

Supplementary Online Content

Federman AD, O'Connor R, Mindlis I, et al. Effect of a self-management support intervention on asthma outcomes in older adults: the SAMBA study randomized clinical trial [published online June 10, 2019]. *JAMA Intern Med*. doi:10.1001/jamainternmed.2019.1201

eTable 1. Subgroup Analysis of Intervention Patients: Differences in Asthma Outcomes Within and Between Home- and Clinic-based Arms

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eTable 3. Screening and Follow-up Performance of the Intervention, Overall and by Study Site

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Subgroup Analysis of Intervention Patients: Differences in Asthma Outcomes Within and Between Home- and Clinic-based Arms

	Home-based Intervention			Clinic-based Intervention			Home Effect	
	Value	Δ (95% CI)*	P*	Value	Δ (95% CI)*	P*	DiD (95% CI)*	P*
Asthma Control Test score, mean (sd)								
Baseline	15.0 (3.8)	-	-	14.6 (4.0)	-	-	-	-
3 months	16.6 (4.4)	1.6 (0.8, 2.4)	<.001	15.7 (4.4)	1.2 (0.3, 2.1)	.003	0.5 (-1.6, 0.5)	.35
6 months	16.8 (4.3)	1.6 (0.7, 2.5)	<.001	15.8 (4.4)	1.2 (0.3, 2.1)	.02	0.1 (-1.2, 1.0)	.87
12 months	17.4 (4.8)	2.5 (1.5, 3.4)	<.001	16.9 (4.7)	1.9 (0.8, 3.0)	<.001	0.3 (-1.5, 1.0)	.68
Overall effect†							χ ² (4)=3.2	.52
Mini-Asthma Quality of Life score, mean (sd)								
Baseline	4.4 (1.2)	-	-	4.4 (1.2)	-	-	-	-
3 months	4.8 (1.8)	0.5 (0.3, 0.7)	<.001	4.6 (1.2)	0.3 (0.0, 0.5)	.03	0.2 (-0.2, 0.6)	.31
6 months	4.9 (1.2)	0.5 (0.2, 0.7)	<.001	4.5 (1.4)	0.1 (-0.1, 0.4)	.66	0.4 (0.1, 0.8)	.02
12 months	4.9 (1.3)	0.6 (0.4, 0.8)	<.001	4.8 (1.4)	0.3 (0.1, 0.6)	.01	0.2 (-0.2, 0.5)	.29
Overall effect†							χ ² (4)=6.7	.15
Medication Adherence Rating Scale score, mean (sd)								
Baseline	3.6 (0.7)	-	-	3.7 (0.6)	-	-	-	-
3 months	3.9 (0.6)	0.3 (0.2, 0.5)	<.001	3.9 (0.6)	0.2 (0.0, 0.4)	.003	0.1 (-0.2, 0.3)	.58
6 months	3.9 (0.7)	0.3 (0.1, 0.5)	.003	4.0 (0.7)	0.3 (0.1, 0.4)	<.001	-0.1 (-0.3, 0.2)	.51
12 months	3.8 (0.8)	0.2 (0.0, 0.4)	.01	4.0 (0.7)	0.4 (0.2, 0.5)	<.001	-0.1 (-0.4, 0.2)	.44
Overall effect†							χ ² (4)=2.7	.62
MDI technique, % correctly completed steps, median (range)								
Baseline	62.8 (53.0, 74.4)	-	-	60.1 (50.9, 70.9)	-	-	-	-
12 months	71.5 (59.6, 85.8)	-8.7 (-25.5, 8.1)	.31	60.6 (50.4, 72.7)	0.4 (-15.3, 14.4)	.95	1.0 (0.9, 1.2)	.71
Overall effect†							χ ² (2)=0.4	.82
≥1 Emergency department visit, %								
Baseline	13.1%			9.3%				-
12 months	7.7%	0.7 (0.5, 1.0)‡	.03	6.2%	0.9 (0.7, 1.2)‡	.70	1.3 (0.8, 2.0)§	.31

*Change within study arm relative to baseline.

