

evaluations of such methods of smoking cessation have been conducted. This study aimed to establish how successful the service is 5–10 years following counselling.

Method Patients were interviewed by means of a telephone questionnaire. Their current smoking status was assessed and baseline data including previous smoking habits was recorded. The intervention group were patients who completed the programme and deemed non-smokers after 1 year. The control group were patients who were referred but failed to attend. Both groups were referred to the service between 2001 and 2005. Seventy-nine out of 202 patients were interviewed from the intervention group and 121 out of 752 patients from the control group were interviewed.

Results Of those previously attending the programme, 30.4% had relapsed. Of the 69.6% of participants remaining non-smokers, 85.5% had remained non-smokers throughout this follow-up period. Participants who did not attend were more likely to remain smokers (63.3%, $p < 0.001$, $RR = 2.08$). Of those attending the programme, 70% reported using additional methods (eg, nicotine replacement therapy) to aid cessation. However, these individuals had a higher rate of relapse (36% vs 20%, $p = 0.080$). Lower socio-economic status may also be linked to a higher relapse rate ($p = 0.075$). Baseline statistics comparing the two cohorts revealed that patients from a lower socio-economic background were less likely to have successfully attended the programme ($p < 0.001$). Gender or number of pack years accumulated at the time of invitation were not significantly different between cohorts and patient age was similar (control=59 years, intervention=62 years). Median follow-up for both cohorts was 8 years.

Conclusions This unique 5–10 year follow-up indicates that smoking cessation counselling is achieving its aim of assisting the long-term cessation of patients attending the programme. However, patients requiring further interventions such as nicotine replacement therapy and those from lower socio-economic groups have been identified as requiring additional encouragement. This may indicate areas for improvement that smoking cessation programmes should consider.

P124 CHILDREN UNITE TO STOP SMOKING IN CARS

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It is well-established that second-hand cigarette smoke affects the health of everyone who is exposed to it. However, second-hand

smoke is particularly dangerous for children, increasing their risk of developing asthma, chest infections and triggering asthma attacks. In addition, previous research shows that smoking just one cigarette in a car, even with the window open, creates a greater concentration of second-hand smoke than a whole evening's smoking in a pub. Hence, exposing children to second-hand smoke in a car is exceptionally hazardous. This study sought information regarding children's experiences of, and attitudes towards, being exposed to second-hand cigarette smoke, including exposure in cars. 1001 children aged 8–15 (51% male, 49% female) were surveyed online via a self-completion questionnaire between 20 and 27 January 2011. 51% of respondents had been in a car when someone has been smoking at some time. Of the 512 respondents who had been in a car while someone was smoking, 31% said they would ask them to stop, 24% said they were too embarrassed to ask them to stop, 9% said they were too scared to say anything and 21% said they didn't mind. All respondents were asked how they felt when an adult smokes near them. 58% said it made them smell of smoke, 49% said it made them feel sick, 44% said it made them cough and only 7% said it didn't bother them. 86% of all respondents said they would like the Government to stop people from smoking when children are in the car, with only 4% saying they would not and 10% saying they did not know. This survey shows that an overwhelming majority of children would support legislation to protect children from passive smoke in the car. This work also suggests that when exposed to second-hand smoke while travelling in a car, many children do not feel able to ask the smoker to stop. More work is needed to empower children and give them a voice to help change legislation around smoking in private cars and to increase awareness of the dangers of second-hand smoke.

P125 STOP SMOKING AS TREATMENT FOR COPD: QUIT-INTERVENTIONS OF HIGHER INTENSITY AND DURATION ARE REQUIRED

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Introduction and Objectives Smoking cessation is one of the most cost-effective interventions for COPD (£2092/QALY; Hoogendoorn *et al* 2010). Smokers with COPD should therefore be offered

Abstract P124 Table 1

Children unite to stop smoking in cars						
Children and exposure to smoke in cars - all respondents (1001)						
	Yes	No	I don't know	—	—	—
Ever been in a car when someone has been smoking	512 (51%)	473 (47%)	16 (2%)	—	—	—
Would you like the government to stop people smoking when children are in the car?	858 (86%)	44 (4%)	99 (10%)	—	—	—
Children who have been exposed to second-hand smoke in cars—(512)						
Ask them to stop		Nothing, too embarrassed to ask them to stop	Nothing, I don't mind it	Nothing, I'm too scared to say anything	Other	Don't know
What do you do when someone is smoking in the car?	158 (31%)	122 (24%)	105 (21%)	46 (9%)	59 (12%)	22 (4%)
Children and exposure to second-hand smoke—all respondents (1001)						
How does it make you feel when an adult smokes around you?	585 (58%)	486 (49%)	442 (44%)	72 (7%)	72 (7%)	31 (3%)

intensive quit-smoking support as treatment for their disease. The aim of this study was to assess the efficacy of standard quit-smoking interventions (NICE, 2008) for COPD-smokers, to determine levels of support required to improve quit rates.

Methods Current smokers with confirmed COPD were referred from within an inner-city general hospital (inpatients/outpatients) to a dedicated quit-smoking specialist (QSS) or from the community COPD-multidisciplinary team to an integrated QSS, who undertook domiciliary visits for household smokers. Both QSS had additional counselling skills. Demographics, disease severity (FEV₁), smoking history, duration of quit-smoking treatment, pharmacotherapy and quits (4 week) were prospectively recorded over 11 months (September 2010–July 2011).

