

# **A machine learning approach to identify product characteristics that contribute to increased risk of frequent vaping and vulnerable youth populations**

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# Implications for FDA's tobacco regulatory authorities

- Nicotine use / dependence as the primary predictor of becoming frequent vapers in 6 months
  - Scoring  $\geq 1$  on the Hooked on Vaping Checklist predicts a higher risk
- Vulnerable youth subpopulations
  - Younger students with high levels of perceived discrimination and/or belong to certain racial/ethnic minority groups
- Potentials of using machine learning to predict vaping behaviour progression in youth