

Thames Valley Clinical Senate

British Thoracic Society: Smoking Cessation Audit Report 2016

What is the current status of smoking cessation services in secondary care in Buckinghamshire, Oxfordshire, Berkshire, and Frimley and are there further opportunities to support patients to 'stop before the op'.

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1. Foreword

Smoking still accounts for a large proportion of illnesses in England and is the most important cause of preventable death in the UK.

Strategies to reduce smoking have been successful in lowering the smoking prevalence rates in the country and in Thames Valley they are lower than the National Average. These highly valuable interventions are supported in the Five Year Forward View but there is more that can be done. In Thames Valley we must not become complacent since the rates of smoking in hospital inpatients remain higher than one would wish according to the audit presented in this report.

The recommendations in this report are not difficult to implement but it will take commitment from every healthcare professional at every clinical encounter.

The Thames Valley Clinical Senate is keen to ensure a reduction in local smoking rates to the absolute minimum and urges you to take up the recommendations in this report. .

Jane Barrett

Chair, Thames Valley Clinical Senate

2. Executive Summary

Due to huge efforts by Public Health, Local Authorities and clinicians, smoking rates nationally have fallen to record lows. Despite this smoking remains one of the biggest killers in our society, causing premature death in more than half of smokers. Smoking cessation interventions are evidence-based and the single most cost-effective life saving intervention provided by the NHS yet, smoking cessation services within secondary care remain underfunded, under-prioritised and still not deemed a core part of treatment strategy for smoking-related illness. (*British Thoracic Society*)

In 2016 the British Thoracic Society (BTS) carried out a national audit of secondary care providers and found that the rate of stop smoking interventions was poor despite well-founded evidence that facilitating patients to stop smoking before an operation delivered benefits to the patient and the NHS – in terms of reduced complications and shorter length of stay.

This report summarises the local BTS findings of each of the acute Trusts in Buckinghamshire, Oxfordshire, Berkshire and Frimley Health, and establishes to what extent smoking cessation services are being delivered to inpatients, in compliance with NICE PH48 recommendations. The findings of this research will link into the TVSCN Cancer Network's analysis of smoking cessation community provision across the region, accounting for the patient pathway from admission to acute care and onward referral into the community.

The local findings reflect the national position and show that the smoking prevalence rate for people in hospitals is 25% compared to the local rate of 15.5%. The audit results, which are detailed in this report, identify that there are missed opportunities for stop smoking interventions.

The report also reviews the learning from the London Clinical Senate which led a major stop smoking programme in 2014 which has earned recognition from NICE and BTS. Local providers can benefit from this learning as they develop their own services.

In drawing up the recommendations, the Senate was mindful of the need for the patient to be an active participant in smoking cessation. Equally, it was clear that to maximise the combined effort, this needs to be a whole system approach and consistent messages and information should be developed that can be communicated at any part of the patient's pathway.

Recommendations:

1. There is well founded evidence that facilitating patients to stop smoking prior to their operation delivers benefits to both patient and the NHS. The Senate recommends that a system wide approach is required and that 'Stop before the Op' needs to be a consistent message for patients being referred for or approaching surgery. The time from referral up to the operation is an important opportunity to influence patients while their focus is

on their health and a consistent message explaining the risks and benefits should be developed for use across primary and secondary care. Consideration should also be given to maximising the opportunities to influence patients through non direct contact such as appointment correspondence/communication which the Senate recommends should set out the organisation's policy regarding smoking, the benefits of ceasing before surgery and offer signposting to smoking cessation services

2. The smoking status of patients in primary care, outpatients and inpatients should be ascertained and recorded in the patient notes on every attendance. The notes should record whether brief advice and onward referral has been offered. In locations where the introduction of electronic notes is underway, developers should ensure that the developing system will accommodate smoking status and advice.
3. The audit showed that only 25% of patients identified as smokers were asked if they would like to quit and the Senate recommends that all patients, who are identified as current smokers, should be provided with very brief advice and interventions as appropriate including a referral onto specialist stop smoking services for those patients who have indicated a desire to quit. This will require an increase in very brief intervention training as the audit identified that this is currently only offered in 1 of the 4 Trusts. All frontline staff, in health and social care, should receive Level 1 stop smoking training and know how to refer on to a specialist service for those smokers wanting further help. It is important that the consultations with patients should be collaborative in nature and recognise tobacco dependency as an addiction which requires clinical diagnosis and subsequently appropriate evidence-based treatment and support.
4. The Senate recommends that all inpatients who would like to abstain from smoking whilst in hospital, but who do not wish to quit should have access to pharmacotherapy and appropriate products should be available in the formulary.

3. Background

Smoking prevalence amongst adults (18+) has fallen from 19.9% in 2010 to 15.5% (PHE, 2016); the lowest levels since records began. The reported rates of smoking in pregnancy have also fallen over time, from 15.1% in 2006/7 to 12.7% in 2012/13 (ASH, 2016). This can be attributed to world-leading public health measures, such as curbed advertising and established smoke free places. Despite this, in 2015/16 the estimated number of hospital admissions attributable to smoking has increased to 474 thousand, and smokers saw their GP 35% more than non-smokers at a cost of £2.5 billion on the NHS (Department of Health, 2017). The estimated number of deaths attributable to smoking now accounts for 16% of all deaths: 79,000 (NHS Digital, 2017), at a wider cost to society of around £3.1 billion (Policyexchange.co.uk, 2017)

There are approximately 233, 894 smokers across the BOB and Frimley STPs, costing the NHS a total of 57m annually (ASH, 2016). The number of patients setting a quit date is significantly lower in Oxfordshire than the England average, and Slough is in the worst percentile in England for smoking prevalence, deaths attributed to smoking from heart disease, COPD, and stroke (PHE, 2016). Trusts can benefit financially from investing in Stop Smoking services at a number of levels, including admissions avoidance, reducing length of stay and reducing re-admissions. In addition to this, improving the smoking cessation services in Trusts may also attract income tariffs through the CQUIN: Preventing ill health by risky behaviours.