Results 106 patients with moderate COPD M:F 39:67, mean±SD age 66.4±10.4 y range 49–85; FEV₁ 1.2±0.6l, n=76) were referred: 63 (69%) hospital patients (HP), 43 (41%) from the community (CP). Compared to the HP who had mean±SD FEV₁ 1.4±0.5 l, and smoked 23.5±11.4 cigarettes/day on referral, CP had significantly (p=0.03) worse lung function (FEV₁ 1.2±0.5 l) but smoked fewer (p=0.002) cigarettes/day (9.8±8/day). 25/106 (24%) patients quit, but quits were significantly lower (p<0.05) in the CP (20%) compared to the HP (30%). 45/106 (42%) were not able to set a quit-date, 5/106 (5%) set multiple quit-dates. 56/106 (53%) used nicotine replacement therapy (NRT), >2 products in 48/56. 18/106 (17%) used varenicline, seven sequentially following NRT. Duration of pharmacotherapy for quitters was 6.1±4.5 months (mean±SD, range 1–16). 38/106 (36%) were discharged after lost to follow-up.

Conclusions These data demonstrate that 1-in-4 smokers with COPD are able to quit using evidence based tobacco addiction treatment. However, quit rates for these smokers are much lower than the Department of Health (DH) expectation of >35%, despite intensive interventions by skilled QSS, domiciliary visits to household patients, and pharmacotherapy extended beyond the standard 8–12 weeks. Novel approaches, including addressing psychosocial issues, motivational quit-date setting, review of the DH 4-week quit-target and sufficient funding for extended NRT/Varenicline prescribing, may be required to achieve effective smoking cessation in this patient group.

P126 DOES A PERSONALISED AND NON-CLINICAL EXPLANATION OF LUNG HEALTH TRIGGER THE IMPULSE IN SMOKERS TO MAKE A QUIT ATTEMPT?

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Introduction and Aim A Cochrane review concluded that there is a lack of evidence to support lung function and lung age measures as a method for increasing smoking cessation quit rates. This study aims to assess whether providing lung health checks in workplaces and community settings, combined with immediate access to high quality smoking cessation advice, will promote behaviour change in smokers.

Method The intervention consisted of spirometry followed by a detailed and personalised explanation of the findings. The results were delivered in plain non-clinical language, using lung age, visual tools and local analogies. The results were augmented by a written report and advice with regard to any action indicated. To capitalise on the tension created by the intervention, current smokers were strongly encouraged to seize the moment and have an immediate discussion with a stop smoking adviser who was positioned within easy reach. The smoking status of every individual tested was recorded, along with their age, gender, test results and action advised.

Results 1054 smokers have undertaken the lung health check. 953 were given brief advice to stop smoking. 467 (49%) subsequently registered with the stop smoking service.

Conclusions Regardless of the spirometry result, whether normal or abnormal, a clear understanding of your lung health appeared to be a powerful motivational trigger and teachable moment for behaviour change. This innovative model potentially provides all the ingredients in one location for promoting smoking cessation as described by Robert West in the 3 Ts strategy: Tension, Trigger, Treatment.¹ The offer of a lung health check was exceptionally popular in all settings, even among traditionally hard-to-reach groups, and could be targeted according to local need. Joint working with the smoking cessation service improved the outcome for smokers as it took advantage of the immediate situation, triggering the impulse to make a quit attempt. These results justify further work collecting follow-up data to establish whether the trigger of a lung health check converts to a successful long-term quit.

REFERENCE

1. West R. "Catastrophic" pathways to smoking cessation: findings from national survey. *BMJ*. 2006; **332**:458–60.

P127 IMPROVING SMOKING CESSATION ADVICE THROUGH THE IMPLEMENTATION OF A QUALITY IMPROVEMENT INTERVENTION

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Background Smoking remains the main cause of preventable morbidity and premature death in England (DH data) and is estimated to cost the NHS £1.5 billion a year. Smoking counselling beginning during hospitalisation and including support after discharge increases smoking cessation rates (Rigotti *et al* 2008).¹ Health professionals in the hospital are expected to offer cessation advice. An audit was carried out in the acute medical unit of 118 consecutive medical patients which demonstrated that only 1/25 current smokers received any cessation advice. In July 2010, driven by a quality improvement project carried out locally in patients admitted with community-acquired pneumonia, key indicators of high quality care were established, one of which was to clearly document and offer smoking cessation advice to current or recently-quit smokers. Despite being a requirement, documentation regarding smoking cessation advice was poor. In the respiratory wards, only seven patients were referred to existing smoking cessation services over 6 months. Several interventions were planned to increase awareness. No additional resource was required and members of the multidisciplinary team were employed in a variety of roles. An educational programme was established, including presentations to key specialities (acute and respiratory medicine) and key ward nursing staff. An in-reach programme was developed by the smoking cessation lead nurse, targeting wards where high rates of smoking were identified. Several foundation trainees were employed as "smoking champions," raising awareness among their peers.

Results Since initiation of the interventions, documented cessation advice has steadily risen from 0% to 68% of patients with a smoking history (see Abstract P127 figure 1). On the respiratory wards, 77 patients over 6 months (cf seven prior to intervention) were referred to the service. Four-week cessation rates in the patients referred to the cessation service was 82% and of these patients 70% had still ceased to smoke at 6 months.