Supplemental Online Content

eTable 1. Comparison of Baseline Characteristics Between Individuals With and Without Viral Tool Kit

Variable	ViralToolkit	NoViralToolkit	*P* value
	(n=745)	(n=742)	
	n (%)	n (%)	
Age			0.12
19-34 years	236 (31.7%)	208 (28.0%)	
35-54 years	259 (34.8%)	249 (33.6%)	
55+ years	250 (33.6%)	285 (38.4%)	
Gender			0.007*
Female	529 (71.0%)	572 (77.1%)	
Male	216 (29.0%)	170 (22.9%)	
Race			0.98
African-American/Black	95 (13.3%)	93 (13.1%)	
White	583 (81.9%)	584 (82.3%)	
Other[a]	34 (4.8%)	33 (4.6%)	
Ethnicity			0.40
Not Hispanic or Latino	652 (93.0%)	639 (91.8%)	
Hispanic or Latino	49 (7.0%)	57 (8.2%)	
Education			0.018[b]
High school or less education	168 (34.2%)	131 (26.4%)	
Some college or technical school	206 (42.0%)	220 (44.4%)	
College graduate	117 (23.8%)	145 (29.2%)	
How hard it is for you/family to pay for medical care			0.43
Very hard or hard	172 (36.0%)	158 (32.5%)	
Somewhat hard	165 (34.5%)	185 (38.1%)	
Not very hard	141 (29.5%)	143 (29.4%)	
Readiness to Quit Smoking			0.46
I am not thinking about quitting	34 (4.6)	28 (3.8)	
I am thinking of quitting or I have set a quit date	597 (81)	585 (79)	
I quit today or I have already quit	109 (15)	123 (17)	
Number of Cigarettes Smoked per Day			0.06
0-5	108 (14.5%)	87 (11.7%)	
6-20	499 (67.1%)	486 (65.5%)	
21 or more	137 (18.4%)	169 (22.8%)	

MLRecommender=Machine learning recommender computer-tailored motivational texting intervention; Stdmessaging= standard motivational texting intervention; ViralToolkit=Peer recruitment toolkit
[a]Includes Asian, American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander
[b]Indicates statistically significant (P<0.05)

eTable 2. Comparison of Baseline Characteristics Between Individuals Randomized to ML Recommender and Standard Messaging

Variable	ML Recommender	Std Messaging	*P* value
	(n=745)	(n=742)	
	n (%)	n (%)	
Age			0.27
19-34 years	207 (27.9%)	237 (31.8%)	
35-54 years	261 (35.2%)	247 (33.1%)	
55+ years	273 (36.8%)	262 (35.1%)	
Gender			0.31
Female	540 (72.9%)	561 (75.2%)	
Male	201 (27.1%)	185 (24.8%)	
Race			0.15
African-American	98 (13.8%)	90 (12.7%)	
White	588 (82.6%)	579 (81.5%)	
Other	26 (3.7%)	41 (5.8%)	
Ethnicity			0.06
Not Hispanic or Latino	659 (93.7%)	632 (91.1%)	
Hispanic or Latino	44 (6.3%)	62 (8.9%)	
Education			0.31
High school or less education	142 (28.3%)	157 (32.4%)	
Some college or technical school	219 (43.6%)	207 (42.7%)	
College graduate	141 (28.1%)	121 (24.9%)	
How hard it is for you/family to pay for medical care			0.12
Very hard or hard	173 (35.3%)	157 (33.1%)	
Somewhat hard	163 (33.3%)	187 (39.5%)	
Not very hard	154 (31.4%)	130 (27.4%)	
Readiness to Quit Smoking			0.15
I am not thinking about quitting	27 (3.7%)	35 (4.7%)	
I am thinking of quitting or I have set a quit date	602 (82.1%)	580 (78.1%)	
I quit today or I have already quit	104 (14.2%)	128 (17.2%)	
Number of Cigarettes Smoked per Day			0.54
0-5	92 (12.4%)	103 (13.8%)	
6-20	501 (67.6%)	484 (65.0%)	
21 or more	148 (20.0%)	158 (21.2%)	