3.1 The Case for providing inpatient smoking cessation support

- **Smoking is a well-known risk factor for complications after surgery.**
In one retrospective study, smokers were found to have a three-to six-fold increased risk of intraoperative pulmonary complications (Akrawi, 1997; Schwilk 1997). Smokers with chronic heart or lung disease have a two-to five-fold increased risk of perioperative complications.
- **Smoking increases admissions** for COPD exacerbations by 43%, and up to 37% for acute severe asthma. (BTS, 2016)
- **Smoking cessation decreases the risk of postoperative and wound healing complications**
The harmful effects of smoking on heart function and circulation disappear in as little as 24 to 48 hours after smoking cessation. A recent systematic review evidences a reduction in postoperative complications in patients who abstained from smoking four to eight weeks before surgery (Thomsen T et al, 2014). This is supported by good evidence that surgical outcomes, including post-operative complications, length of stay and need for ITU admission can be reduced by stopping smoking prior to surgery (Moller, 2002; Warner, 2006).
- **Smoking is a modifiable risk factor for complications in pregnancy**, and has been associated with:
 - 5-8% of premature deaths
 - 13-19% of cases of low birth weight in babies carried to full term
 - 5-7% of preterm-related deaths
 - 23-24% of deaths caused by sudden infant death syndrome (cot death) (Dietz, PM, 2010)

- Up to 5,000 miscarriages, 300 per-natal deaths and around 2,200 premature deaths per year in the UK.(RSCP, 2010)

4. National ambitions for smoking cessation

The recently published [Department of Health Tobacco Control Plan for England \(2017\)](#) sets out the high level national ambitions for smoking cessation in the United Kingdom. The DoH aspires to achieve a smoke free generation i.e. smoking prevalence at 5% or below by 2022. This will be achieved by:

- All public services working together, leading the way in helping people to stop smoking;
- Reducing the prevalence of smoking in pregnancy from 10.7% to 6% or less;
- Giving people with mental ill health equal priority to those with physical ill health;
- Backing evidence-based innovations to support quitting.

The DoH affirms that any interaction with the health and social care system is considered as an opportunity to be exploited by clinicians, who should promote smoking cessation to improve health outcomes for their patients who smoke. A very brief conversation with patients is one of the most effective ways of triggering a quit attempt, and all smokers should be offered stop smoking advice and referral to evidence-based support at all relevant points in their journeys through the health system. At a national level, the DoH has committed to developing evidence-based guidance and training for healthcare professionals to support patients to quit smoking. To that end, it is expected that:

- All health professionals will engage with smokers to promote quitting;
- All commissioners will take up the 2017-19 Commissioning for Quality and Innovation framework which includes tobacco as a national indicator for clinicians to undertake assessment and arrange for intervention where appropriate in relation to smoking status.
- All NHS hospitals fully implement NICE PH48 guidance supporting cessation in secondary care.

5. Smoking related ill health across Berkshire, Oxfordshire, Buckinghamshire and Frimley

- In 2016, the number of people who have quit has slowed compared to 2014 and 2015, and since 2013 year on year fewer people are trying to quit. (PHE, 2017)
- There were 7760 smoking attributable hospital admissions in Oxfordshire, Berkshire, Buckinghamshire and Frimley in 2015/16. It is estimated that of these admissions, 25% are due to respiratory disease, 16% are due to circulatory disease, 12% are due to cancers and 1% are due to digestive disorders. (BTS, 2013).
- There were 2344 emergency hospital admissions for COPD in Oxfordshire, Berkshire, and Buckinghamshire in 2015/16 at an average cost of admission per patient of £2352. In total the financial burden £632m.

- **The estimated cost per capita of smoking attributable hospital admissions in Oxfordshire, Berkshire, Buckinghamshire and Frimley is £320m.**

5.1 Health inequalities

Smoking remains highest among populations who already suffer from poorer health and other disadvantages. Local PHE data shows that in the areas of the lowest deprivation, there is a higher prevalence of smoking amongst adults and smoking-related ill health. NHS Slough CCG has both the highest deprivation level score (22.9), and prevalence of adult smokers (18%) across BOB and Frimley STPs. The smoking attributable admissions in Slough have increased by 14%, as have levels of smoking attributable deaths, and smoking attributable deaths from heart disease. Across BOB and Frimley STPs the number of smoking attributable deaths from COPD continues to worsen, with the sharpest increase in Buckinghamshire of 12% 2012-2015. PHE advise that areas such as Slough would benefit from identifying its priority groups and shaping its smoking cessation services to meet the needs of its communities to break the cycle of health inequality.

5.1.1 Pregnancy

Smoking during pregnancy is also a major health inequality which may contribute to various complications, including: premature birth, miscarriage, low birth weight and Sudden Infant Death Syndrome (SIDS), to name only a few. The prevalence of smoking at time of delivery varies across BOB and Frimley STPs, ranging from 5% in Wokingham to 8.3% in Slough, an area of high levels of deprivation.

The NHSE [Saving Babies Lives Care Bundle](#) sets out to tackle stillbirth by bringing together four elements of care. The Bundle sets out to reduce the prevalence of smoking in pregnancy by: recording the smoking status of each pregnant woman; recording of CO reading for each pregnant woman and referral to a stop smoking service where appropriate.

Frimley Health has implemented CO monitoring to identify pregnant women who smoke, and support smoking cessation in line with the Saving Babies Lives Care Bundle. This represents promising progress in smoking cessation support to pregnant women; however data from NHS digital evidences an opportunity for further improvement across the STPs.

