# The effects of offering a disposable EC versus NRT on smoking cessation outcomes: a retrospective community pharmacy study

#### Soar K<sup>1</sup>, Doshi J<sup>2</sup>, Cameron J<sup>3</sup>

## **Background**

Smoking prevalence has steadily declined in the UK over recent decades<sup>1</sup>. However, there still remains 5.9 million smokers. Given smoking is still the leading cause of preventable illness and death, reducing smoking uptake and in particular increasing smoking cessation rates remain urgent priority. In order to reach the UK Governments target of Smokefree by 2030, the UK needs to reduce smoking by two thirds within the next 10 years. These targets can only be achieved by motivating smokers to make a quit attempt using the most effective quitting aids and maximising the proportion of successful quits per quit attempt.

E-cigarettes (EC) are now a viable method for supporting a quit attempt, with increasing evidence demonstrating their efficacy for smoking cessation relative to NRT and behavioural support/no treatment<sup>2</sup>. EC are also the most popular quitting aid in the UK<sup>1</sup>. However, at the time, only 11% of Local Authority funded Stop Smoking Services (SSS) in England offered an EC<sup>3</sup>. As such, their effectiveness within a community pharmacy stop smoking service (SSS) has received limited attention.

### **Aims & Objectives**

PharmaStrat (a SSS) has developed a protocol based on an e-cigarette friendly approach recommended by Public Health England (PHE)<sup>4</sup>. The aim was to evaluate the effectiveness of offering a disposable EC with and/or without nicotine replacement therapy (NRT) compared to NRT alone, on both 4- and 12-week quit rates in adult smokers.

### Method

- Non-randomised between subjects retrospective design
- Secondary routine data collected via the SSS
- Smokers 18+ willing to quit
- Offered choice of:







**Objective:** To assess self report smoking cessation rates at both 4- and 12-weeks, in those using an EC over a 12-week program, compared to NRT alone.

**Outcome**: Quit rate (self report) at 4 and 12 weeks

• EC only or EC + NRT (EC condition)



• NRT alone (NRT condition)



• 2 weeks supply of 16 hr Patches (10, 15 or 25mg), 24 hr Patches (7, 14 or 21 mg) Gum (2 or 4 mg) mouth arrow (1 mg (or real) inholeter

14 or 21mg), Gum (2 or 4mg), mouth spray (1mg/spray), inhalator

(15mg), nasal spray (10ml), microtabs (2mg) or Lozenges (2 or 4mg)

All offered 12-week standard smoking cessation support inc. behavioural support.

#### Results





No significant differences between conditions at either follow up period

#### Conclusions

Overall, four-week quit rates were in line with the UK national average (59%)<sup>5.</sup> Quit rates were comparable across conditions at both time

- points.
- Cessation rates are higher than seen in previous community pharmacy studies using NRT at similar time points<sup>6 & 7</sup>.
- EC was no more effective than NRT, however this could be due to the weekly nicotine content in the EC condition not being comparable to other forms of NRT or even continued smoking (see Soar, 2021 for further details)<sup>8.</sup>
- Offering a disposable EC within a community pharmacy setting attracted a large number of smokers willing to engage in a quit attempt and given the choice the majority of these smokers chose to use an EC. Therefore, the use of an offer of an EC as part of SSS provides encouraging support for the role in community pharmacies delivering SSS going forward.

**Disclosures:** <sup>1</sup>K Soar was a paid consultant on this research project. <sup>2</sup>J Doshi have no potential COI to declare. <sup>3</sup>J Cameron operates the stop smoking clinic and has also provided healthcare consulting for UK pharmacies and advice regarding medical license application to Evapo and Thornton and Ross.

#### References

- 1. Smoking Toolkit (2022) <u>https://smokinginengland.info/graphs/top-line-findings</u> Accessed on 07 October 2022.
- 2. Hartman-Boyce J, McRobbie H, Lindon N, et al. (2021) Electronic cigarettes for smoking cessation. Cochrane Database of Systematic Reviews 2021, Issue 4. Art. No:CD010216.
- 3. ASH (2012). Many ways forward: Stop smoking services and tobacco control work in English local authorities. <u>https://ash.org.uk/information-and-resources/reports-submissions/reports/many-ways-forward/</u> Accessed on 05 October 2021.
- 4. Cox S, Dawkins L, Doshi J, Cameron J (2019) Effects of e-cigarettes versus nicotine replacement therapy on short-term smoking abstinence when delivered at a community pharmacy. Addictive Behaviors Reports, 10, 100202. <a href="https://doi.org/10.1016/j.abrep.2019.100202">https://doi.org/10.1016/j.abrep.2019.100202</a>.
- 5. NHS Digital, Statistics on Smoking: England 2020. 2020: https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-smoking/statistics-on-smoking-england-2020. Accessed 30 May 2021.
- 6. Sinclair HK, Bond CM, Stead LF (2004). Community pharmacy personnel interventions for smoking cessation. Cochrane Database of Systematic Reviews. 1L CD0033698. DOI: <a href="https://doi.org/10.1002/14651858.CD003698.pub2">https://doi.org/10.1002/14651858.CD003698.pub2</a>
- 7. Bauld L, Boyd KA, Briggs AH, et al (2010) One-year outcomes and a cost effectiveness analysis for smokers accessing group-based and pharmacy-led cessation services. Nicotine & Tobacco Research, 13(2):135-145
- 8. Soar K (2021) A retrospective community clinical study to evaluate smoking cessation outcomes by offering smokers a disposable e-cigarette alongside one NRT presentation through a community pharmacy stop smoking service. <a href="http://dx.doi.org/10.13140/RG.2.2.13721.13927">http://dx.doi.org/10.13140/RG.2.2.13721.13927</a>

Entre for Addictive Behaviours Research