

Transitions in cigarette and ENDS use in the PATH Study: a multistate transition model analysis of adults in 2021–2022 compared to previous years

TCORS Center for the Assessment of Tobacco Regulations [CAStoR]

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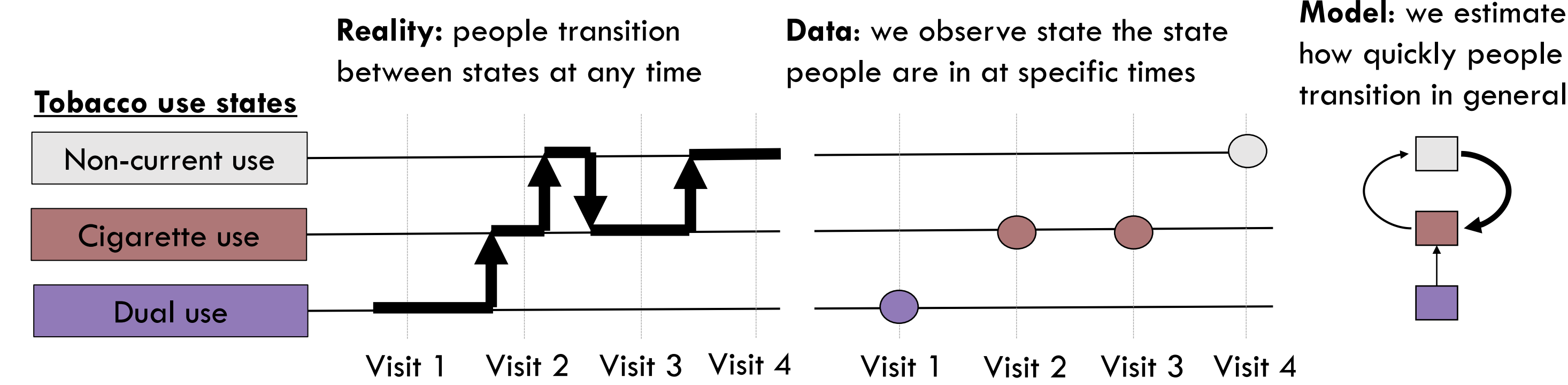
Introduction

- The Electronic Nicotine Delivery System (ENDS) marketplace has changed substantially over the past decade.
- Regulations, such as Tobacco 21 and ENDS flavor restrictions have been enacted
- Major public health events, including the lung injury outbreak and COVID, may have affected tobacco and nicotine product use
- It is important to continue to observe how transition patterns are changing over time.

Methods

Multistate Markov Transition Model Framework

Markov transition models are continuous time stochastic processes models.



Data

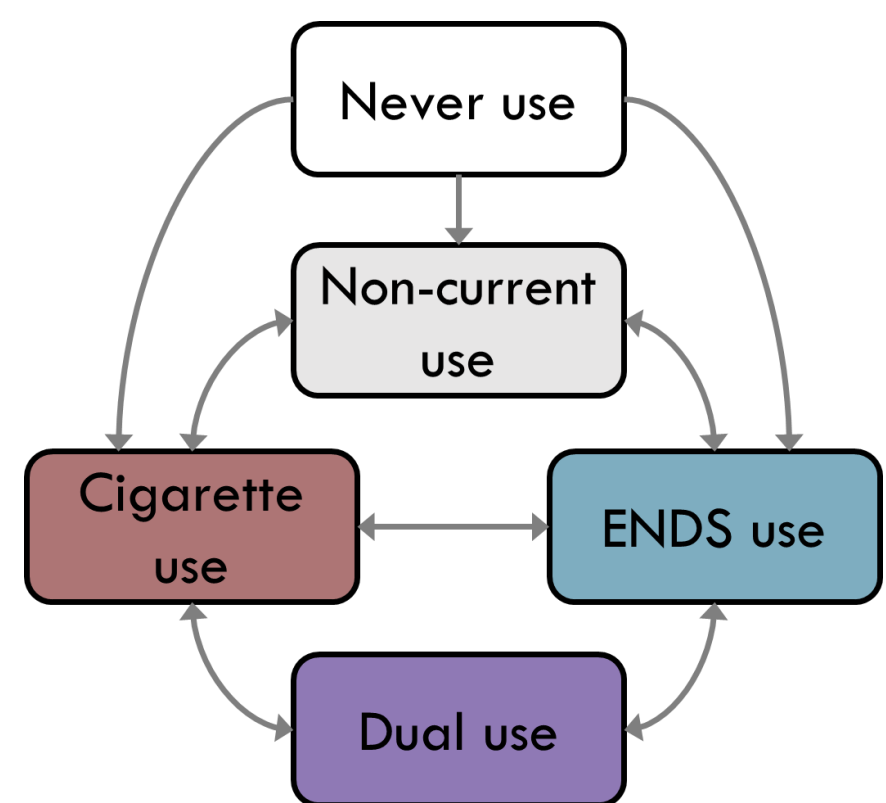
PATH Study

- Nationally representative longitudinal study of tobacco use 2013–2022
 - 2015-17 (Waves 2-4): 24,242 adults
 - 2017-19 (Waves 4-5): 28,061 adults
 - 2019-21 (Waves 5-6): 24,584 adults
 - 2021-22 (Waves 6-7): 23,803 adults

State definitions and transitions

Tobacco use states were defined from:

- Established use criteria for cigarettes (100+ cigarettes in lifetimes) and ENDS (ever fairly regularly used) and
- Current past-30-day use of cigarettes and ENDS



Key findings

- ENDS initiation continues to grow while cigarette initiation decreases.
- ENDS initiation from never use and current cigarette use is driven by young adults.
- The fraction of adults transitioning from dual to cigarette-only use has stayed relatively constant over the past few years, while the fraction transitioning to ENDS-only use has steadily increased.
- Older adults are less likely to use dual use as a path to cigarette cessation.

Take-away: Younger adults are increasingly transitioning from cigarette to dual to ENDS use. More attention is needed to help older adults quit cigarettes.

Results