MLRecommender=Machine learning recommender computer-tailored motivational texting intervention; Stdmessaging= standard motivational texting intervention; ViralToolkit=Peer recruitment toolkit
* Indicates statistically significant (P<0.05).

eTable 3. Smoking-Cessation Rates at 6 Months for Each 3 Hypotheses With Missing Outcomes Treated as Smoking

	n/N (%)	Model unadjusted		Model adjusted for covariates [a]	
		Odds Ratio (95% Confidence Interval)	*P* value	Odds Ratio (95% Confidence Interval)	*P* value
Hypothesis H1					
Sub-hypothesis 1: Group A vs. Group B					
Fully enhanced	89/371 (24)	1.73 (1.20, 2.51)	0.004*	1.79 (1.17, 2.72)	0.007*
MLRecommender and NoViralToolkit	57/370 (15)	Reference		Reference	
Sub-hypothesis 2: Group A vs. Group C					
Fully enhanced	89/371 (24)	1.03 (0.73, 1.44)	0.88	0.96 (0.65, 1.42)	0.83
StdMessaging and ViralToolkit	88/374 (24)	Reference		Reference	
Sub-hypothesis 3: Group A vs. Group D					
Fully enhanced	89/371 (24)	1.41 (0.99, 2.01)	0.06	1.19 (0.79, 1.78)	0.40
StdMessaging and NoViralToolkit	68/372 (18)	Reference		Reference	
Hypothesis 2					
Groups (A and C) vs. Groups (B and D)					
ViralToolkit	125/742 (17)	1.54 (1.19, 1.99)	0.001*	1.48 (1.11, 1.98)	0.01*
NoVitalToolkit	177/745 (24)	Reference		Reference	
Hypothesis 3					
Groups (A and B) versus Groups (C and D)					
MLRecommender (A+B)	146/741 (20)	0.93 (0.72, 1.20)	0.56	0.81 (0.61, 1.08)	0.16
StdMessaging (C+D)	156/746 (21)	Reference		Reference	

MLRecommender=Machine learning recommender computer-tailored motivational texting intervention;
Stdmessaging= standard motivational texting intervention; ViralToolkit=Peer recruitment toolkit
Group A – Fully Enhanced Group – MLRecommender and ViralToolkit
Group B – MLRecommender with NoViralToolkit
Group C – StdMessaging with ViralToolkit
Group D – StdMessaging with NoViralToolkit
[a] Multivariable logistic regression was adjusted for sex and education level.
*Indicates statistically significant (P<0.05).

eTable 4. Smoking-Cessation Rates at 6 mo for 3 Hypotheses With Missing Outcomes Treated Using Multiple Imputation

	n/N (%)	Model unadjusted		Model adjusted for covariates [a]	
		Odds Ratio (95% Confidence Interval)	*P* value	Odds Ratio (95% Confidence Interval)	*P* value
Hypothesis 1					
Sub-hypothesis 1: Group A vs. Group B					
Fully enhanced				1.77 (1.16, 2.70)	0.01*
MLRecommender and NoViralToolkit		Reference		Reference	
Sub-hypothesis 2: Group A vs. Group C					
Fully enhanced				0.90 (0.58, 1.38)	0.63
StdMessaging and ViralToolkit		Reference		Reference	
Fully enhanced vs. Standard (Hypothesis 1)					
Fully enhanced				1.44 (0.95, 2.19)	0.09
StdMessaging and NoViralToolkit		Reference		Reference	
Hypothesis 2					
Groups (A and C) vs. Groups (B and D)					
ViralToolkit				1.68 (1.24, 2.28)	0.001*
No ViralToolkit		Reference		Reference	
Hypothesis 3					
Groups (A and B) versus Groups (C and D)					
MLRecommender (A+B)				0.86 (0.63, 1.18)	0.35
StdMessaging (C+D)		Reference		Reference	

Group A – Fully Enhanced Group – MLRecommender and ViralToolkit
Group B – MLRecommender with NoViralToolkit
Group C – StdMessaging with ViralToolkit
Group D – StdMessaging with NoViralToolkit
[a] Multivariable logistic regression was adjusted for age, race, sex, education level, and smoking status and number of cigarettes per day measured at baseline.
* Indicates statistically significant (P<0.05).