

# Weekly Engagement Patterns in an Internet Smoking Cessation Intervention: Do Mondays Matter to Everyone?

Institute for Global Tobacco Control

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## Background

- Online health information seeking is more common at beginning of the week (i.e., the “Monday phenomenon”)
- Google search query and quitline usage analysis found more smoking cessation information seeking early in the week

## Objective

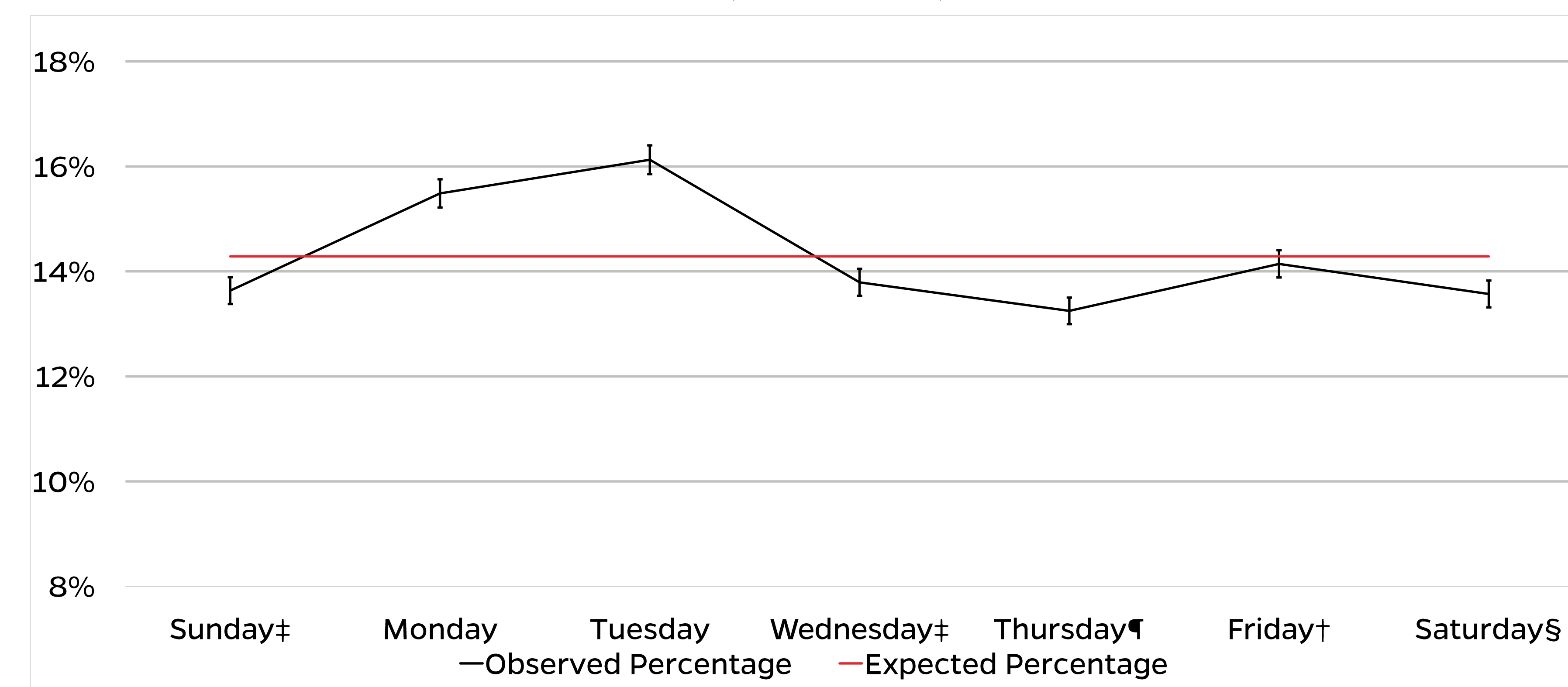
- Investigate the presence of the “Monday phenomenon” using automated tracking data from BecomeAnEX.org, a free smoking cessation intervention
- Compare the “Monday phenomenon” for different groups of users

## Methods

- We examined automated tracking data from BecomeAnEX.org to compare day-of-the-week activity in the three months following enrollment for different categories of users (n=69,237)
- We grouped participants by age (around the median), reason for joining (ready to quit versus already quit), smoker status (current versus former), and number of visits (one return visit versus multiple)
- We assessed differences in these subgroups by day of the week for enrollment and day of initial selected quit date using chi-squared tests of independence
- Differences were considered statistically significant at the 1 percent level if  $p < 0.00167$  due to multiple comparisons

