

Year-long follow-up shows e-cigs users quit cigs more, but also relapse more and start smoking

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Kelly Young-Wolff and colleagues' new paper, "[Documentation of e-cigarette use and associations with smoking from 2012 to 2015 in an integrated healthcare delivery system](#)" provides further insight into the dynamic relationship between e-cigarette and cigarette use. They collected information on e-cigarette and cigarette use for 7926 people aged 12 and older enrolled in the Kaiser Permanente HMO in Northern California in 2014 and compared that behavior to what products they were using a year later. They found three distinct linked behaviors:

- Cigarette smokers who used e-cigarettes at baseline were less likely to be smoking cigarettes a year later, i.e., e-cigarettes were helping people quit cigarettes

BUT

- Former smokers (i.e., people who had quit smoking cigarettes before the baseline measurement) who used e-cigarettes at baseline were more likely to have relapsed to cigarettes a year later than former smokers who did not use e-cigarettes, i.e., e-cigarettes were promoting relapse to cigarette smoking among former smokers
- Never smokers who used e-cigarettes at baseline were more likely to be smoking cigarettes a year later, i.e., e-cigarettes were a gateway to cigarette smoking

The overall effect of e-cigarettes in the patients that Young-Wolff et al studied seems to be that e-cigarettes are associated with *more* smoking; they report more people who used e-cigarettes smoking at followup than not.

This is not the first data showing that e-cigarettes could be helping with short-term cessation but also promoting relapse. My [secondary analysis](#) of Shu-Hong Zhu and colleagues' cross-sectional study of e-cigarettes and smoking cessation showed.

Here is the abstract:

It is unclear whether use of electronic nicotine delivery systems (ENDS) precedes cigarette smoking initiation, relapse, and/or quitting. Healthcare systems with electronic health records (EHRs) provide unique data to examine ENDS use and changes in smoking. We examined the incidence of ENDS use (2012-2015) based on clinician documentation and tested whether EHR documented ENDS use is associated with twelve-month changes in patient smoking status using a matched retrospective cohort design. The sample was Kaiser Permanente Northern California (KPNC) patients aged ≥ 12 with documented ENDS use ($N = 7926$); 57% were current smokers, 35% former smokers, and 8% never-smokers. ENDS documentation incidence peaked in 2014 for current and former smokers and in 2015 for never-smokers. We matched patients with documented ENDS use to KPNC patients without documented ENDS use ($N = 7926$) on age, sex, race/ethnicity, and smoking status. Documented ENDS use predicted the likelihood of smoking in the following year. Among current smokers, ENDS use was associated with greater odds of quitting smoking (OR = 1.17, 95%CI = 1.05-1.31). Among former smokers, ENDS use was associated with greater odds of smoking relapse (OR = 1.53, 95%CI = 1.22-1.92). Among never-smokers, ENDS use was associated with greater odds of initiating smoking (OR = 7.41, 95%CI = 3.14-17.5). The overall number of current smokers at 12 months was slightly higher among patients with ($N = 3931$) versus without ($N = 3850$) documented ENDS use. Results support both potential harm reduction of ENDS use (quitting combustibles among current smokers) and potential for harm (relapse to combustibles among former smokers, initiation for never-smokers).

The full reference is: Kelly Young-Wolff et al. Documentation of e-cigarette use and associations with smoking from 2012 to 2015 in an integrated healthcare delivery system. *Prev Med.* 2018 Jan 19. pii: S0091-7435(18)30013-6. doi: 10.1016/j.ypmed.2018.01.012. [Epub ahead of print] It is available [here](#).

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