†Effect over all time points.

‡Odds ratio (95% confidence interval).

DiD, difference-in-differences.

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eTable 2. Subgroup Analysis of Intervention Patients: Heterogeneity of Treatment Effects for Individuals with Cognitive Impairment, Physical Impairment, or Depression

	Physical Impairment						Model Effect P
	3-Months		6-Months		12-Months		
	Home	Clinic	Home	Clinic	Home	Clinic	
ACT, <i>mean (sd)</i>	16.1 (4.3)	15.3 (4.3)	16.3 (4.2)	15.0 (4.4)	16.4 (4.7)	16.1 (4.7)	.99
mAQLQ, <i>mean (sd)</i>	4.6 (1.2)	4.4 (1.1)	4.7 (1.2)	4.2 (1.3)	4.7 (1.3)	4.6 (1.4)	.57
MARS, <i>mean (sd)</i>	3.9 (0.6)	3.9 (0.6)	3.9 (0.7)	3.9 (0.7)	3.9 (0.7)	4.0 (0.7)	.81
MDI technique, % correctly completed steps, <i>median (range)</i>		-	-	-	83 (17, 100)	67 (17, 100)	.46
≥1 ED visit, %	-	-	-	-	13.1	11.7	.95
	Cognitive Impairment						Model Effect P
	3-Months		6-Months		12-Months		
	Home	Clinic	Home	Clinic	Home	Clinic	
ACT, <i>mean (sd)</i>	16.1 (4.6)	14.8 (4.3)	16.3 (4.4)	15.6 (4.6)	16.9 (4.9)	15.9 (4.9)	.61
mAQLQ, <i>mean (sd)</i>	4.7 (1.1)	4.4 (1.2)	4.8 (1.2)	4.3 (1.4)	4.5 (1.3)	4.5 (1.4)	.43
MARS, <i>mean (sd)</i>	3.9 (0.5)	3.8 (0.6)	3.7 (0.7)	3.8 (0.7)	3.7 (0.7)	4.0 (0.6)	.96
MDI technique, % correctly completed steps, <i>median (range)</i>	-	-	-	-	58 (0, 100)	58 (0, 100)	.32
≥1 ED visit, %	-	-	-	-	11.3	11.8	.95
	Depression						Model Effect P
	3-Months		6-Months		12-Months		
	Home	Clinic	Home	Clinic	Home	Clinic	
ACT, <i>mean (sd)</i>	14.4 (4.2)	14.5 (3.7)	15.7 (4.5)	15.2 (4.1)	15.6 (6.2)	16.0 (4.6)	.96
mAQLQ, <i>mean (sd)</i>	4.0 (1.1)	4.4 (1.1)	4.4 (1.3)	4.2 (1.4)	4.2 (1.7)	4.5 (1.5)	.71
MARS, <i>mean (sd)</i>	3.8 (0.6)	3.9 (0.4)	3.7 (0.8)	3.8 (0.7)	3.7 (0.7)	4.1 (0.6)	.71
MDI technique, % correctly completed steps, <i>median (range)</i>	-	-	-	-	71 (33, 92)	79 (33, 83)	.85
≥1 ED visit, %	-	-	-	-	14.3	2.8	.52

ACT, Asthma Control Test; mAQLQ, mini-Asthma Quality of Life Questionnaire; MARS, Medication Adherence Rating Scale; MDI, metered dose inhaler; ED, emergency department.

