and Addiction Services and Yale University. It serves individuals from the greater New Haven area who have severe and persistent mental illness, a substance use disorder, or both.*	Mental Health **Smokefree coverage** Smokefree building(s) Smokefree grounds **Supporting strategies/interventions** Not reported **Sample size** Total sample *n=175* *Most survey respondents were women (N=124, 71%) and Caucasian (N=117, 67%), and the mean±SD age of respondents was 42.5±11.8 years. Most respondents had never smoked (N=107, 61%); 14% (N=25) defined themselves as current smokers, and 25% (N=43) defined themselves as former smokers.* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable	*demographic characteristics of respondents in three smoking status groups. Ordinal regression analyses were conducted to examine whether smoking status was a significant predictor of responses to any of the four attitude statements. Age, race, sex, and job category were entered in all regression analyses as covariates.*	*those who had never smoked agreed that the mental health center should be smoke free.* **Attrition** Not applicable	
Authors *Stillman et al* **Year** 1995 **Aim of study**	**Country** USA **Urban/rural setting** Urban **Secondary Care setting**	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree in place	**Primary outcomes** Attitudinal outcomes *Attitude toward the smoke-free policy* **Follow-up periods**	**Attitudes to smokefree: Patients** *Agreement with the policy: 76.8% patients expressed agreement with the smokefree policy. There were no differences in agreement with the policy based on*	**Limitations identified by author(s)** Identified by author(s) *Substance disorders were excluded and those with*

To examine compliance with a hospital wide no smoking policy and tobacco abstinence rates in a selected group of smoking hospital inpatients. **Study design** Cross sectional study **Quality score** + **External validity score** +	Not Mental Health (Acute and/or Maternity) **Source population** Patients **Source population demographics** Age *Mean age=50.2 years* Sex *57% male* Ethnicity *40% African American* **Recruitment** Recruitment method *Daily computerised search performed of patient admission records and daily patient census. All patients who had identified themselves as smokers at the time of admission were listed, but only patients on the medical and surgical services were eligible to be interviewed. The interview team reviewed charts of patients to determine if they were eligible. Patients were not visited if they were too sick, asleep, or out of their room for procedure.* **Population selection criteria** Inclusion criteria *All inpatients assessed in hospital and recruited for smoking cessation counselling. Patients on the medical and surgical services. All regular smokers (within 1 month of admission), ≤75 years old, fluency in English.* Exclusion criteria *Those diagnosed with a terminal illness; current illicit drug use or*	*Implemented 1990* **When assessed** After implementation – single time-points *At admission (patients admitted 1990-1992)* **Where** Not Mental Health **Smokefree coverage** Smokefree building(s) **Supporting strategies/interventions** Written policy(ies) Cessation support *Bedside smoking cessation during patients' forced abstinence* Temporary abstinence support Other *Information about hospital's no smoking policy given to all inpatients at time of admission. Policy also published in the patient handbook. Notes that "no other procedures were instituted to promote compliance" [p.145]* **Sample size** Total sample *n=504 inpatients (who were recruited for smoking cessation counselling)* Sample characteristics: *mean age=50.2 years;*	Not applicable **Method of analysis** Method(s) of analysis *Demographics compared using Students t test for continuous variables, a Chi-square test for categorical and linear trends. Logistic regression analysis was performed to determine predictors of smoking during hospital admission. Odds ratios with 95% CIs were calculated.*	*gender, age or race of the patient.* Sub-group differences: *Patients who remained abstinent during hospitalisation (self report to not smoking even one cigarette) were significantly more likely to have stated agreement with the policy than patients who smoked during hospitalisation (self-report to either leaving the hospital to smoke or being non-compliant with the policy and smoking inside the hospital building) (82% versus 62.5%, p<0.001).* **Attrition** Not applicable	*cardiac problems where over-sampled. CO monitoring may not have been sensitive enough to discriminate abstainers from non abstainers in an inpatient setting – pre-hospital smoking may have affected this especially for those interviewed within 24 hours of admission. Those that carried on smoking minimal amounts may have gone undetected.* **Limitations identified by review team** *That the participants were recruited from a smoking cessation counselling programme* **Future research recommendations** *Indicates more effort is needed to help patients remain abstinent during hospital admission. Understanding the factors that influence patient compliance, identifying characteristics of an inpatient who is less likely to be compliant with non smoking policies.* **Source of funding** Not reported

