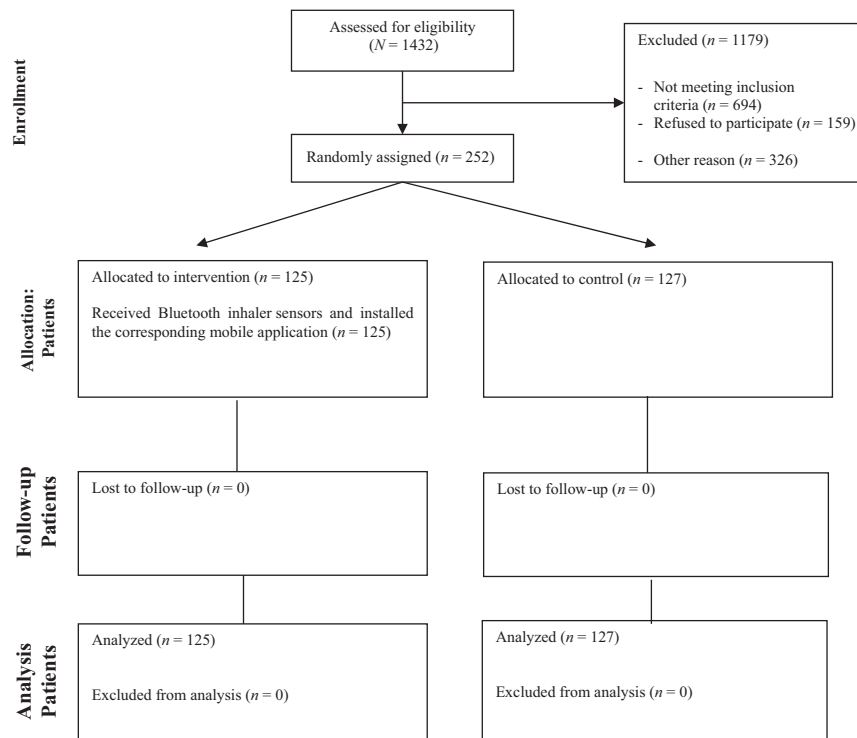


Supplemental Information

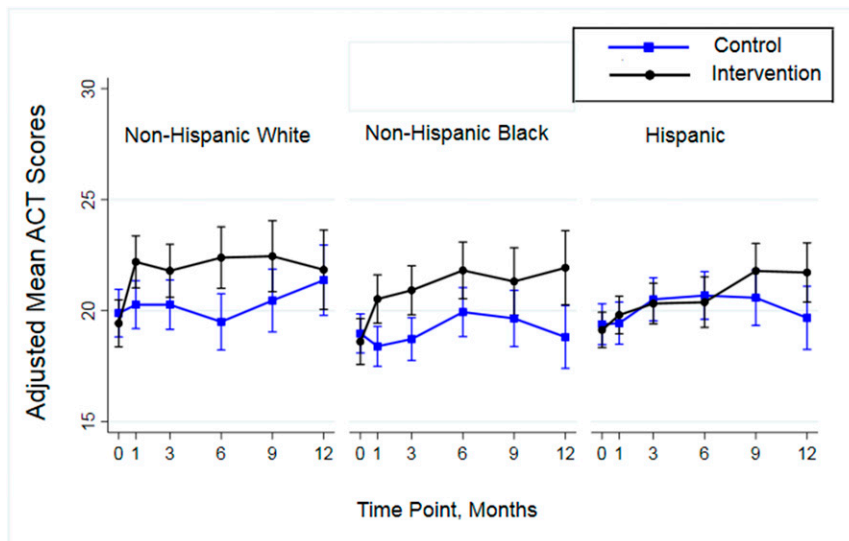
SUPPLEMENTAL VIDEO 1

The images used on slides 5, 6, and 12 are used with permission from Propeller Health. These are images that represent the sensors used in the trial. We were granted permission by UnitedHealth Group to use the videos in slides 2 and 15. The stock photograph used in slide 3 was purchased by the study team. No permission was required.



