

# Call of Abstracts - "International conference on the E-Cigarette: patterns of use and health impacts"



## Call of abstracts

"International conference on the E-Cigarette: patterns of use and health impacts" - Paris, on 5-6th December 2022

### Submission form

Poster & oral presentation

## Contact details of the corresponding author

### Title

Ms

### First name

Elizabeth

### Last name

Stevens

### E-mail

elizabeth.stevens@nyulangone.org

### Institution / company

NYU Grossman School of Medicine

### Unit / department

Population Health

### Address

180 Madison Ave, 17-13  
New York, 10016  
United States

## Background information

### Type of submission

Oral or poster

### Theme of conference

Patterns of use

## Keywords

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## Abstract title

Using ecological momentary assessment via text messaging to measure cigarette and e-cigarette use patterns

## Author's contact details :

### Title

Ms

### First name

Elizabeth

### Last name

Stevens

### E-mail

elizabeth.stevens@nyulangone.org

### Institution / company

NYU Grossman School of Medicine

## Co-author's contact details :

### Number of co-authors

4

### Co-author 1

Tucker Morgan NYU Grossman School of Medicine

### Co-author 2

Andrew Nicholson NYU Grossman School of Medicine

### Co-author 3

Omar El-Shahawy NYU Grossman School of Medicine

### Co-author 4

Scott E. Sherman NYU Grossman School of Medicine

## Abstract details (poster & oral)

### Background, method, results and conclusions

#### Background

Given the potential harms of dual use, it is important to reduce overlap when using e-cigarettes (ECs) as harm reduction among smokers. The process of how smokers switch to ECs, however, is not well understood. In a pilot study among current smokers with pulmonary disease, participants record daily cigarette use by responding to daily text message prompts. Through this study, we sought to evaluate the potential of ecological momentary assessment (EMA) via text messaging for measuring patterns

of switching behaviors among those transitioning from cigarettes to ECs.

## Methods

Participants receive EMA text message prompts asking about cigarette and EC use throughout the day at approximately four-hour intervals for 12-weeks. Text messages are managed through a mass text messaging service. Participants were incentivized to respond to texts monetarily based on response rate. Data was validated against self-reported cigarettes per day (CPD) collected via survey. The data was analyzed for response rates as well as general trends in cigarette to EC switching patterns.

## Results

Overall, response rates were high among study participants (n=28) with >95% response over 12-weeks. Of the participants with 0% response rate in week 12, many have response rates below 50% at or prior to week 8. On average the text-message reported CPD was approximately 34% lower than survey estimated use. Throughout the 12-weeks, it was observed that as EC use increased, there was a decrease in CPD. This effect is seen most strongly in the first 20 days and seems to continue for the length of the study with EC use surpassing cigarette use around day 40.

## Conclusions

Text messaging is a feasible method for collecting CPD data and EMA may be more reliable than survey estimates due to recall bias. Further exploration is needed to better understand patterns of EC supplementation and replacement of cigarettes as well as to understand contributing factors to individuals with lower response rates.

## Main messages

EMA data collected via text message have the potential to reveal patterns of EC and cigarette use not observable with standard survey collection. Further EMA studies are needed to examine patterns of dual-use and switching.

## Type of study / research

Longitudinal

## Geography of the study

Outside Europe

## Funding of study

### Federal source

No

### State source

No

### Nonprofit Grant Funding Entity Source

No

### Nonprofit Grant Funding Entity Source

No

**Academic Institution Source**

Yes

**Pharmaceutical Industry Source**

No

**Tobacco/E-Cigarette Industry Source**

No

**Declaration of interest**

**The submitter declares that during the past 5 years have a direct nor indirect link (professional\*, personal or financial\*\*) with the tobacco and e-cigarette companies**

No