5.1.2 Mental Health

Nationally, on average 41% of adults with serious mental illness smoke, and people with a mental health condition die on average 10 to 20 years earlier than the general population (DoH, 2017). In the South East region, 39% of adults with serious mental illness are recorded as current smokers (PHE, 2017). In the most recent Tobacco Control Plan for England (2017) the Department of Health has committed to implementing comprehensive smokefree policies, including integrated tobacco dependence treatment pathways, in all mental health services by 2018.

Figure 1: Local Tobacco Control Profiles data

PHE Centre	Smoking attributable admissions 2014/15	Smoking attributable admissions 2015/16	Trends
Oxfordshire	5212	4252	↓
West Berkshire	1007	1016	↑
Bracknell & Ascot	749	697	↓
Windsor & Maidenhead	899	903	↑
Reading	911	986	↑
Slough	785	892	↑
Buckinghamshire	3517	3729	↑
PHE Centre	Smoking attributable mortality 2012-14	Smoking attributable mortality 2013-15	
Oxfordshire	2314	2352	↑
West Berkshire	559	591	↑
Bracknell & Ascot	376	409	↑
Windsor & Maidenhead	551	546	↓
Slough	383	450	↑
Reading	487	525	↑
Buckinghamshire	1657	1781	↑
PHE Centre	Smoking attributable deaths from heart disease 2012-14	Smoking attributable deaths from heart disease 2013-15	
Oxfordshire	227	237	↑
West Berkshire	60	58	↓
Bracknell & Ascot	39	36	↓
Windsor & Maidenhead	66	59	↓
Slough	53	65	↑
Reading	59	58	↓
Buckinghamshire	173	180	↑
PHE Centre	Smoking attributable deaths from COPD 2012-14	Smoking attributable deaths from COPD 2013-15	
Oxfordshire	738	688	↓
West Berkshire	175	187	↑
Bracknell & Ascot	107	118	↑
Windsor & Maidenhead	156	154	↓
Slough	145	145	↑
Reading	167	184	↑
Buckinghamshire	460	517	↑

5.1.3 The cost of smoking to society

The impact of smoking related ill health is also borne on the social care system and the wider economy. The cost to the social care system is £1.4 billion every year, made up of:

- £760m in costs borne by local authorities
- £630m spent by those who have to self-fund their care.

There are also the costs being borne by friends and family carers. Since smoking doubles the risk of developing care needs, it is highly relevant when considering the provision of preventative and supportive services. (ASH, 2017)

ASH: The Cost of Smoking to the Social Care System in England, 2017

County	Additional spending on social care for adults aged 50 and over as a result of smoking 2015/16	Total local authority spending on social care for adults 2015/16	Number of state-dependant individuals
Oxfordshire	£15,553,175	£8,490,041	388
Slough	£2,8900,05	£1,577,573	72
Reading	£3,258,031	£1,778,468	81
Berkshire	£3,584,779	£1,956,830	89
Buckinghamshire	£9,219,188	£5,032,495	230
Windsor and Maidenhead	£2,960,352	£1,615,973	73
Wokingham	£2,399,552	£1,309,848	59
Milton Keynes	£5,748,805	£3,138,111	143
Bracknell	£2,847,753	£1,554,508	71

6. British Thoracic Society (BTS) Smoking Cessation Audit

In 2016 the British Thoracic Society (BTS) carried out a national smoking cessation audit in 146 secondary care providers. The aim of the programme was to drive improvements in the quality of care and services provided for patients with respiratory conditions across the UK by measuring how hospitals were treating people with tobacco dependence against national standards (NICE PH48). The audit was aimed at all adult inpatients (16 years and older) in acute hospitals under the care of a hospital doctor, in any clinical specialty, and admitted during 1 April - 31 May 2016. Maternity and mental health patients were not included in the scope of the audit. This was the first comprehensive audit of smoking cessation activity using BTS and NICE standards for secondary care.

Part 1 of the audit involved screening the notes of inpatients – both smokers and non-smokers – to establish whether patients were being asked if they smoked, and if it was being appropriately recorded. If patients were recorded as being current smokers, then further questions were asked about the services that they were offered. Part 2 of the audit covered organisational aspects of smoking cessation services, for example whether or not Trusts had and/or enforced Smoke-free Policies, and to what extent smoking cessation services were

supported by senior clinical leadership. Part 2 of the audit provides context to the results of Part 1.

The full audit protocol can be found in [Appendix 1](#)

6.1 Local BTS audit of smoking cessation services

BTS was not able to share the individual results from the acute Trusts in Buckinghamshire, Oxfordshire, Berkshire (BOB STP), and Frimley Health (STP) due to data sharing agreements. Throughout July the following Trusts were requested to share their results:

- Frimley NHS Foundation Trust.
- Wexham Park Hospital.
- Royal Berkshire NHS Trust.
- Oxford University Hospitals NHS Foundation Trust.
- Buckinghamshire NHS Trust.

The purpose of the data collection has been to establish the extent to which smoking cessation services are being delivered locally.

The local BTS audit results for Part 1 and Part 2 have been listed in [Table 1](#) and [Table 2](#) respectively, and are benchmarked against the national figures.

6.2 Summary of key findings

All 5 acute Trusts from Buckinghamshire, Oxfordshire, Berkshire, and Frimley took part in the BTS audit of smoking cessation in 2016. Frimley Health NHS Foundation Trust included Wexham Park Hospital in the audit, and Oxford University Hospitals NHS Foundation Trust excluded the Horton General Hospital from the audit.

In Part 1 of the audit, 540 patient records were submitted. Approximately 67% of patients were from surgical specialties, and 77% were emergency admissions. The median age was 63, 49% were female. Smoking prevalence was 25% in males, and 22% in females which is not statistically different to the national average. The highest smoking prevalence was seen in patients who had been admitted to respiratory medicine 45%. The most common route of patient contact was through emergency admission 77%, which is also consistent with the national average.