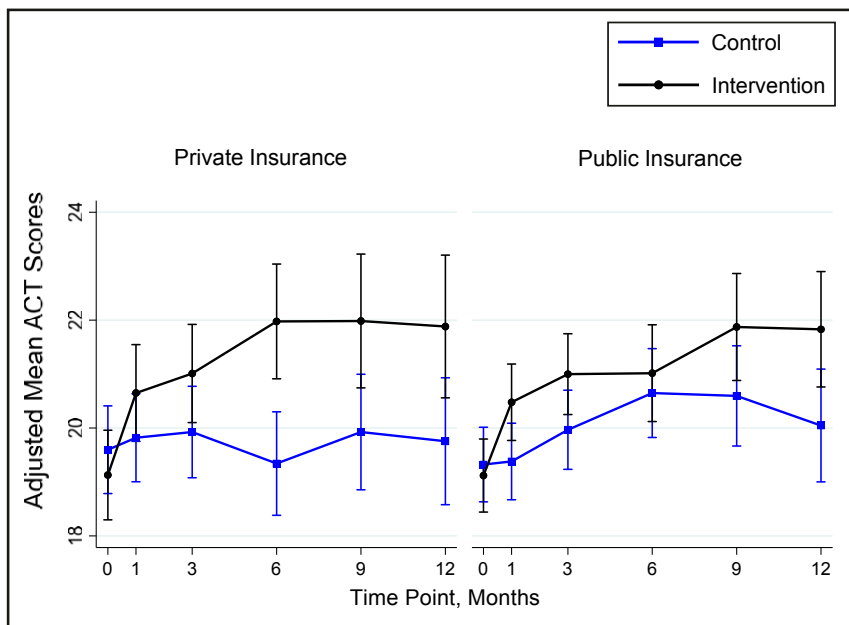
SUPPLEMENTAL FIGURE 4

Modified Consolidated Standards of Reporting Trials flow diagram for individual randomized controlled trials of nonpharmacologic treatments. Adapted from Boutron I, Altman DG, Moher D, Schulz KF, Ravaut P; CONSORT NPT Group. CONSORT statement for randomized trials of nonpharmacologic treatments: a 2017 update and a CONSORT extension for nonpharmacologic trial abstracts. *Ann Intern Med.* 2017;167(1):40–47.



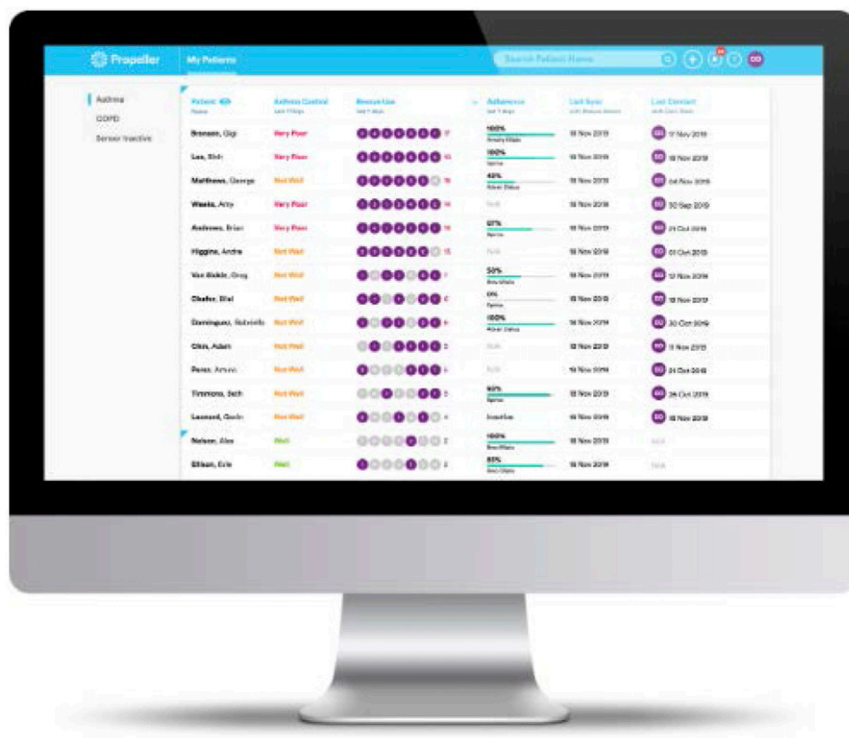
SUPPLEMENTAL FIGURE 5

Asthma symptom control by race and ethnicity. We illustrate the change from baseline in adjusted mean ACT score, stratified by race and ethnicity, at each study time point among caregiver-child dyads of the intervention and control groups. Error bars represent 95% confidence intervals. Sample sizes are as follows: non-Hispanic white (control): 0 months: $n = 29$, 1 month: $n = 30$, 3 months: $n = 30$, 6 months: $n = 27$, 9 months: $n = 28$, and 12 months: $n = 30$; non-Hispanic white (intervention): 0 months: $n = 29$, 1 month: $n = 24$, 3 months: $n = 25$, 6 months: $n = 22$, 9 months: $n = 21$, and 12 months: $n = 23$; non-Hispanic Black (control), 0 months: $n = 42$, 1 month: $n = 40$, 3 months: $n = 37$, 6 months: $n = 33$, 9 months: $n = 32$, and 12 months: $n = 35$; non-Hispanic Black (intervention): 0 months: $n = 29$, 1 month: $n = 26$, 3 months: $n = 27$, 6 months: $n = 24$, 9 months: $n = 21$, and 12 months: $n = 24$; Hispanic (control): 0 months: $n = 36$, 1 month: $n = 34$, 3 months: $n = 35$, 6 months: $n = 35$, 9 months: $n = 33$, and 12 months: $n = 34$; Hispanic (intervention): 0 months: $n = 49$, 1 month: $n = 44$, 3 months: $n = 40$, 6 months: $n = 29$, 9 months: $n = 32$, and 12 months: $n = 40$.



