

Cessation of Smoking Trial in the Emergency Department



THE COSTED TRIAL
SWITCHING AWAY FROM SMOKING



Dr Ian Pope
On behalf of the COSTED team

Background



- 24 million ED attendances/yr in England¹
- ED attendees more likely to smoke²
- Teachable moment³



1. Hospital Accident & Emergency Activity 2021-22. NHS Digital. <https://digital.nhs.uk/data-and-information/publications/statistical/hospital-accident--emergency-activity/2021-22> (accessed Sept 26, 2022).
2. Lowenstein SR, Tomlinson D, Koziol-McLain J, Prochazka A. Smoking Habits of Emergency Department Patients: An Opportunity for Disease Prevention. *Academic Emergency Medicine* 1995; **2**: 165–71.
3. Lemhoefer C. Emergency Department–Initiated Tobacco Control: Update of a Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Prev Chronic Dis* 2017; **14**. DOI:10.5888/pcd14.160434.

Background

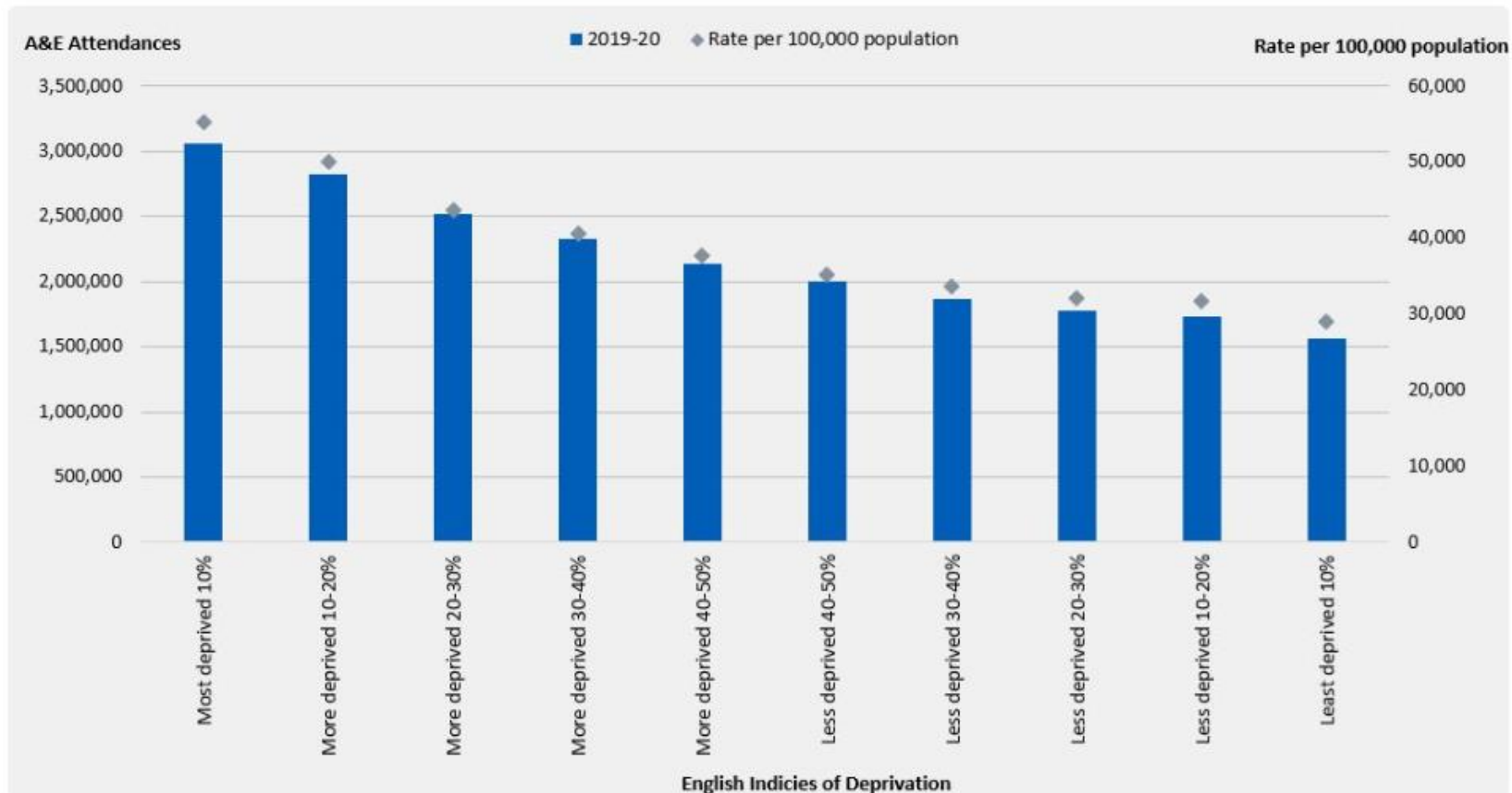


Table 19: A&E attendances by Index of Multiple Deprivation and rate per 100,000 population (Source: HES and ONS)

Background



What people think
happens in ED

Vs.

Reality



What was COSTED?



- Two-group RCT
- 6 EDs across the UK



Who did we recruit?



- Inclusion
 - Adults smoking at least 1 cigarette per day attending ED
- Exclusion
 - CO <8ppm
 - dual users
 - lacking capacity



What was the intervention?



- Brief advice (15 mins)
- E-cigarette, 11 pods and advice on how to use it (15 mins)
- Referral to stop smoking services



What was the control?



Written material about local stop-smoking services



What did we do?