On average, 32% of hospital patients in the audit were not asked if they smoked, which is higher than the national average. Smoking status was recorded in 68% of patient records, which is **lower than the national average (72.5%)**, with non-cigarette use (i.e. shisha, marijuana, e-cigarettes) documented in only 1.25% of patient records. This difference is not statistically significant to the national average; however the expected compliance is 100%.

Of the 20% of patients who were identified as current smokers, **only 25% were asked if they would like to quit**. This has been shown to have a negative impact on the number of referrals to smoking cessation services. In Wexham Park Hospital, for example, 0 of the 24 patients identified as current smokers were asked if they would like to quit, and therefore there were no referrals. Similarly, in Stoke Mandeville Hospital of the 23 patients identified as current smokers, only 4 were asked if they would like to quit and only 3 offered a referral.

Of the 80% of patients who did not wish to quit smoking, only **2% were offered nicotine replacement therapy** to aid abstinence and acute withdrawal from nicotine whilst awaiting treatment. The expected level of compliance is 100%.

Part 2 of the BTS audit of smoking cessation services in Trusts provides context to the findings of Part 1. The data for Part 2 of the BTS audit pertains to 4 of the 5 acute Trusts in BOB and Frimley STPs. 100% of the Trusts had a dedicated smoking cessation service, and a Hospital Smoking Cessation Practitioner (HSCP). There are formal pathways for patients to be referred to the hospital smoking cessation services in Frimley Health NHSFT, Wexham Park Hospital, and Buckinghamshire NHS Trust. However, in comparison to the national figures, the **service is heavily under resourced**. On average, a HSCP is employed to work 8 hours per week, whilst the national average is 29.5 hours per week. This necessarily impacts upon the availability of, and access to the service for inpatients and/or outpatients. Outpatients can only access HSCP for support 25% of the time, and inpatients can access them mostly 50% of the time.

75% of the smoking cessation services are supported by a senior clinical leader; however the average amount of time that they are able to dedicate is 1.75 hours per week. This has an impact upon the availability to train frontline staff in smoking cessation. Only 25% of Trusts offer regular smoking cessation training to frontline staff. This also affects the extent to which the service being delivered is evidence-based and clinically led, which is fundamental to its effectiveness.

The results evidence a lack of communication with patients about smoking restrictions on hospital grounds, and the benefits of smoking cessation prior to surgery. Smoking restrictions are rarely enforced, and for elective admissions only 25% of patients are provided with written information about the Trust's smoke free policy before their appointment, procedure or stay. This is **below the national average (51%)** and does not meet the expected standard of 100%.

100% of hospitals provided some pharmacotherapy for smoking cessation. 75% of HSCPs were able to prescribe or supply pharmacotherapy which is significantly **higher than the national average**. It is recommended that 100% of HSCPs are able to prescribe NRT to patients.

In summary, the local BTS audit results **echo those of the national findings**, and highlight a significant opportunity for improving the way that smoking cessation services are being supported and delivered in BOB and Frimley STPs.

7. BTS Recommendations

- Frontline hospital staff should receive Level 1 stop smoking training and know how to refer onto a specialist service for those smoker wanting further help.
- Smoking status and smoking cessation interventions should be recorded in the notes at every attendance.
- Licenses pharmacotherapy for smoking cessation should be readily available at all times of day in the hospital wards/pharmacy.
- There should be specific post(s) in each hospital designated to specialist smoking cessation counselling.

- The Hospital Smoking Cessation Service (HSCS) should have a dedicated office, phone, computer (email) and access to all specialities.
- There should be a named Consultant, Senior Nurse or Hospital Manager (Stop Smoking Champion) responsible for supporting the HSCS.
- The HSCS should offer smokers interested in quitting:
 - Around 40-60 minutes initial consultation
 - Weekly follow-up appointments of 10-20 minutes for at least 4 weeks
 - Phone call contact at 3 and 6 months
 - Self-reported quitters should be offered a final appointment at 12 months
- The Hospital Smoking Cessation Practitioner (HSCP) should be able to prescribe or recommend medications so that all patients and staff who want to quit have timely access to all licensed pharmacotherapies
- The HSCP-led service should be flexible allowing more intensive and prolonged support /pharmacotherapy, when needed.
- Smoking status should be validated at each visit to the smoking cessation

8. Local BTS Audit results

		Frimley Health NHS Foundation Trust	Wexham Park Hospital	Royal Berkshire Trust NHS Foundation Trust	Oxford University Hospitals NHS Foundation Trust	Buckinghamshire NHS Trust	Local Mean Results	National Results	Expected Compliance
Patient Characteristics									
Age	Median (IQR)	60	60	64	NP	69	63.25	67	N/A
Gender	Male	55.20%	52.10%	46.60%	NP	50%	50.98%	49.30%	N/A
	Female	44.80%	47.90%	53.40%	NP	50%	49.03%	50.70%	N/A
Route of patient contact	Emergency admission	73.60%	71.30%	81.20%	76.80%	80.70%	76.72%	76.80%	N/A
	Elective inpatient	26.40%	28.70%	18.80%	23.20%	19.30%	23.28%	23.20%	N/A
Smoking status									
Is smoking status documented in the notes	Yes	56.44%	71.30%	68.40%	71.00%	73.30%	68.09%	72.50%	100%
	No	43.56%	28.70%	31.60%	29.00%	26.70%	31.91%	27.50%	
Is non-cigarette smoking documented in the notes	Yes		1.10%	2.30%	0.90%	0.70%	1.25%	2.20%	100%
	No	100%	98.90%	97.70%	98.10%	99.30%	99%	97.80%	
Is the patient a current smoker	Yes	12.88%	35.80%	15.40%	13.00%	20.90%	19.60%	25.40%	0%
	No	48.47%	64.20%	81.30%	87.00%	79.10%	72.01%	73.80%	
	Not documented	38.65%		3.30%			20.98%	0.80%	14