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eTable 3. Screening and Follow-up Performance of the Intervention, Overall and by Study Site

	Overall	Site 1	Site 2	Site 3	Site 4	Site 5	P
Completed barrier screening, %	93.2	93.9	84.6	94.1	100	80.5	.55
Follow-up encounters							
# In-person, <i>mean (sd)</i>	3.3 (2.6)	2.6 (2.1)	2.5 (2.1)	4.8 (3.5)	4.1 (2.2)	4.3 (1.8)	.006
# Telephone, <i>mean (sd)</i>	4.1 (3.7)	1.2 (0.4)	2.3 (1.0)	2.2 (1.5)	1.4 (0.7)	8.9 (3.8)	<.001

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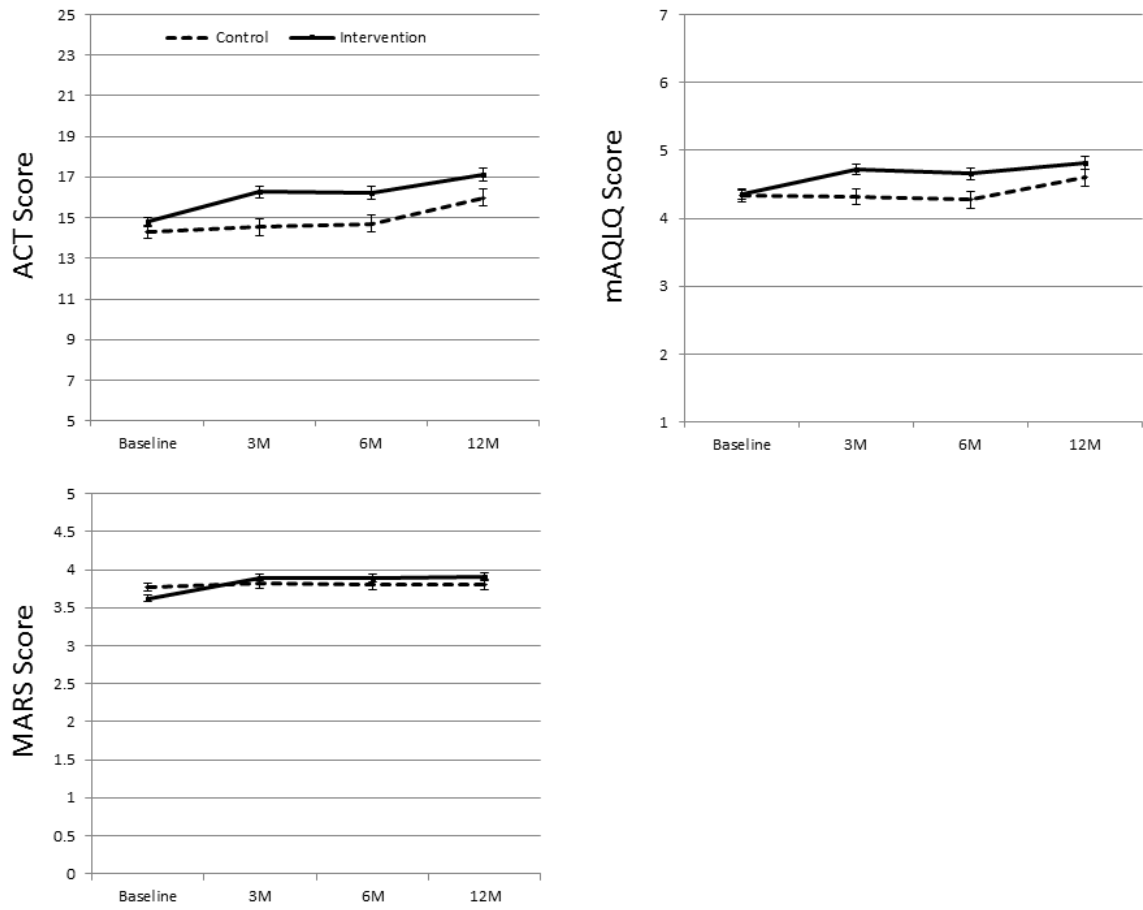
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504 **eFigure. Asthma Control, Asthma Quality of Life, and Medication Adherence Over Time,**
505 **Intervention vs. Control**

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507 Overall effect, intervention vs. control: ACT, $p=.01$; mAQLQ, $p=.03$; MARS, $p=.049$.

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509 ACT, Asthma Control Test; mAQLQ, mini-Asthma Quality of Life Questionnaire; MARS,
510 Medication Adherence Rating Scale.

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