McNeil LCA Outline

# Introduction

* Smoking is leading cause of premature death and preventable illness worldwide
* Smoking reduction is recommended to smokers who find it difficult to quit abruptly, and is defined as a decrease in CPD
* Limited evidence that reduction improves health, but clearer evidence that reduction is as effective as abrupt quitting in achieving complete cessation
* Some evidence that behavioral support helps people quit (e.g., timed reduction, hierarchical reduction). No clear support for any particular behavior reduction method over others
* Little is known about what smokers told to reduce their smoking do
* Aims:
  + Use LCA to find trajectories in CPD over time
  + Associate characteristics with these trajectories
  + Determine whether latent class is associated with cessation
* Several studies have used LCA to explore smoking behavior but none have leveraged contemporary ML methods

# Methods

## Analysis 1

## Analysis 2

## Analysis 3

# Appendix

## Cross-validation scheme

## CPD Distributions at each time point

## ROCs?