	alcohol abuse. % participation not reported **Potential sources of bias (association)** + *The participants were selected from a smoking cessation programme.* **Setting** *1000 bed urban teaching hospital in Baltimore, Maryland, USA*	*51% male; 28% African American, "most of the rest were white"; 63% high school graduates; 51% had a cardiac diagnosis; mean length of stay=8.3 days.* **Baseline comparison** No differences btw groups **Study sufficiently powered? (association)** ++			
Authors *Ullen et al* **Year** 2002 **Aim of study** *To explore the impact of the introduction of a smoking ban at the Karolinska Hospital.* **Study design** Cross-sectional study *3 separate cross-sectional studies.* **Quality score** + **External validity score** +	**Country** Sweden **Urban/rural setting** Urban *Stockholm* **Secondary Care setting** Not reported **Source population** Staff **Source population demographics** Occupation *Heads of clinics, all employees, labour managers.* **Recruitment** *Heads of clinical departments: questionnaire survey sent to all heads of department.* *Employees: a random sample of approx. 10% of employees. Individuals sent a questionnaire to their home address.* *Labour managers: convenience sample.*	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree in place *From 1st September 1992.* **When assessed** After implementation – multiple time-points *December 1992 (Participants: Heads of clinical Departments)* *March 1993 (Participants: hospital employees)* *March 1995 (Participants: Labour Managers)* **Where** Not reported **Smokefree coverage** Smokefree building(s) **Supporting**	**Primary outcomes** Attitudinal outcomes *Heads of clinical department: their staff's dis/satisfaction with restrictions* *Employees: attitude to smoking restrictions* *Labour managers: opinion of the smokefree workplace* **Follow-up periods** Not applicable **Method of analysis** Not reported	**Attitudes to smokefree: Staff** *Heads of Department reported a third of their staff were satisfied with the smoking restrictions, and the remaining two thirds were of a mixed positive/negative opinion.* *Employee survey: 62% of employees had a positive attitude towards the smoking restrictions. 28% had mixed attitudes. 7% were negative towards the restrictions.* *Approximately 30% said they had changed their opinion to the ban in a positive direction.* **Communication issues: Availability of information** *Heads of department: 98% reported that information prior to the introduction of the ban had been adequate and sufficient.* *Employee survey: 78% of employees 'considered information sufficient and well adjusted'.* **Communication issues: Staffs' familiarity/understanding of policy** *Labour managers survey: All were familiar with existing smoking restrictions.* **Attrition**	**Limitations identified by author(s)** *The questionnaires were not subject to pre-testing in the retrospective target groups, which might have influenced the validity of the results.* *Two parts of the study, heads of clinical departments and labour managers, were small in size.* **Evidence gaps/future research recommendations** None reported **Source of funding** Government

	Population selection criteria Inclusion criteria not reported Exclusion criteria not reported % participation agreement *Heads of clinics: 100%* *Employees: 85%* *Labour managers: 82%* **Potential sources of bias (association)** + **Setting** *Karolinska Hopsital, Sweden. A large University Hospital dedicated to specialist medical care and clinical research. 1,000 beds, 6,000 staff.*	**strategies/interventions** Implementation committee Posters/signage Moved ashtrays/shelters *Ashtrays moves outdoors.* Other (write in) *Employees informed about ban through staff newspaper.* *Patient and visitor information leaflets in Swedish, Finnish, Spanish, Arabic and English.* *'Quit and win' contest for staff.* **Sample size** Total sample *Heads of departments n=41* *Employees n=517 [84% female]* *Labour managers n=17* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported		Not applicable	
Authors *Vardavas et al.* **Year** 2009	**Country** Greece **Urban/rural setting** Not reported	**Method of allocation** Investigator did not assign exposure Minimising of confounders not	**Primary outcomes** Attitudinal outcomes *Approval or disapproval of smoke-free hospitals; Change from a complete*	**Attitudes to smokefree: Staff** *Approval or disapproval of smoke-free hospitals: 66% (n=66) of total staff approved of smokefree hospitals, 70.9% (n=39) of all medical/research staff*	**Limitations identified by author(s)** None identified by author(s) **Limitations identified by**

