



Research Article

Cost-effectiveness of e-cigarettes for smoking cessation at homeless support centres: SCeTCH cRCT

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Plain language summary

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This Stop Smoking Trial for people experiencing homelessness randomised 32 homeless support centres, with 475 participants to either e-cigarettes group ($n = 239$) or usual care group ($n = 236$).

People in the e-cigarette group received an e-cigarette starter pack, 4 weeks' supply of e-liquid, and a fact sheet. People in the usual care group received very brief advice, a leaflet adapted from 'National Health Services choices', and were signposted to the local Stop Smoking Service. Both were delivered by centre staff. We estimated the costs of e-cigarette package at £92 per participant and the costs of usual care at £50 per participant.

When the costs of other Stop Smoking Services and aids and the use of healthcare services over 24 weeks were added, the total costs per participant were higher in the e-cigarette group compared with usual care (£3859 vs. £2716). We also measured quality-adjusted life-years. One year in perfect health equals 1 quality-adjusted life-year, and it becomes zero at death. Perfect health over 24 weeks equals nearly 0.5 quality-adjusted life-year. Quality-adjusted life-years were low in both groups, and the e-cigarette group had only marginally higher quality-adjusted life-years per participant than the usual care group (0.303 vs. 0.295). Calculated by dividing the additional costs of e-cigarette group by the additional quality-adjusted life-years, the e-cigarette group, in comparison to the usual care group, cost £181,000 extra per participant to gain one extra quality-adjusted life-year. Compared against the United Kingdom standard highest acceptable rates (£20,000–30,000 per quality-adjusted life-year gained), the probability of e-cigarette being cost-effective was very low. Considering the impact across a person's lifetime, including future treatments for smoking-related diseases, the e-cigarette intervention cost £38,360 more per person than the usual care to gain an additional quality-adjusted life-year. The probability of e-cigarette being cost-effective in this case was a bit higher (between 47.6% and 49.6%). The analyses conclude that e-cigarette intervention is unlikely to be cost-effective, compared to usual care, in the current trial setting and population.