

## DOES USING ELECTRONIC CIGARETTES AFFECT ASHLINE CLIENTS' ABILITY TO QUIT SMOKING?

Electronic cigarettes (e-cigs) are handheld battery operated devices designed to vaporize a liquid that may or may not contain flavoring or nicotine. In a national study, 30% of e-cig users believed that e-cigs can help them cut-down or quit cigarettes.<sup>1</sup> For smoking cessation service providers, this raises the question of how e-cigs may affect users' ability to quit tobacco. In a prior data brief, we explored differences between ASHLine clients who reported using e-cigs when they joined our program and those who did not.<sup>2</sup> We found that ASHLine e-cig users were more likely to experience factors that reduce the likelihood of staying quit, such as a mental health condition, respiratory disease, or higher nicotine dependence than non-e-cig users. In this brief, we examined the relationship between e-cig use and quit rates while controlling for these differences.

Before controlling for any group differences, we found that clients who use e-cigs are less likely than non-e-cig users to be quit at 7-month follow-up—28% of clients who used an e-cig were quit compared to 39% of clients who did not. The lower quit rate among ASHLine e-cig users is consistent with other studies conducted in a quitline setting.<sup>2</sup> Given the above noted differences between e-cig users and non-users, however, we were interested in identifying whether the lower rates might be explained by other factors and not by e-cig use per se.

To do this, we conducted a matched-pair analysis. Matching allowed us to compare “apples to apples” e-cig users and non-e-cig-users along similar risk factors and demographic characteristics. We matched 125 ASHLine clients who, upon enrollment, reported using e-cigs (and tobacco) with 125 clients who were exclusive tobacco users (no e-cigs used). Clients were matched based on similarity in age, level of nicotine dependence, and mental health status. After matching, we found that quit rates for those who used and did not use e-cigs were comparable—35% of both groups were quit at follow-up.

### CONCLUSION

We found no evidence that ASHLine e-cig users have a lower likelihood of quitting than clients who do not use e-cigs. Although fewer e-cig users report being quit at follow-up, this difference seems to result from other factors (mental health, nicotine dependence) that are more prevalent among ASHLine e-cig users, factors that contribute independently to poorer smoking outcomes. Limitations in our data prevent us determining length of the clients' e-cig use or type of e-cig product used. Future studies examining the role of e-cigs on quitting may benefit from considering these factors along with individual-level variables that play a role in smoking behavior change.

### REFERENCES

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