Aim of study *An investigation in a typical large regional hospital in Greece of hospital personnel's perceptions and compliance towards hospital smoking regulations and their current smoking habits.* **Study design** Cross-sectional study **Quality score** - **External validity score** +	**Secondary Care setting** Not Mental Health (Acute and/or Maternity) **Source population** Staff *Medical research staff/doctors and nursing staff* **Source population demographics** Smoking status *Cites previous research in Greece that "the smoking prevalence among hospital staff is estimated at approximately 50%" (p.2)* None reported **Recruitment** *Using the 2006 hospital personnel database, 10% of the permanently employed staff (weighted according to the doctor/nurse ratio) were randomly selected for interview. Participants were repeatedly contacted for interviews.* **Population selection criteria** Inclusion criteria *Permanently employed medical doctors and nurses at the hospital* Exclusion criteria not reported % participation agreement *96%* **Potential sources of bias (association)** + *96% participation (minimal response bias)*	reported **Smokefree implementation stage** Smokefree in place *Aug 02. Although it is noted that, "just as with the majority of relative legislations in Greece it is bluntly ignored by many" (p.1)* **When assessed** After implementation – single time-point *No date* **Where** Not Mental Health **Smokefree coverage** Smokefree building(s) **Supporting strategies/interventions** Not reported **Sample size** Total sample *n=100 staff (n=55 medical research staff/doctors; n=45 nursing staff)* *Sample characteristics: 33.0% males; mean age 39.2 SD 7.4 years; 45.0% smokers, 55.0% ex- and non-smokers; mean 8.0 SD 9.0 years of smoking; 8.9% 1-9 cigarettes/day, 68.9% 10-20 cigarettes/day,*	*to partial smoking ban* **Follow-up periods** Not applicable **Method of analysis** *All p-values from two-sided tests with a significance level of <5%. Continuous variables presented as mean and SD, qualitative variables depicted as frequencies. Student's t-test and a chi-square test used to calculate the distribution of the study group with regard to parameters of occupation, gender, attitudes and level of smoking. Analysis by SPSS 15.0.*	*approved of smokefree hospitals, 60.0% (n=27) of all nursing staff approved of smokefree hospitals. 46.7% (n=21) of total staff smokers approved of smokefree hospitals, 52.6% (n=10) of all medical/research staff smokers approved of smokefree hospitals, 42.3% (n=11) of all nursing staff smokers approved of smokefree hospitals. 81.8% (n=45) of total staff non-smokers (non- and ex-smokers) approved of smokefree hospitals, 80.6% (n=29) of all medical/research staff non-smokers approved of smokefree hospitals, 84.2% (n=16) of all nursing staff non-smokers approved of smokefree hospitals.* *Change from a complete to partial smoking ban: 93.3% of total staff smokers and 96.4% of total staff non-smokers (non- and ex-smokers) responded that they would prefer if the complete smoking ban should change into a partial (with designated smoking and non-smoking areas inside the hospital). No further statistical information is available.* **Attrition** Not applicable	**review team** *Self report smoking, other measures not validated, few p values reported, no control group. Non full-time staff excluded* **Future research recommendations** *"Further research into the factors that modify both personnel smoking habits and the health professionals' beliefs on tobacco related issues is warranted."* **Source of funding** Voluntary/Charity

	Setting *A large regional university hospital which provides primary and secondary care to the population of Heraklion and tertiary care to the population of Crete and the nearby islands.*	*22.2% >20 cigarettes/day; mean 8 SD 11 cigarettes/day.* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported			
Authors *Voci et al* **Year** 2010 **Aim of study** *To examine changes over time in degree of staff support for the implementation of a smoke-free policy in Canada's largest public mental health and addiction teaching hospital and to assess the impact of the policy on patient behaviour.* **Study design** Cross-sectional study *Two cross sectional studies.* **Quality score** ++ **External validity score** -	**Country** Canada **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Staff *Approximately 2532 staff worked at CAMH at the time of the first survey, and 2770 staff worked at CAMH at the time of the second.* **Source population demographics** None reported **Recruitment** *Staff were sent the first survey via e-mail or inter-office mail, to be completed in pen-and-paper format. The survey was redesigned as an online survey and an e-mail containing a link to the survey was sent to all staff to increase response rate. Recruitment for the second survey was initiated over 2 years post-implementation. All staff*	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree in place *September 2005* **When assessed** After implementation – multiple time-points *2-7 months after policy implementation (November 2005-April 2006)* *31-33 months after policy implementation (April- June 2008)* **Where** Mental Health **Smokefree coverage** Smokefree building(s) Smokefree doorways/entrances *The policy prohibits smoking within all CAMH buildings and within a 9-meter radius of any entrance.* **Supporting**	**Primary outcomes** Attitudinal outcomes *The survey assessed attitudes toward and experiences with implementation of the CAMH smoke-free policy.* **Follow-up periods** Not applicable **Method of analysis** *Chi-square tests were computed to compare proportions and independent t-tests were carried out to compare means from the 2005–2006 and 2008 surveys. A paired t-test was performed to compare retrospectively recalled level of support for the policy before it was implemented with current level of support (both reported in 2005–2006). While preliminary data screening revealed that*	**Attitudes to smokefree: Staff** *2005-2006 survey How strongly did you support the smoke-free policy before it was implemented? n=430: 64.0% definitely support; 18.6% support; 9.3% neutral; 5.6% do not support; 2.6% definitely do not support. How strongly do you support the smoke-free policy currently? n=430: 72.6% definitely support; 16.5% support; 4.4% neutral; 2.3% do not support; 4.2% definitely do not support* *2008 survey How strongly do you support the smoke-free policy currently? n=386: 78.2% definitely support; 11.9% support; 5.4% neutral; 2.1% do not support; 2.3% definitely do not support* *In adopting a smoke-free policy, CAMH is following best practices for public health and health prevention (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.) 2005-2006 survey: mean 4.31 (SD 1.17), median 5.00 2008 survey: mean 4.53 (SD 0.94), median 5.00* *Smoke-free facilities are cleaner 2005-2006 survey: mean 4.04 (SD 1.36), median 5.00 2008 survey: mean 4.56 (SD 0.88),*	**Limitations identified by author(s)** *Several limitations of this study are acknowledged. Statistically significant changes in staff attitudes were not large and therefore may not be of clinical or practical significance. Additionally, changes in staff attitudes over time may have been influenced by broader environmental changes. These include enactment of an Ontario-wide smoking ban in all enclosed workplaces and public places (Smoke-Free Ontario Act, May 2006), which may have contributed to a general shift in awareness of the health hazards of second-hand smoke and greater acceptance of bans on indoor smoking. A broader shift in attitudes toward smoking bans may also account for the decreased frequency of staff who*