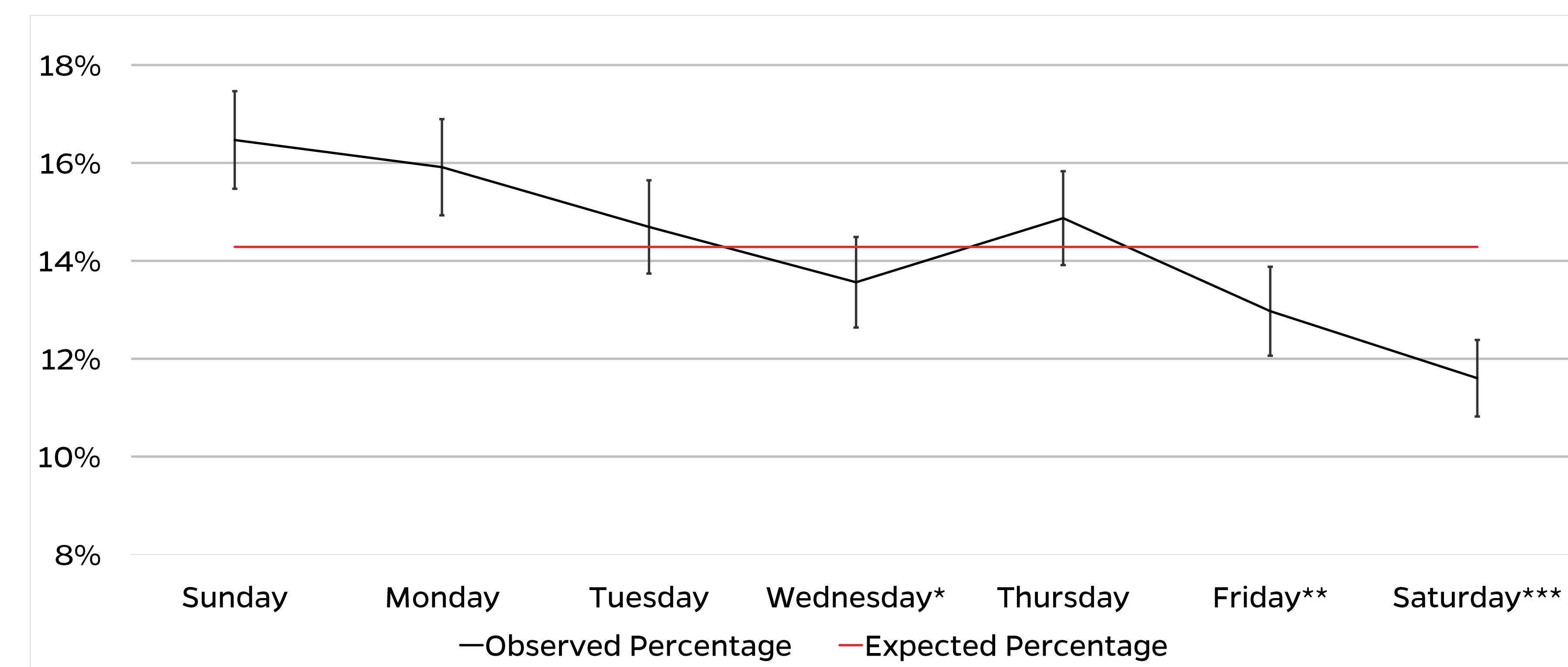
## Results

- Overall, participants had a significantly greater likelihood of enrolling in the program and choosing a quit date at the beginning of week
- Enrollment by day of the week (n=69,237)



Significance indicated relative to observed Monday activity: †  $p < 10^{-10}$ , ‡  $p < 10^{-15}$ , §  $p < 10^{-20}$ , ¶  $p < 10^{-25}$

- Initial selected quit day (n=5,574)



Restricted to current smokers. Significance indicated relative to observed Monday activity: \* $p < 0.00167$ , \*\* $p < 0.0001$ , \*\*\* $p < 10^{-5}$

- There was no significant difference at even the 10 percent significance level ( $p < 0.0167$ ) in Monday-related activity for the groups compared

	MONDAY ENROLLMENT DAY		MONDAY INITIAL QUIT DAY	
Age	13-31	32-70	13-31	32-70
	15.7% (32,515)	15.2% (27,997)	14.9% (2,278)	16.9% (3,452)
$p=0.102$ (left), $p=0.046$ (right)				
Reason Joining	Ready to Quit	Quit & Need Help	Ready to Quit	Quit & Need Help
	15.5% (36,664)	15.7% (16,779)	16.1% (4,703)	17.8% (579)
$p=0.431$ (left), $p=0.291$ (right)				
Smoker Status	Current	Former	Current	Former
	15.5% (59,532)	16.1% (6,006)	15.9% (5,574)	16.7% (288)
$p=0.181$ (left), $p=0.733$ (right)				
Return Visits	One	Multiple	One	Multiple
	15.5% (51,838)	15.6% (6,251)	15.8% (3,581)	16.2% (2,421)
$p=0.886$ (left), $p=0.711$ (right)				

## Conclusions

- Our findings are consistent with previous research showing that more people are interested in taking healthy actions early in the week
- The “Monday phenomenon” is consistently found across the subgroups we examined
- These findings can be leveraged by increased recruitment ads and additional communication strategies on days when people are more likely to engage with a site

## Acknowledgements

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