		Frimley NHS Foundation Trust	Wexham Park Hospital	Royal Berkshire Trust NHS Foundation Trust	Oxford University Hospitals NHS Foundation Trust	Buckinghamshire NHS Trust	Local Mean Results	National Results	Expected compliance
Smoking cessation interventions									
Evidence that current smokers were asked if they would like to quit smoking	Yes	47.62%	0%	15.00%	23.00%	17.40%	25.76%	28.00%	100%
	No	52.38%	100%	85.00%	77.00%	82.60%	79.40%	72.00%	
If no, is there evidence that nicotine products were offered the help them abstain	Yes	0%	0%	0%	0%	10.50%	10.50%	4.30%	100%
	No	100%	100%	100%	100%	89.50%	98%	95.70%	

8.1 Local BTS organisational audit results Part 2

Part 2 of the BTS audit provides some context to the results from Part 1 by exploring various organisational aspects which may or may not be supporting smoking cessation services in hospitals. The results were received from 4 out of 5 providers and are detailed in Table 2 below.

Organisational aspects supporting smoking cessation	Frimley Health NHS Foundation Trust	Wexham Park Hospital	Oxford University Hospitals NHS Foundation Trust	Buckinghamshire NHS Trust	Local Mean Results	National Results
Does your trust have a designated smoking area?	No	No	No	No	No: 100%	Yes: 40% No: 60%
If the answer is yes, to what extent are smoking restrictions enforced in areas outside the designated smoking areas?	N/A	N/A	N/A	N/A	N/A	Completely: 7% Mostly/rarely/not at all: 93%
If the answer is no, to what extent are smoking restrictions enforces throughout the Trust grounds?	Mostly	Mostly	Rarely	Rarely	Rarely: 50% Mostly: 50%	Completely:10% Mostly/rarely/not at all: 90%
For elective admissions, are patients provided with written information about the Trust's smoke free policy before their appointment, procedure, or hospital stay?	No	No	Yes	No	Yes: 25% No: 75%	Yes: 51% No/Not known: 49%
Does your Trust have access to a smoking cessation service?	Yes - both hospital and community based	Yes - both hospital and community based	Yes	Yes - both hospital and community based	Yes: 100%	Yes: 94%
Does your Trust have a dedicated smoking cessation practitioner? (HSCP)	Yes	Yes	Yes	Yes	Yes: 100%	Yes: 51%
If yes, how many hours per week is an HSCP employed?	10	11	NP	4	Median 8 hours p/w	Median 29.5 hours p/w
Is your Trust's smoking cessation service supported by a dedicated senior member of staff?	Yes	Yes	No	Yes - other	Yes: 75% No: 25%	Yes: 26%

If yes, how many hours per week are dedicated to this person to the smoking cessation service?	2	3	NP	0.25	Median: 1.75 hr p/w	Median 2 hr p/w
Does your Trust have a BTS Stop Smoking Champion?	Yes	Yes	Yes	Yes	Yes: 100%	Yes: 64%
Does your hospital-based smoking cessation service provide inpatient access to an HSCP during their stay?	Mostly	Mostly	NP	Sometimes	Mostly 50% Sometimes 25%	Yes - 34%
Outpatient access during visit?	Never	Never	NP	Sometimes	Never: 50% Sometimes: 25%	Yes:34%
Electronic recording of smoking status	Sometimes	Sometimes	NP	Sometimes	Sometimes: 75%	Yes: 34%
Does your Trust offer pharmacotherapy in its hospitals?	Yes	Yes	Yes (but not in all forms)	Yes	Yes: 100%	Yes: 99%
Is the HSCP able to prescribe, supply or recommend pharmacotherapy that can be given to inpatients on the day of the consultation?	Yes	Yes	No - prescribing limited	Yes - recommend	Yes: 75% No: 25%	Yes: 23%
OR Outpatients on the day of consultation?	No	No	No	Yes - recommend	Yes: 25% No: 75%	Yes:19%
Is there a formal pathway that allows all healthcare professionals within the Trust to refer patients to your HSCS?	Yes	Yes	NP	Yes	Yes: 75%	Yes: 54%
Is there a formal pathway that allows all healthcare professionals within the Trust to refer patients to a community smoking cessation service?	N/A	N/A	NP	N/A		Yes: 61%
For smokers that are discharged from secondary care that wish to stop smoking, is there a system in place that allows them to be followed up by a smoking cessation service (hospital or community) for ongoing support?	Yes - via community services	Yes - via community services	No	Yes - via a community smoking cessation service	Yes: 75% via community smoking cessation service	Yes:27% via hospital smoking cessation service Yes: 62% via community smoking cessation service Yes: 1.4% via both hospital and community services.
Are frontline staff offered regular smoking cessation training?	No	No	No	Yes	75% No - 25% yes	Yes - 44%

9. London Clinical Senate Programme

In August 2014 the London Clinical Senate launched a programme, Helping Smokers Quit (HSQ), to support behaviour change within clinical teams and across care settings, specialties and organisations with the goal that every London clinician knows the smoking status of each patient they care for and has the competence and the commitment to encourage and support that patient to stop smoking through direct action or referral. The programme has been highlighted as evidence of best practice by Public Health England and nationally through the CQUIN programme.