	were invited to complete the survey, available in both online and paper-and-pen formats. Invitations to complete the survey were distributed via e-mail and through newsletters and advertisements on the CAMH internal website, by way of the CAMH Public Affairs Department. **Population selection criteria** Inclusion criteria (write in) *Inclusion criteria for both surveys were being a current CAMH staff member and being 18 years of age or older. The first survey (2005–2006) also required that respondents had been a staff member at CAMH since the announcement of the policy (August 11, 2005).* Exclusion criteria not applicable % participation agreement *2005/2006 survey: 19.0%* *2008 survey: 18.1%* **Potential sources of bias (association)** - **Setting** *Centre for Addiction and Mental Health (CAMH): 557 beds; provides care to over 20,000 patients annually through approximately 28 inpatient units and over 100 outpatient clinics. CAMH is governed by Ontario's provincial health care system and is a fully affiliated teaching hospital of the University of*	**strategies/interventions** Pharmacotherapies/NRT Staff training **Sample size** Total sample *2005-2006: n=430; Mean age 45.7 (SD 11.1); 79.2% female* *2008: n=400; mean age 44.9 (SD 11.2); 77.3% female* *Further demographic information provided.* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable	*Likert scale ratings were not normally distributed, evidence has shown that t-tests conducted with even modestly large samples (n=80) are robust to deviation from normality, and they were thus deemed appropriate for the current study. We report both medians and means for Likert scale outcome measures.*	*median 5.00* *Moving the smoking off-site or outside is dirtier, uglier 2005-2006 survey: mean 2.64 (SD 1.44), median 3.00 2008 survey: mean 2.35 (SD 1.23), median 2.00* *Staff who were current smokers were more likely to recall having not supported the policy before implementation and were more likely to be unsupportive at both time points post-implementation.* **Beliefs - people's rights: Smokers' right to smoke** *Inpatient clients have a right to smoke (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree) 2005-2006 survey: mean 2.84 (SD 1.43), median 3.00 2008 survey: mean 2.99 (SD 1.39), median 3.00* **Beliefs - people's rights: Non-smokers' right to smokefree** *Non-smoking clients have a right to be cared for in a 100% smoke-free facility (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.) 2005-2006 survey: mean 4.71 (SD 0.77), median 5.00 2008 survey: mean 4.77 (SD 0.68) median 5.00* **Beliefs - people's rights: Other rights issues** *Staff have the right to work in a 100% smoke-free facility (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.) 2005-2006 survey: mean 4.76 (SD 0.69), median 5.00 2008*	*allow visitors to smoke in their homes. With the exception of emergency code data, data to assess attitudes and behaviour prior to policy implementation were collected retrospectively and therefore susceptible to recall error. In addition, staff reports of patient behaviour changes are subjective; however, they do reflect staff experience and attitudes and therefore speak to staff support for the policy. Despite being objective, code data may not have been sensitive enough to reveal certain changes in patient behaviour. For example, although code red data revealed no increased incidence in actual fires (as might occur with secretive smoking), it may not have captured the extent to which indoor smoking actually occurred. Furthermore, objective indicators or evidence of change in several other types of patient behaviour was not examined, such as number of prescriptions for NRT, use of PRN medication and number of elopements or discharges against medical advice.*

	Toronto.			*survey: mean 4.79 (SD 0.62), median 5.00* **Beliefs - effects of smokefree: "Smokefree affects patients' mental health"** *Patients are more anxious (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.) 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 3.13 (SD 1.13), median 3.00 2005/2006: mean 3.05 (SD 1.20), median 3.00 2008: mean 2.99 (SD 1.11), median 3.00* **Beliefs - effects of smokefree: "Smokefree affects patients' physical health"** *Patients are experiencing more withdrawal symptoms (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.) 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 3.15 (SD 1.12), median 3.00 2005/2006 current attitudes: mean 3.01 (SD 1.13), median 3.00 2008: mean 3.33 (SD 1.09), median 3.00* **Beliefs - effects of smokefree: "Smokefree results in changed patient aggression/management issues"** *There is an increased number of physical assault/aggression (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.) 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 2.91 (SD 1.03), median 3.00 2005/2006 current: mean 2.58 (SD 1.12), median 3.00 2008: mean 2.69 (SD 0.98), median 3.00*	*Another limitation of the current study is that we did not seek the views of other parties impacted by the policy, most notably patients and individuals of importance to them (e.g., partners, relatives, caregivers, friends), whose views may have deviated from those reported here for staff. Finally, survey response rates were less than 50%, a finding common among surveys of health professionals. As such, survey findings may not be formally representative of the attitudes and beliefs of all staff at CAMH. However, a considerable strength of the current study is that we recruited a large sample of staff across a wide variety of professions and patient care settings. Furthermore, prior studies of this type and formal evaluations of smoke-free policies in similar large psychiatric hospital settings are rare. This lack of empirical data serves to perpetuate a perception that such policy changes would be unacceptable to staff and clients, or ultimately unsuccessful. What this study demonstrates is that even*