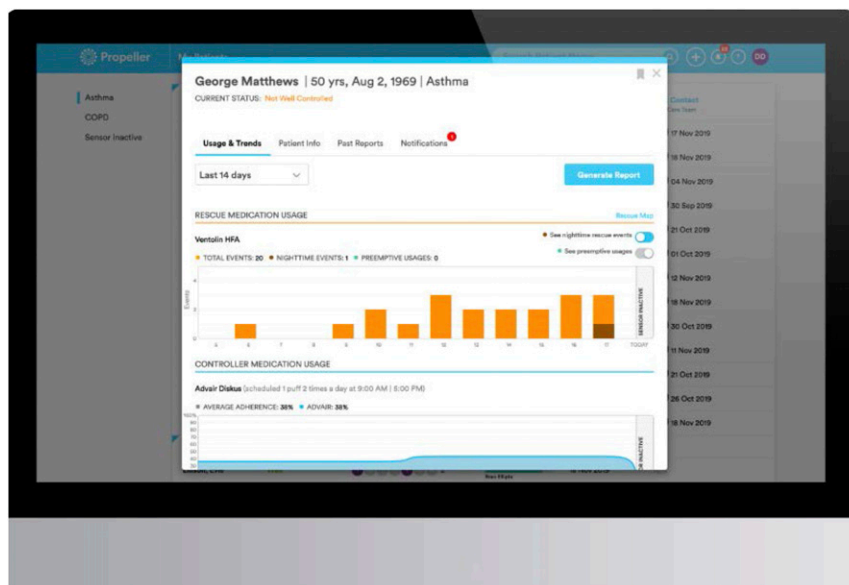
SUPPLEMENTAL FIGURE 6

Asthma symptom control by insurance type. We illustrate the change from baseline in adjusted mean ACT score, stratified by type of insurance (private or public), at each study time point among caregiver-child dyads of the intervention and control groups. Error bars represent 95% confidence intervals. Sample sizes are as follows: private insurance (control): 0 months: $n = 54$, 1 month: $n = 55$, 3 months: $n = 54$, 6 months: $n = 48$, 9 months: $n = 48$, and 12 months: $n = 54$; private insurance (intervention): 0 months: $n = 49$, 1 month: $n = 43$, 3 months: $n = 45$, 6 months: $n = 38$, 9 months: $n = 34$, and 12 months: $n = 42$; public insurance (control): 0 months: $n = 72$, 1 month: $n = 68$, 3 months: $n = 67$, 6 months: $n = 62$, 9 months: $n = 61$, and 12 months: $n = 64$; public insurance (intervention): 0 months: $n = 74$, 1 month: $n = 66$, 3 months: $n = 62$, 6 months: $n = 48$, 9 months: $n = 50$, and 12 months: $n = 60$.



SUPPLEMENTAL FIGURE 7

Web portal for the health care team.



SUPPLEMENTAL FIGURE 8

Patient profile at a glance.



SUPPLEMENTAL FIGURE 9
Propeller sensor and cell phone application.

SUPPLEMENTAL TABLE 3 Caregiver-Reported End Points at Trial End Line

End Point at 12 Months	Caregiver-Reported End Points at 12 Months of Follow-up					
	Intervention (<i>n</i> = 103)			Control (<i>n</i> = 118)		
	%	95% CI	<i>n</i>	%	95% CI	<i>n</i>
At least 1 asthma attack	67.0	57.3–75.5	103	72.0	63.2–79.5	118
At least 1 d of school missed because of asthma	67.0	57.3–75.6	103	68.6	59.6–76.4	118
At least 1 asthma attack treated by a provider at MD office	45.6	36.2–55.4	103	52.3	40.0–64.3	65
At least 1 attack in which steroids were prescribed by MD office	72.5	60.6–81.8	69	34.6	22.8–48.7	52
At least 1 attack resulting in ED visit	49.3	37.5–61.1	69	44.6	32.9–57.0	65
At least 1 attack resulting in hospitalization	24.6	15.8–36.3	69	12.3	5.9–23.9	57
At least 1 course of steroids because of asthma at ED or hospital	60.9	48.7–72.0	69	50.9	37.7–64.0	55

A total of 224 (intervention: *n* = 104; control: *n* = 120) participants had partially complete 12 months data; 221 participants (intervention: *n* = 103; control *n* = 118) had complete data on the main end points under study. CI, confidence interval; MD, medical doctor.