The HSQ programme has focused on clinical action, and what health system support is necessary to enable an improved interaction between a clinician and tobacco-dependent patient. As such a four step approach had been suggested, involving the London Boroughs, Provider Trusts, and CCGs – the CO4 approach, with each provider taking overall a 1/3 of the responsibility:

- The ‘right’ **CO**nversation for every patient and staff member who smokes that gives him or her a chance to quit, referring if necessary.
 - The ‘right conversation’ would be delivered through very brief advice (VBA). The training for VBA takes only 20 minutes (via NCSCT) and the intervention can take as little as 30 seconds to complete in a real consultation.
 - VBA encourages a more collaborative approach to consultations with patients, and aims to recognise tobacco dependency as an addiction that requires clinical diagnosis and subsequently appropriate evidence-based treatment and support.
- Make routine desktop exhaled carbon monoxide (**CO**) monitoring by clinicians possible: “Would you like to know your level?”
 - CO monitoring is a cost and clinically-effective and can motivate quit attempts, and yet is underused by clinicians across specialties, resulting in substantial variation in its availability.
 - Supporting pregnant women to quit smoking as early as possible in order to reduce the toxic effect of tobacco smoke on the foetus, routine CO monitoring would be implemented in community, acute and primary care settings.
- **CO**de the intervention so we can evaluate effectiveness – including death certification.
 - It is important to record smoking as a cause of death on certificates in order to: change the way that clinical teams think about smoking and interventions; increase family awareness where smoking prevalence is high; enabling more accurate documentation of the impact of tobacco in death statistics.
- **CO**mmission the system to do this right: so the right behaviours are incentivised systematically. (london senate.nhs.uk/helping-smokers-quit).
 - Taking a whole-system approach to dealing with tobacco, ensuring that health or social care providers are supported to become health promoting organisations.

9.1 Learning from the London Clinical Senate Programme

The programme ran for 18 months, with leadership from the Clinical Senate Council Vice-Chair and a half day commitment each from a respiratory clinician, a general practitioner and an independent consultant who were all involved in the London Respiratory Network and were able to draw on significant experience in developing materials and guidance. The Clinical Senate Programme Lead and Development Manager also committed time. The Programme was overseen by a multi-professional programme board which aimed to engage with and influence key stakeholders. A smaller, Delivery Group, planned and managed the programme on a day to day basis. In addition to individuals mentioned above this included a Public Health Consultant (chair of the London Directors' of Public Health Tobacco Alliance) Mental Health Trust Smoking Cessation Specialist, a Pharmacist who specialised in smoking cessation, the Head of Health in the Greater London Authority (a role supported by PHE). The programme worked with PHE at London and National level.

In March 2016 the London Clinical Senate hosted an awards event which recognised the best practice underway in London. The best practice examples served to highlight that it was possible to implement aspects of the CO4 programme. For example:

- Barts Health NHS Trust:
 - Introduction of CO monitors in maternity services and pre-operative assessment clinics
- Oxleas NHS Foundation Trust + Bexley & Greenwich Stop Smoking Service:
 - Use of CO4 as CQUIN target for 2016/17
 - Use of CO monitor on all wards.

Progress overall; however, was found to be difficult to maintain as a result of the London CCGs decommissioning smoking cessation services. Efforts were made by the Trusts to maintain the service through self-funding, however over time it became financially unviable to continue.

The original catalyst for the programme was a view expressed at a meeting of the Clinical Senate Forum (October 2013) which identified tackling smoking cessation as the action that would have the greatest impact in improving Londoners' health (reducing mortality and inequalities) and that clinicians were uniquely placed to tackle smoking cessation by making every contact count. There was therefore an expectation that recommendations would be accepted and adopted daily practice, however in reality, many barriers exist for example:

- Lack of knowledge – clinicians were not aware of how to use carbon monoxide monitors;
- Prescribing myths – entrenched misconceptions that nicotine therapies such as varenicline (Champix) were ineffective or the cause of adverse drug reactions such as depression.
- Lack of documentation – tobacco rarely featured in death certificates as the cause of, or contributing factor to death masking the true burden of smoking.
- Lack of insight in the effects of using a paternalistic approach and lack of training in use of behaviour change techniques to support patients

Significant efforts were made by the programme leads to generate buy-in from clinical leaders at an organisational level and secure commitment from other key stakeholders. This included: visiting trusts and liaising with clinical teams; writing to STP leads with summary reports and recommendations and writing to the Mayor of London to ask the NHS to work harder to improve smoking cessation. Helping Smokers Quit was initially set up for 12 months then extended for another 6, concluding with a final report. It was difficult to sustain the level of funding previously committed, thus the Senate's efforts have since focused on promoting the programmes recommendations and tools.

The experience of the London Clinical Senate Helping Smokers Quit programme provides invaluable insight into the complexities and challenges involved in implementing a successful in-hospital smoking cessation intervention as part of a comprehensive smoking cessation pathway. In any given intervention it is crucial to consider, for example:

- Predisposing factors: clinician beliefs and attitudes toward their role in preventive practices and knowledge of nicotine therapies.
- Reinforcing factors: endorsement of hospital leaders and support from colleagues.
- Expected behaviours: ascertainment of smoking status of all admitted patients; provision of smoking cessation counselling; provision of NRT; documentation.
- Environmental factors: availability of training and funding related to CO monitors and smoking cessation counselling.)

The London Clinical Senate continues to promote Helping Smokers Quit. The Clinical Leadership group in one STP has agreed that it should be implemented across all trusts and discussions are now focussing on how to provide project management resource to support this within each organisation.

10.Learning from Smoking Cessation interventions

10.1 Increasing smoking cessation referrals in Portsmouth

Portsmouth Hospitals NHS Trust piloted a [Streamlined Secondary Care system](#) for three months, November 2011 to February 2012. This was a whole hospital approach to 'stop smoking' support for patients. The system included an electronic referral system which was incorporated within the existing hospital IT system. The approach ensured that it was a straightforward and efficient method for referring smokers on to their local stop smoking service. It focused on implementing systems that supported staff to deliver VBA and electronically refer patients to and of the five different local stop smoking services. The electronic referral system sorted patients by their postcode to ensure that they were automatically referred to the correct local stop smoking service. The system also included an online training programme that provided the necessary knowledge required to deliver VBA in the hospital setting. The primary outcome measured in the pilot was the number of referrals made from the hospital to smoking cessation services.