				There is an increased number of verbal assault/aggression 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 3.13 (SD 1.05), median 3.00 2005/2006 current: mean 2.87 (SD 1.18), median 3.00 2008: data not collected *There is an increased number of physical restraints 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 2.83 (SD 1.01), median 3.00 2005/2006 current: mean 2.56 (SD 1.09), median 3.00 2008: mean 2.58 (SD 0.93), median 3.00* *There is an increased number of seclusions 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 2.84 (SD 0.95), median 3.00 2005/2006: mean 2.57 (SD 1.02), median 3.00 2008: mean 2.59 (SD 0.92), median 3.00* *There is an increased number of elopements 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 2.90 (SD 1.04), median 3.00 2005/2006: mean 2.65 (SD 1.07), median 3.00 2008: mean 2.76 (SD 0.97), median 3.00* **Beliefs - effects of smokefree: "Smokefree results in changed medication issues"** *There is an increase in NRT as a result of smokefree policy (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.) 2005/2006 'relative to what I thought would be the case before the*	*large and complex mental health facilities can establish and persist with a complete indoor ban on smoking.* **Evidence gaps/future research recommendations** None reported **Source of funding** Government

				smoke-free policy': mean 3.56 (SD 0.98), median 3.00 2005/2006 current attitude: mean 3.67 (SD 1.00), median 4.00 2008: mean 3.61 (SD 0.94), median 4.00 *There is an increased use of PRN medications (excluding NRT) 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 3.23 (SD 1.00), median 3.00 2005/2006: mean 3.05 (SD 0.99), median 3.00 2008: mean 3.10 (SD 0.86), median 3.00* **Beliefs - effects of smokefree: Other views on smokefree effects** *Clients participate more in recreational activities when in a 100% smoke-free facility (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.) 2005-2006 survey: mean 3.18 (SD 1.10), median 3.00 2008 survey: mean 3.53 (SD 1.03), median 3.00* *There is an increase in discharges against medical advice (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.)* **Planning & resource issues: Staff workload/resourcing** *Staff spend less time monitoring smokers when a facility is 100% smoke-free (1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.) 2005-2006 survey: mean 2.82 (SD 1.31), median 3.00 2008 survey: mean 3.66 (SD 1.28), median 4.00* *Staff will take fewer smoke breaks in a smoke-free facility*	

				2005-2006 survey: mean 3.11 (SD 1.37), median 3.00 *2008 survey: mean 3.46 (SD 1.35), median 3.50* **Other factors: Safety issues** *There is an increase in calls to security (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.) 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 2.94 (SD 1.05), median 3.00 2005/2006 current: mean 2.61 (SD 1.16), median 3.00 2008: mean 2.74 (SD 0.99), median 3.00* **Other factors: Other** *There is an increase in incidences of secretive smoking (Rating scale: 1=strongly disagree; 2=somewhat disagree; 3=neutral; 4=somewhat agree; 5=strongly agree.) 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 3.59 (SD 1.20), median 3.00 2005/2006 current: mean 3.66 (SD 1.22), median 4.00 2008: mean 3.50 (SD 1.07), median 3.00* *There is an increase in discharges against medical advice 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 2.80 (SD 1.04), median 3.00 2005/2006 current: mean 2.61 (SD 1.01), median 3.00 2008: mean 2.74 (SD 0.90), median 3.00* *There is an increased loss of patient privileges 2005/2006 'relative to what I thought would be the case before the smoke-free policy': mean 2.88 (SD 1.07), median 3.00 2005/2006 current: mean 2.78 (SD 1.10), median 3.00 2008: mean*	

