SMART Weight Loss: Analytics for February 2021 Submission

December 14, 2020

1 How many individuals did we consider and what percentage had missing data?

Table 1: First Column: Total number of individuals in APP ONLY arm (excluding one individual with data issue); Remaining Columns: Percent with no weights

Total No. Individuals	No weight on Day 1	No weight on Day 4	No weight on Day 7	No weight on Day 1, 4, or 7
184	3.804	11.413	16.304	25.543

2 Can we identify App nonresponders during the first week of treatment?

Table 2: CART Only

	Sensitivity	Specificity
Training Validation	$0.773 \\ 0.875$	$0.737 \\ 0.800$

Table 3: Overall Decision Rule

	Sensitivity	Specificity
Training	0.886	0.368
Validation	0.938	0.400

3 Is predicted response status at week 8 predictive of weight loss at month 3?

Table 4: Estimates of Parameters in a Logistic Regression Model

	Estimate	Std. Error	z value	$\Pr(>\! z)$
beta0 beta1	-0.288 -0.635	$0.242 \\ 0.287$	-1.191 -2.213	$0.234 \\ 0.027$

4 Is predicted response status at week 8 predictive of weight loss at month 6?

Table 5: Estimates of Parameters in a Logistic Regression Model

	Estimate	Std. Error	z value	$\Pr(> z)$
beta0 beta1	-0.305 -0.751	$0.249 \\ 0.300$	-1.226 -2.501	$0.220 \\ 0.012$