The costs to alter the hospital IT system were approximately £7,000, however it should be noted that this is significantly higher than would be anticipated for any future testing due to the lessons learnt. The pilot was overseen by a coordinator who worked for three days a

week based in the hospital at NHS Band 6. In addition, £1,200 contributed to the training cost of the pharmacy technicians and towards their time spent on giving VBA to patients.

10.1.2 Outcomes

- The pilot resulted in a total increase of 602% referrals to stop smoking services, 187 of the 330 referrals overall had been made using the new referral management system. During the same period in the previous year, only 47 referrals had been made overall.
- There had been a 415% increase in the number of staff trained to give VBA to patients via the online training programme. The uptake of training was greatest amongst nurses (39.7%), which was positive as it was anticipated that they would have the majority of contact with patients and would therefore have the greatest opportunity to deliver VBA. Encouragingly, this was followed by doctors (17.4%).
- In total, 64 (40.8%) of the 187 patients referred via the RMS on to the Hampshire and Portsmouth stop smoking services, accepted support when contacted. Of those 64, at the time of data capture, 22 (34.4%) had gone on to set a 'quit date' and 14 (22%) were reported as four week quitters.
- The model was not found to have had a detrimental impact on their day to day job roles and it was felt that the model had been incorporated into daily practice.
- The model provided an auditable and accountable system that could support the performance management of smoking related CQUIN and other quality-related indicators.

10.1.3 Electronic Cigarettes

There is evidence to suggest that, aside from nicotine, other factors which contribute to tobacco dependence include sensory and behavioural cues, such as a 'scratch' at the back of the throat, heat on inhalation, the smell and sight of smoke. These sensations are understood to reinforce smoking behaviours, and over time become as rewarding as the nicotine itself (Hartmann – Boyce et al, 2016). Electronic cigarettes (EC) are electronic devices that heat a liquid into an aerosol for inhalation which usually comprises of propylene glycol and glycerol, with or without nicotine flavours, and stored in disposable or refillable cartridges or a reservoir (Hartmann-Boyce J, et al. 2016). It is understood that a sharp rise in the use of EC can largely be attributed to their similarity to cigarettes, acting as an effective substitute for smoking behaviour and the rituals and sensations that accompany smoking (Hartmann – Boyce et al, 2016).

E-cigarettes are not covered by smokefree legislation, as they do not burn tobacco and do not create smoke. The absolute level of safety is a matter for perennial debate, and there are concerns that the presence of EC might act to renormalise smoking, however there is a general consensus across England's public health community that:

- **EC are substantially less harmful than** cigarettes (Hajek, 2014; McNeill, 2015)
While vaping may not be 100% safe, most of the chemicals causing smoking-related disease are absent and the chemicals which are present pose limited danger; EC are approximately 95% safer than smoking (PHE, 2015). A more recent study by Shabab et al (2017) reassures that use of EC and NRT can reduce exposure to toxic chemicals that can lead to cancer in cigarette smokers. Whilst NRT products are the

recommended option, if a pregnant woman chooses to use an EC and if that helps her to stay smoke free, the latest guidance from the Smoking in Pregnancy Challenge Group (2017) is that she should not be discouraged from doing so, as it carries significantly less risk of harm than ordinary cigarettes.

- **EC are not a gateway to smoking but can act as a gateway from smoking.** Under-18s are prohibited from buying EC and adults are prohibited from buying them on behalf of under-18s. EC are used almost exclusively by smokers and ex-smokers and are now the most popular stop smoking aid in England. In 2016 it was estimated that 2 million consumers in England had used e-cigarettes and completely stopped smoking and a further 470,000 were using them as an aid to stop smoking. (DoH, 2017)

To support smokers to stop smoking and stay smokefree, PHE recommends a more enabling approach to EC to make it an easier choice than smoking.

10.2.1 Hampshire Stop Smoking Services

Quit4Life is one of the first “e-cigarette and vaping friendly” NHS stop smoking services in the country. Clients in Basingstoke who wish to quit smoking by using e-cigarettes access the service and are given a voucher by them to take to a local vape shop to obtain a vape machine and bottle of nicotine liquid. Hampshire Stop Smoking services are due to roll out an extended programme across the county imminently. The scheme is supported by Public Health England and will be evaluated once data collection has been completed.

11. Key findings

Commissioning for Quality and Innovation (CQUIN): Preventing ill health by risky behaviours (smoking and alcohol consumption)

By 2018/19 all acute trusts are expected to have signed up to the [CQUIN](#): Preventing ill health by risky behaviours (smoking and alcohol consumption) has been introduced with a key aims of significantly reducing the burden on the NHS; premature mortality and morbidity; and reducing health inequalities. It also contributes to the ambition set out in the Five Year Forward view around the need for a “...radical upgrade in prevention...” and to incentivise and support healthier behaviour.

A summary of the CQUIN requirements, options for delivery and payment schedule can be found in Appendix 1.

The implementation of the CQUIN across all hospital trusts in BOB and Frimley would provide a financial incentive to focus on identifying smokers, and where required providing advice and offering referral to specialist services for inpatients upon discharge into the community, complementing and reinforcing current activity to deliver interventions to smokers. It is recognised that much of this work will, in theory, address the findings of the BTS audits, however an appraisal of the evidence-base and evaluations of best-practice smoking cessation interventions elsewhere will support Trusts in considering how best to implement the necessary changes to their services.