				2.81 (SD 1.04), median 3.00 **Attrition** Not applicable	
Authors *Wheeler et al.* **Year** 2007 **Aim of study** *To measure the impact of the new smoke-free campus policies on employees and patients at the two institutions on the hospital campus.* **Study design** Before-and-after study (with different sample after intervention) Cross-sectional study *Site 2 questionnaire (staff)* **Quality score** - **External validity score** +	**Country** USA *Arkansas* **Urban/rural setting** Not reported **Secondary Care setting** Not Mental Health (Acute and/or Maternity) **Source population** Patients Staff **Source population demographics** Smoking status *Staff: convenience data collected for 2706/8484 (31.9%) current employees (site 1) by the occupational health office showed a 16.4% rate of smoking on 1st Jul 04 (3 days pre-implementation).* **Recruitment** *Questionnaire site 1 (staff): staff roster from HR Dept. used to randomly sample 1,400 from ~9,000 employees without replacement* **Population selection criteria** Inclusion criteria *Questionnaire site 1 (staff): university and hospital and faculty staff* Exclusion criteria not reported *Questionnaire site 1 (staff)*	**Method of allocation** Investigator did not assign exposure Minimising of confounders not reported **Smokefree implementation stage** Smokefree in place *Site 1: announced 29th Oct 03, implemented 4th Jul 04; Site 2: announced Spring 04, implemented 6 months later (employees) and Spring 05 (12 months later) (employees, visitors, patients)* **When assessed** Before implementation – single time-point *Site 1: Apr 04 (questionnaire).Site 2: 2 months after employee only ban (= 4 months pre-full smokefree) (questionnaire).* After implementation – single time-point *Site 1: May 05 (questionnaire).* **Where** Not Mental Health	**Primary outcomes** Attitudinal outcomes *Site 1 (staff only): support for the policy; the policy will make/makes the site healthier and safer; the policy will set/sets a good example for patients* **Follow-up periods** Follow-up period(s) *13 months (questionnaire, site 1 only).* **Method of analysis** *Descriptive statistical methods of analyses included proportions and their standard errors. Rao-Scott Chi-square tests for independence (a design-adjusted version of the Pearson Chi-square test) were applied to compare the equality in proportions before and after policy implementation. Fisher's exact test was applied in instances where Chi-square cell expectancy assumptions were not met.*	**Attitudes to smokefree: Staff** *Site 1:* *Support for the policy: Between April 2004 (pre-implementation) and May 2005 (post-implementation), there was a significant increase in staff support for the ban (83.3% to 89.8%, p<0.001). Results in favour of smokefree.* *Before the ban, 87.8% employees felt the policy would make hospital healthier and safer (87.8%), and following the ban, this attitude became significantly more prevalent (92.3%; p=0.0001).* *Before the ban, (87.2%) employees believed the policy would set a good example for patients (87.2%), and this belief significantly intensified afterward (91.6%; p=0.001).* *Site 2:* *Support for the policy was high (87.8%). Employees felt the policy would make hospital healthier and safer (89.4%). Employees believed the policy would set a good example for patients (85.1%).* **Attrition** Not applicable	**Limitations identified by author(s)** *Study restricted to two hospital campuses and not all outcomes were measured on both campuses. Efforts to enrol other regional hospitals were limited by the hesitancy of institutions to commit to smoke-free and concerns about sharing proprietary information about employment statistics.* **Limitations identified by review team** *Limited reporting as many measures/parts to the study; self-selection bias; no control group* **Evidence gaps** *"Reasons that hospitals have not volunteered to go smoke-free have not been carefully studied"* **Source of funding** Government Voluntary/Charity

	% participation agreement *60.1% (pre-implementation), 65.1% (post-implementation) for Questionnaire site 1* **Potential sources of bias (association)** + *Staff survey used HR roster to randomly sample 1,400 from ~9,000 employees without replacement, weighted by gender and age groups for representative estimates of employee population. 60.1% (pre-), 65.1% (post-) participation. No demographics for non-responders.* **Setting** *Two sites: 1) Arkansas's university hospital and academic medical center and 2) a smaller, private children's hospital that uses the university's faculty and residents for its medical staff.*	**Smokefree coverage** Smokefree building(s) Smokefree vehicles Smokefree grounds Other *All property owned or leased.* **Supporting strategies/interventions** Written policy(ies) Implementation committee Posters/signage Staff meetings Staff letters/payslip notes Patient appointment letters Cessation support Pharmacotherapies/NRT *Site 1: free to employees for 6m (Apr-Sep 04), on sale on campus to non-employees. Site 2: free to employees (open-ended), n sale on campus to non-employees.* Other *Staff appointed (site 1: wellness director, site 2: tobacco control specialist with cessation expertise); Site 1: portable pagers*			

		in emergency dept. for patrons/visitors who needed to leave campus to smoke; Scripts for staff to deal with patrons smoking; Staff violations dealt with by HR dept.; Written policy in new employees packs; Neighbouring businesses notified; Announcements in local media. **Sample size** Total sample *Questionnaire site 1 (staff): n=842 (pre-implementation), n=912 (post-implementation)* *Sample characteristics: occupation distribution changed significantly due to a change in nurse respondents from 19% (pre-) to 11% (post-) (p<0.0001) and education distribution changed significantly due to decreases in 'high school or less' and 'college graduate' and an increases in 'professional or post-college education' (p=0.015). Gender (p=0.8964), age and race distributions did not change*			