People in the ED screened for smoking status



Consented and randomised



Intervention delivered whilst they waited



1, 3 and 6 month follow-up

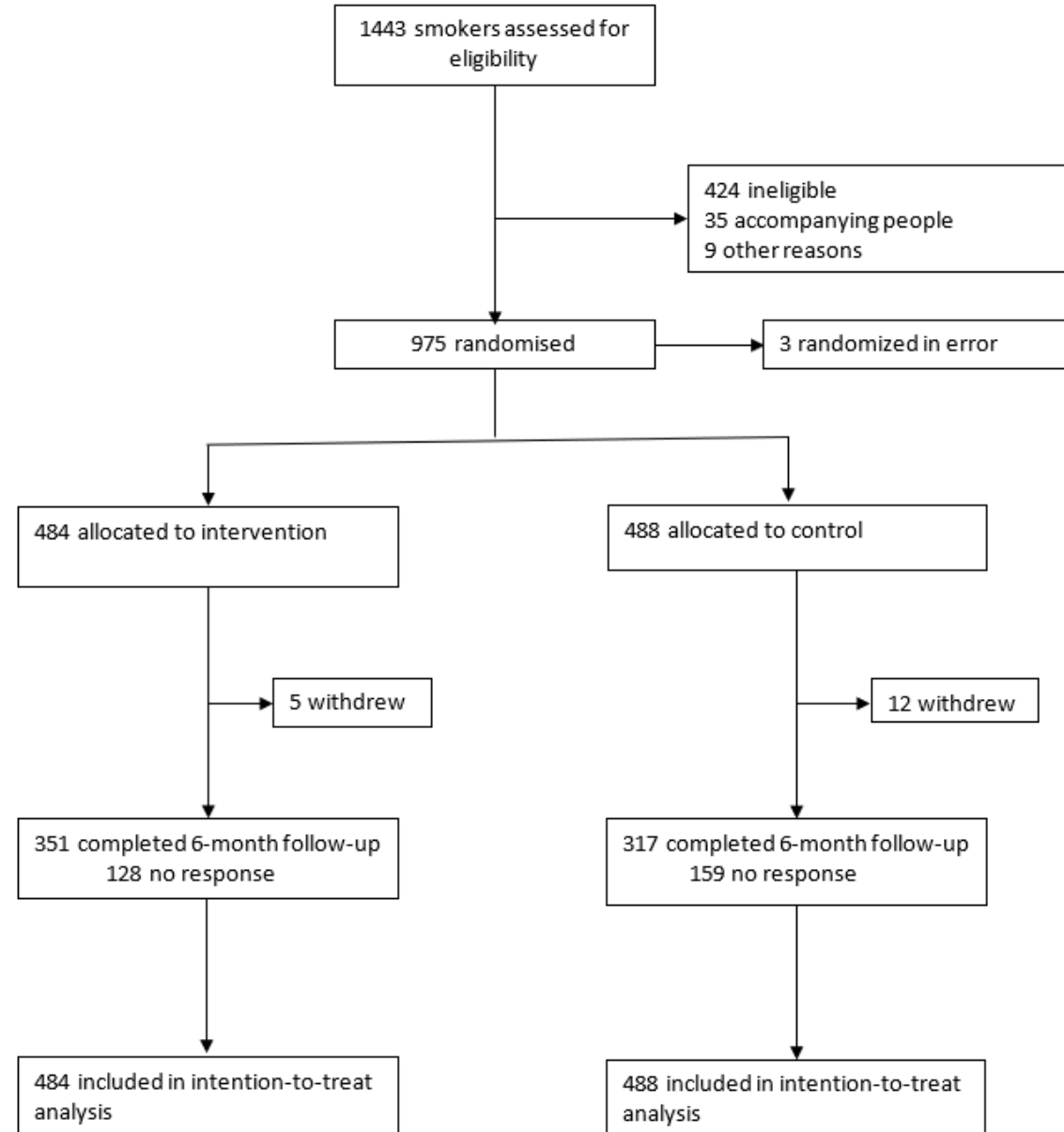


If report abstinence at 6 months invited to undergo CO testing



Primary outcome





Baseline characteristics



- Male= 60%
- Mean age= 41
- White British= 73%
- Unemployed or unable to work due to ill health= 28%



Baseline characteristics



IMD decile	Percentage of participants
1 (most deprived)	11.2%
2	17.2%
3	16.3%
4	13.2%
5	8.3%
6	10.2%
7	6.3%
8	6.5%
9	6.0%
10 (least deprived)	3.8%
missing	1.1%

28% in CORE20

66% in IMD 1-5

Primary outcome



	Intervention	Control	Absolute difference (95% CI)	p-value	Relative Risk (95% CI)	p-value
Biochemically validated self-reported continuous smoking abstinence at 6 months	35/484 (7.2%)	20/488 (4.1%)	3.1% (0.2-6.0)	0.035	1.76 (1.03-3.01)	0.038

6 month self reported abstinence



	Intervention	Control	Absolute difference (95% CI)	p-value	Relative Risk (95% CI)	p-value
Self-reported point prevalence abstinence at 6 months	113 (23.4%)	63 (12.9%)	10.6 (5.86-15.41)	<0.001	1.80 (1.36,2.38)	<0.001

Implementation model- impact in Norfolk



285,715 ED attendances per year



20,345 people who smoke



1,636 quits per year



Implementation model- cost



- 2x whole time band 4 members of staff in each ED
 - £217,002 in total
- 6,426 e-cigarette starter kit + leaflets per year
 - Cost covered by Swap to Stop
- Cost per quit= £133



Key messages



- It is possible to opportunistically reach large numbers of people who smoke in the ED
- Can reach a population who would not otherwise engage
- The COSTED intervention works to help smokers to quit
- Potential setting for *Swap to Stop*