

Table S1. Sample size re-estimation.

Quitting outcomes	Intervention group (N=62) n(%)	Control group (N=57) n(%)	Current power	Sample size (Power 0.80)	Sample size (Power 0.90)
Validated abstinence					
3-month	2 (3.2)	1 (1.8)	0.01	4106 (2053*2)	5414 (2707*2)
6-month	1 (1.6)	0	0.00		
Self-reported past 7-day PPA					
3-month	8 (12.9)	6 (10.5)	0.05	5786 (2893*2)	7688 (3844*2)
6-month	10 (16.1)	3 (5.3)	0.42	278 (139*2)	362 (181*2)
Smoking reduction \geq 50% (including quitters)					
3-month	15 (24.2)	14 (24.6)	0.04	362956 (181478*2)	485556 (242778*2)
6-month	20 (32.3)	11 (19.3)	0.32	382 (191*2)	498 (249*2)
Other outcomes at 6-month follow-up (accumulated)					
Quit attempt	56 (90.3)	44 (77.2)	0.43	268 (134*2)	350 (175*2)
Use of NRT-S	39 (62.9)	22 (38.6)	0.75	144 (72*2)	192 (96*2)
Use of SC services	2 (3.2)	1 (1.8)	0.01	4106 (2053*2)	5414 (2707*2)

Notes: NRT-S: nicotine replacement therapy sampling, SC: smoking cessation.

Table S2. Sensitivity analysis of quitting outcomes by weakly informative prior (N=119).

Quitting outcomes	Intervention group (N=62) n(%)	Control group (N=57) n(%)	Model 1 (OR, 95% CI)	Model 2 ^a (AOR, 95% CI)	Model 3 (AOR including Prior, 95%CI) ^b	Change in Estimate ^c %
Validated abstinence						
3-month	2 (3.2)	1 (1.8)	1.87 (0.16-21.16)	1.07 (0.08-13.65)	1.06 (0.13-12.20)	0.9
6-month	1 (1.6)	0	-	-	2.30 (0.12, 340.2)	-
Self-reported past 7-day PPA						
3-month	8 (12.9)	6 (10.5)	1.26 (0.41-3.88)	1.12 (0.34-3.71)	1.09 (0.35, 3.57)	2.7
6-month	10 (16.1)	3 (5.3)	3.46 (0.90-13.29)	2.82 (0.70-11.30)	2.54 (0.75, 10.75)	9.9
Smoking reduction ≥50% (including quitters)						
3-month	15 (24.2)	14 (24.6)	0.98 (0.42-2.27)	0.80 (0.32-2.01)	0.81 (0.33, 1.98)	1.3
6-month	20 (32.3)	11 (19.3)	1.99 (0.85-4.64)	1.74 (0.71-4.26)	1.69 (0.72, 4.14)	2.9
Other outcomes at 6-month follow-up (accumulated)						
Quit attempt	56 (90.3)	44 (77.2)	2.76 (0.97-7.84)	2.61 (0.88-7.82)	2.46 (0.88, 7.45)	5.7
Use of NRT-S	39 (62.9)	22 (38.6)	2.70 (1.29-5.66)**	2.27 (1.04-4.96)*	2.21 (1.03, 4.80)*	2.6
Use of SC services	4 (6.5)	3 (5.3)	1.24 (0.27-5.80)	0.75 (0.15-3.74)	0.80 (0.18-3.55)	6.7

^a Adjusting for sex and perceived importance of quitting at baseline

^b Penalization with a log-F (1, 1) prior for sex and perceived importance of quitting at baseline with profile likelihood-based confidence intervals. A log-F (1, 1) distribution corresponds to a median OR = 1 and 95% CI between 1/648 to 648

^c Change-in-estimate: $\Delta\text{OR} = (\text{OR}_{\text{penalization}} - \text{OR}_{\text{original}}) / \text{OR}_{\text{original}} * 100\%$

OR: odds ratio; AOR: adjusted odds ratio. NRT-S: nicotine replacement therapy sampling. * P<0.05, ** P<0.01.

Table S3. Sensitivity analysis of the associations of IM chat engagement with NRT-S use, quit attempt, self-reported quit rate and smoking reduction at 6-month follow-up in the intervention group by weakly informative prior (N=62).

	Engaged chat support (n=21)	Not engaged (n=41)	Model 1 (OR, 95% CI)	Model 2 ^a (AOR, 95% CI)	Model 3 ^b (AOR including Prior, 95%CI)	Change in Estimate ^c %
Use of NRT-S	16/21 (76.2%)	21/41 (56.1%)	2.50 (0.77, 8.14)	3.21 (0.84-12.28)	2.80 (0.84-10.69)	12.8
Quit attempt	21/21 (100%)	25/41 (85.4%)	-	-	11.40 (1.08-1598.25)	-
Smoking reduction \geq 50%	9/21 (42.9%)	11/41 (26.8%)	2.04 (0.68, 6.18)	1.65 (0.49, 5.57)	1.59 (0.49, 5.14)	3.6
Self-reported past 7-day PPA	5/21 (23.8%)	5/41 (12.2%)	2.25 (0.57-8.88)	2.00 (0.45-9.01)	1.81 (0.45, 7.62)	9.5

^a Adjusting for sex and perceived importance of quitting at baseline.

^b Penalization with a log-F (1, 1) prior for sex and perceived importance of quitting at baseline with profile likelihood-based confidence intervals. A log-F (1, 1) distribution corresponds to a median OR = 1 and 95% CI between 1/648 to 648

^c Change-in-estimate: $\Delta\text{OR} = (\text{OR}_{\text{penalization}} - \text{OR}_{\text{original}}) / \text{OR}_{\text{original}} * 100\%$

OR: odds ratio; AOR: adjusted odds ratio; NRT-S: nicotine replacement therapy sampling.

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