		significantly between measures. *Questionnaire site 2 (staff): n=183* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not reported			
Authors *Wye et al* **Year** 2010 **Aim of study** *This study aimed to examine the views of psychiatric inpatient hospital staff regarding the perceived benefits of and barriers to implementation of a successful total smoking ban in mental health services. Secondly, to examine the level of support among clinical and non-clinical staff for a total smoking ban. Thirdly, to examine the association between the benefits and barriers perceived by clinicians and their*	**Country** Australia **Urban/rural setting** Not reported **Secondary Care setting** Mental Health **Source population** Staff *n=300* **Source population demographics** Occupation *60% (approximately 180 staff) occupied clinical positions that is, performed a role that involved patient care. The remainder occupied non-clinical positions (for example, administrative and support staff).* **Recruitment** Recruitment method *All staff were invited by management email and staff newsletter to complete a pen and paper questionnaire during the two week survey period. Although completion of the*	**Method of allocation** Not applicable **Smokefree implementation stage** Smokefree impending *Due to be implemented 2 weeks immediately following the survey period.* **When assessed** Before implementation – single time-point **Where** Mental Health **Smokefree coverage** Smokefree building(s) Smokefree grounds **Supporting strategies/interventions** Implementation committee Posters/signage Cessation support Removal	**Primary outcomes** Attitudinal outcomes *Perceived benefits of a total smoking ban* *Clinician perceived barriers to implementation of a total smoking ban* *Support for a total smoking ban* **Follow-up periods** Not applicable **Method of analysis** *All analyses were undertaken using SPSS Version 15. Descriptive statistics were used to report respondent demographics, perceived benefits of, and barriers to a total smoking ban, and support for a total smoking ban.* *Response categories for staff perceived benefits and barriers were reduced to three: 'agree, uncertain, disagree'. Response categories for*	**Attitudes to smokefree: Staff** *Do you support the statement that smoking should be totally banned throughout the Area's mental health services?: 7% strongly unsupportive; 14% unsupportive; 12% no view either way; 33% supportive; 34% strongly supportive* *Do you agree with the statement that smoking should be totally banned on the unit? (clinical staff only): 7% strongly disagree; 19% disagree; 19% unsure; 22% agree; 32% strongly agree* *Total smoking ban makes the place look/smell better: 81% agree; 11 uncertain; 8% agree* **Beliefs - effects of smokefree: "Smokefree affects patients' mental health"** *Total smoking ban will improve patient mental health: 29% agree; 37% uncertain; 34% disagree* *Total smoking ban will make patients happier: 5% agree; 35% uncertain; 59% disagree* **Beliefs - effects of smokefree: "Smokefree affects patients' physical**	**Limitations identified by author(s)** *The findings of the present study need to be considered in the context of a number of its methodological characteristics. First, although comparable to previous studies the response rates, particularly for clinical staff, suggest that the results may not be representative of all staff. The extent to which the observed results reflect either an under or overestimate of the views of all staff is not known. Second, as the study was conducted in a single health service, the findings may not be generalizable to mental health services either elsewhere in the state or more broadly.* **Limitations identified by**

support for a total smoking ban in their unit. **Study design** Cross-sectional study *Separate surveys for clinical and non-clinical staff* **Quality score** ++ **External validity score** ++	*questionnaire was voluntary, staff were encouraged to complete the questionnaire by management, and several prompts through emails and newsletters were provided.* **Population selection criteria** Inclusion criteria (write in) *All staff, clinical and non-clinical.* Exclusion criteria not reported % participation agreement *61%: clinical staff 41%; non-clinical staff 92%.* **Potential sources of bias (association)** + **Setting** *A large psychiatric inpatient hospital in the state of New South Wales. The facility had approximately 2000 patient discharges per annum, consisting of 80 beds in six units: a psychiatric emergency centre, an intensive care unit, two general acute units, a dual diagnoses (concurrent mental health and substance use) unit, and an aged care unit.*	ashtrays/shelters Staff training Other (write in) *Allocation of resources to the implementation of the policy; communication to staff and the community regarding the introduction of the policy; creation of a mental health implementation project officer position for twelve months;* **Sample size** Total sample *n=183: clinical staff 73; non-clinical staff 110* *66% female* *44% under 35 years; 21% 36-45 years; 35% 45+ years* *21% current smokers; 26% former smokers; 52% never smokers* **Baseline comparison** Not applicable **Study sufficiently powered? (association)** Not applicable	*clinician and non-clinician support for a ban in mental health services generally were reduced to two: 'strongly unsupportive/unsupportive/ no view either way'; and 'supportive/strongly supportive'. Response categories relating to clinician support for a ban in their unit were reduced to two: 'strongly disagree/disagree/unsure'; and 'agree/strongly agree'. Possible differences between clinical and non-clinical staff in their perceptions of the benefits of a total smoking ban, and in their support for such a ban in mental health services generally were assessed by chi square analyses. Chi square analysis was initially undertaken to determine the univariate associations between staff demographic characteristics and clinical staff perceptions of the benefits and barriers of a total smoking ban, and their support for such a ban. Multiple statistical testing was accounted for by setting the*	**health"** *Total smoking ban will improve patient physical health: 65% agree; 23% uncertain; 12% disagree* **Beliefs - effects of smokefree: "Smokefree results in changed patient aggression/management issues"** *Total smoking ban will decrease client aggression: 8% agree; 31% uncertain; 60% disagree* *Clinician perceived barriers to a successful total smoking ban: Fear of patient aggression: 89% agree; 4% uncertain; 7% disagree* **Beliefs - effects of smokefree: "Smokefree results in changed medication issues"** *Total smoking ban will reduce medication use (clinical staff only): 17% agree; 28% uncertain; 56% disagree* **Beliefs - effects of smokefree: "Smokefree affects staff"** *Total smoking ban helps staff stop smoking: 66% agree; 23% uncertain; 11% disagree* **Beliefs - effects of smokefree: Other views on smokefree effects** *Total smoking ban will improve working conditions: 64% agree; 20% uncertain; 15% disagree* *Total smoking ban will improve patient quality of life: 40% agree; 38% uncertain; 21% disagree* *Total smoking ban will help patients stop*	**review team** **Evidence gaps/future research recommendations** Future research recommendations *Although this was a study of staff views, further research is required to ascertain patient views towards total smoking bans.* **Source of funding** Government