12.Recommendations:

- 1 There is well founded evidence that facilitating patients to stop smoking prior to their operation delivers benefits to both patient and the NHS. The Senate recommends that a system wide approach is required and that 'Stop before the Op' needs to be a consistent message for patients being referred for or approaching surgery. The time from referral up to the operation is an important opportunity to influence patients while their focus is on their health and a consistent message explaining the risks and benefits should be developed for use across primary and secondary care. Consideration should also be given to maximising the opportunities to influence patients through non direct contact such as appointment correspondence/communication which the Senate recommends should set out the organisation's policy regarding smoking, the benefits of ceasing before surgery and offer signposting to smoking cessation services
- 2 The smoking status of patients in primary care, outpatients and inpatients should be ascertained at every visit and where necessary recorded/updated in the patient notes. The notes should record whether brief advice and onward referral has been offered. In locations where the introduction of electronic notes is underway, developers should ensure that the developing system will accommodate smoking status and advice.
- 3 The audit showed that only 25% of patients identified as smokers were asked if they would like to quit and the Senate recommends that all patients, who are identified as current smokers, should be provided with very brief advice and interventions as appropriate including a referral onto specialist stop smoking services for those patients who have indicated a desire to quit. This will require an increase in very brief intervention training as the audit identified that this is currently only offered in 1 of the 4 Trusts. All frontline staff, in health and social care, should receive Level 1 stop smoking training and know how to refer on to a specialist service for those smokers wanting further help. It is important that the consultations with patients should be collaborative in nature and recognise tobacco dependency as an addiction which requires clinical diagnosis and subsequently appropriate evidence-based treatment and support.
- 4 The Senate recommends that all inpatients who would like to abstain from smoking whilst in hospital, but who do not wish to quit should have access to pharmacotherapy and appropriate products should be available in the formulary.

References

- (PHE), P. (2017). *Public Health Profiles*. [online] [Tobaccoprofiles.info](http://www.tobaccoprofiles.info). Available at: <http://www.tobaccoprofiles.info/tobacco-control> [Accessed 21 Aug. 2017].
- (PHE), P. (2017). *Public Health Profiles*. [online] [Fingertips.phe.org.uk](http://fingertips.phe.org.uk). Available at: <https://fingertips.phe.org.uk/profile/tobacco-control> [Accessed 19 Sep. 2017].
- A pathophysiological basis for informed preoperative smoking cessation counseling. (1997). *Journal of cardiothoracic and Vascular Anesthesia*, 11(5), pp.629-40.
- (2017). [online] Available at: <http://www.england.nhs.uk/wp-content/uploads/2014/02/rm-fs-6.pdf> [Accessed 19 Sep. 2017].
- (2017). [ebook] Available at: <http://annals.org/aim/article/2599869/nicotine-carcinogen-toxin-exposure-long-term-e-cigarette-nicotine-replacement> [Accessed 19 Sep. 2017].
- HQIP (2017). *National COPD Audit Programme*. [online] Available at: <http://www.hqip.org.uk/public/cms/253/625/24/77/COPD%20National%20audit%20report%20-%20exacerbations%20-%202015.PDF?realName=zTtPO9.pdf> [Accessed 19 Sep. 2017].
- Ash.org.uk. (2017). *Action on Smoking and Health*. [online] Available at: <http://ash.org.uk> [Accessed 19 Sep. 2017].
- <http://ash.org.uk/localtoolkit/cost-of-social-care/>
- Baumeister, S. (2007). Effects of smoking cessation on health care use: is elevated risk of hospitalisation among former smokers attributable to smoking-related morbidity?. *Drug Alcohol Depend*, 88(2-3), pp.197-203.
- British Thoracic Society (2017). [ebook] British Thoracic Society: The Case for Change. Available at: <https://www.brit-thoracic.org.uk/.../bts-case-for-change> · [Accessed 19 Sep. 2017].
- Dietz PM et al. [Infant morbidity and mortality attributable to prenatal smoking in the U.S.](#) *Am J Prev Med*.2010 Jul;39(1):45-52. doi: 10.1016/j.amepre.2010.03.009.
- E-Cigarettes: An evidence update. (2017). [ebook] Public Health England. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/457102/Ecigarettes_an_evidence_update_A_report_commissioned_by_Public_Health_England_FINAL.pdf [Accessed 19 Aug. 2017].
- Gov.uk. (2017). *Statistics on NHS Stop Smoking Services in England - Apr 2016 to Mar 2017 - GOV.UK*. [online] Available at: <https://www.gov.uk/government/statistics/statistics-on-nhs-stop-smoking-services-in-england-apr-2016-to-mar-2017> [Accessed 19 Sep. 2017].
- Hajek, P., Przulj, D., Phillips, A. et al. *Psychopharmacology* (2017) 234: 773. <https://doi.org/10.1007/s00213-016-4512-6>
- Hartmann-Boyce, J. (2016). Electronic cigarettes for smoking cessation. *Cochrane database of systematic reviews*, 9.
- Moller, A. and al, e. (2002). Effect of preoperative smoking intervention on postoperative complications: a randomised clinical trial. *The Lancet*, 359(9301), pp.114-117.
- <https://www.nice.org.uk/guidance/PH48>
- Policyexchange.org.uk. (2017). *Cough Up: Balancing tobacco income and costs in society | Policy Exchange*. [online] Available at: <http://policyexchange.org.uk/publication/cough-up-balancing-tobacco-income-and-costs-in-society> [Accessed 18 Jul. 2017].

Royal College of Physicians, Tobacco Advisory Group. Ch 3. [Effects of smoking on fetal and reproductive health](#). In: Passive smoking and children: A report by the Tobacco Advisory Group of the Royal College of Physicians. 2010 Mar.

Schwilk, B. (1997). Perioperative respiratory events in smokers and non-smokers undergoing general anesthesia. *Acta Anaesthesiologica Scandinavica*, 41, pp.348-5.

<http://smokefreeaction.org.uk/smokefree-nhs/smoking-in-pregnancy-challenge-group/>

Thomsen, T. (2014). Interventions for preoperative smoking cessation. *Cochrane Database of Systematic Reviews*.

Towards a Smokefree Generation: Tobacco Control for England. (2017). Department of Health.

Warner, D. (2006). Perioperative Abstinence from Cigarettes. *Anesthesiology*, 104(2), pp.356-367.