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Response to Brailon: No, not the exception

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We thank Dr. Braillon for his comments [1]. However, Dr. Braillon seems to have missed the point of our analysis by arguing that the recent declines in smoking in England are merely due to cigarette-oriented policies. Our analysis explicitly takes into account the role of cigarette-oriented control policies [2]. We first validated the model over a pre-vaping period, 2000-2012, a particularly active period for tobacco control policies. The model showed similar reductions in prevalence across age groups and sex as found in surveys. In estimating the implicit impact of e-cigarettes, we specifically net out the impact of new and previously implemented cigarette-oriented policies over the post-vaping period, 2012-2019. Thereby, we explicitly control for the impact of cigarette-oriented policies. We also note that the impact of cigarette-oriented policies may have been greater than we estimated in the post-vaping period, precisely because of the impact of e-cigarettes. E-cigarettes are commonly found to be a substitute for cigarettes [3-6], and thus may have increased the impact of cigarette-oriented policies by providing smokers an alternative.

Besides the evidence presented in our paper, Dr. Braillon ignores other studies using different methods that have found beneficial effects of e-cigarettes in England [7-12]. In addition, Levy et al. [13] conducted a similar analysis for the US and found slightly smaller e-cigarette impacts, but with the effects more concentrated on young adult smoking. Those findings are consistent with the unusually large recent reductions in US smoking at younger ages [14, 15].

Dr. Braillon also compares our results for England to his perception of trends in France. Although it was unclear to us the source of his data, he argues that smoking prevalence in France has plateaued. In fact, recent data indicates that, although remaining at about 30% from 2000 to 2016, smoking prevalence in France fell by 6 percentage points to 24% by 2019 as e-cigarettes became more widely used [16]. Much larger reductions were observed at young ages [16], the most likely users of e-cigarettes. Nevertheless, we agree with the need to consider the contribution of vaping to smoking rates in different countries. The array of nicotine products has changed dramatically in the last 10 years. It is important to compare trends in smoking to vaping rates in different countries [17] to gain a better understanding of their interrelationship and the impact of policies towards those products. Indeed, one of the more interesting comparisons is that, while England [2] and the US [13] has seen the rate of decline in smoking prevalence increase since e-cigarette use has become more widespread, Australia, a country which has had some of the strongest cigarette-oriented policies but very restrictive policies toward e-cigarettes, has seen a levelling off of smoking prevalence [18].

While our paper and other recent studies point towards beneficial effects of e-cigarettes, it will be important to continually monitor the relationship between cigarette and e-cigarette use. As we continue to examine the data, most important is need for rigorous analysis and the need to keep an open mind [19].

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