			significance level to p < 0.01. Perceived benefits and barriers that had the strongest relationship with support for a total smoking ban were entered into a backward stepwise logistic regression model. The number of variables initially entered into the model was limited by the size of the sample. The final model contained all variables with p < 0.05.	*smoking: 38% agree; 29% uncertain; 33% disagree* *Total smoking ban will increase the quality of care: 31% agree; 48% uncertain; 21% disagree* *Total smoking ban will increase rapport between patients (clinical staff only): 11% agree; 37% uncertain; 51% disagree* **Planning & resource issues: Staff workload/resourcing** *Total smoking ban will create less work: 12% agree; 37% uncertain; 51% disagree* *Clinician perceived barriers to a successful total smoking ban: staff are too busy with patient mental health: 61% agree; 15% uncertain; 24% disagree* *Clinician perceived barriers to a successful total smoking ban: Lack of staff time: 57% agree; 21% uncertain; 22% disagree* *Clinician perceived barriers to a successful total smoking ban: Lack of resources: 35% agree; 42% uncertain; 23% disagree* **Planning & resource issues: Staff training** *Clinician perceived barriers to a successful total smoking ban: patients will continue to smoke: Lack of staff knowledge: 52% agree; 16% uncertain; 32% disagree* *Clinician perceived barriers to a successful total smoking ban: Lack of staff skills: 43% agree; 14% uncertain; 43% disagree* *Clinician perceived barriers to a successful total smoking ban: Insufficient staff*	

				training provided: 40% agree; 29% uncertain; 31% disagree **Planning & resource issues: Planning/Timing-specific issues** *Clinician perceived barriers to a successful total smoking ban: processes aren't developed: 44% agree; 37% uncertain; 19% disagree* *Clinician perceived barriers to a successful total smoking ban: support systems aren't in place: 44% agree; 36% uncertain; 19% disagree* **Planning & resource issues: Structural issues** *Clinician perceived barriers to a successful total smoking ban: Lack of sustainability: 32% agree; 32% uncertain; 36% disagree* *Clinician perceived barriers to a successful total smoking ban: Lack of management support: 29% agree; 25% uncertain; 46% disagree* **Planning & resource issues: Compliance/Enforcement issues** *Clinician perceived barriers to a successful total smoking ban: patients will continue to smoke: Lack of staff cohesion/consistency: 59% agree; 24% uncertain; 17% disagree* *Clinician perceived barriers to a successful total smoking ban: patients will continue to smoke: Lack of staff confidence: 53% agree; 21% uncertain; 26% disagree* *Clinician perceived barriers to a successful total smoking ban: Staff resistance to change: 58% agree; 22% uncertain; 20%*	

				disagree *Clinician perceived barriers to a successful total smoking ban: Lack of staff interest: 36% agree; 26% uncertain; 38% disagree* *Clinician perceived barriers to a successful total smoking ban: Lack of staff commitment: 26% agree; 38% uncertain; 36% disagree* **Communication issues: Availability of information** *Clinician perceived barriers to a successful total smoking ban: lack of information about policy/procedures: 49% agree; 21% uncertain; 30% disagree* **Other factors: Safety issues** *Total smoking ban will make the unit safer: 26% agree; 36% uncertain; 37% disagree* **Other factors: Other** *Clinician perceived barriers to a successful total smoking ban: patients will continue to smoke: 72% agree; 14% uncertain; 14% disagree* *Clinician perceived barriers to a successful total smoking ban: staff will continue to smoke: 51% agree; 24% uncertain; 25% disagree* **Attrition** Not applicable	