

## Supplementary Online Content

Morris PE, Berry MJ, Files DC, et al. Effect of standardized rehabilitation on hospital length of stay among patients with acute respiratory failure: a randomized clinical trial. *JAMA*. doi:10.1001/jama.2016.7201

**eTable 1.** Discharge Destinations

**eTable 2.** Baseline Characteristics of Those Participants With and Without any Follow-up as an Outpatient

**eTable 3.** Baseline Characteristics of Those Participants With and Without 6-Month Follow-up as an Outpatient

**eTable 4.** Adverse Events

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

eTable 1. Discharge Destinations

Location	Standardized Rehabilitation Therapy (N=131)	Usual Care (N=126)	Total (N=257)
Home	107 (81.7)	105 (83.3)	212 (82.5)
Rehab	6 (4.6)	6 (4.8)	12 (4.7)
SNF	9 (6.9)	12 (9.5)	21 (8.2)
Hospice	2 (1.5)	2 (1.6)	4 (1.6)
Other	7 (5.3)	1 (0.8)	8 (3.1)
Total	131	126	257

Rehab = Rehabilitation Facility, SNF = Skilled Nursing Facility

eTable 2. Baseline Characteristics of those participants with and without any follow up as an Outpatient

	No Follow-up Mean (SD) or No. (%)			Some Follow-up Mean (SD) or No. (%)		
	SRT (N=51)	UC (N=61)	P- value	SRT (N=99)	UC (N=89)	P- value
Age, years	54.6 (16.7)	61.0 (14.6)	0.03	54.9 (16.6)	56.3 (13.4)	0.54
Gender %female	34 (66.7%)	31 (50.8%)	0.09	50 (50.5%)	51 (57.3%)	0.35
Race/Ethnicity			0.68			0.99
Hispanic or Latino	0 (0.0%)	0 (0.0%)		2 (2.0%)	2 (2.2%)	
Black or African American	9 (17.6%)	9 (14.8%)		24 (24.2%)	22 (24.7%)	
Caucasian	42 (82.4%)	52 (85.2%)		73 (73.7%)	65 (73.0%)	
APACHE III Score	80.2 (30.6)	87.6 (26.6)	0.17	74.4 (24.0)	66.8 (24.6)	0.03
ICU Diagnosis			0.16			0.32
Coma	1 (2.0%)	2 (3.3%)		0 (0.0%)	2 (2.2%)	
Acute Respiratory Failure (ARF) without Chronic Lung Disease	35 (68.6%)	50 (82.0%)		63 (63.6%)	55 (61.8%)	
ARF with Chronic Lung Disease	15 (29.4%)	9 (14.8%)		36 (36.4%)	32 (36.0%)	
Home Oxygen	9 (17.6%)	10 (16.4%)	0.86	23 (23.2%)	17 (19.1%)	0.49
Dialysis Pre-hospital	3 (5.9%)	6 (9.8%)	0.44	10 (10.1%)	5 (5.6%)	0.26
Mean Arterial Pressure (mmHg)	74.9 (22.3)	68.4 (19.1)	0.10	76.8 (22.3)	78.0 (24.0)	0.73

PaCO <sub>2</sub> (mmHg)	45.3 (20.7)	42.0 (13.8)	0.32	43.9 (16.9)	45.0 (17.6)	0.67
PaO <sub>2</sub> /FiO <sub>2</sub>	175.7 (86.2)	163.3 (92.9)	0.47	185.3 (78.7)	183.2 (81.2)	0.86
Non-invasive ventilation at baseline	4 (7.8%)	1 (1.6%)	0.11	7 (7.1%)	9 (10.1%)	0.46
ICU-free days*	12.2 (11.3)	12.5 (10.4)	0.90	17.9 (7.3)	19.3 (6.4)	0.17

\*ICU-free days through day 28. APACHE III<sup>33</sup> Score range is from 0 to 299. A higher score indicates an increased risk of mortality.

eTable 3. Baseline Characteristics of those participants with and without 6 month follow up as an Outpatient

	No 6 Month Follow-up			6 Month Follow-up		
	Mean (SD) or No. (%)			Mean (SD) or No. (%)		
	SRT (N=66)	UC (N=69)	P- value	SRT (N=84)	UC (N=81)	P- value
Age, years	55.2 (16.6)	60.5 (14.7)	0.05	54.5 (16.7)	56.3 (13.2)	0.45
Gender %female	41 (62.1%)	32 (46.4%)	0.07	43 (51.2%)	50 (61.7%)	0.17
Race/Ethnicity			0.62			0.83
Hispanic or Latino	0 (0.0%)	1 (1.4%)		2 (2.4%)	1 (1.2%)	
Black or African American	11 (16.7%)	11 (15.9%)		22 (26.2%)	20 (24.7%)	
Caucasian	55 (83.3%)	57 (82.6%)		60 (71.4%)	60 (74.1%)	
APACHE III Score	76.8 (29.5)	84.7 (27.2)	0.11	76.1 (24.0)	67.3 (25.0)	0.02
ICU Diagnosis			0.04			0.29
Coma	1 (1.5%)	2 (2.9%)		0 (0.0%)	2 (2.5%)	
Acute Respiratory Failure (ARF) without Chronic Lung Disease	41 (62.1%)	55 (79.7%)		57 (67.9%)	50 (61.7%)	
ARF with Chronic Lung Disease	24 (36.4%)	12 (17.4%)		27 (32.1%)	29 (35.8%)	
Home Oxygen	14 (21.2%)	11 (15.9%)	0.43	18 (21.4%)	16 (19.8%)	0.79
Dialysis Pre-hospital	4 (6.1%)	6 (8.7%)	0.56	9 (10.7%)	5 (6.2%)	0.30
Mean Arterial Pressure (mmHg)	76.1 (21.6)	70.6 (20.3)	0.13	76.2 (22.9)	77.1 (24.0)	0.82

PaCO <sub>2</sub> (mmHg)	46.3 (19.7)	43.9 (14.9)	0.43	42.9 (16.9)	43.6 (17.4)	0.77
PaO <sub>2</sub> /FiO <sub>2</sub>	172.6 (79.0)	162.2 (90.3)	0.48	189.4 (82.5)	186.2 (81.9)	0.80
Non-invasive ventilation at baseline	7 (10.6%)	3 (4.3%)	0.17	4 (4.8%)	7 (8.6%)	0.32
ICU-free days*	13.9 (11.1)	12.5 (10.3)	0.44	17.5 (7.3)	20.0 (5.7)	0.02

\*ICU-free days through day 28. APACHE III<sup>33</sup> Score range is from 0 to 299. A higher score indicates an increased risk of mortality.

eTable 4. Adverse Events

	SRT	UC	Overall
# Participants	150	150	300
# Participants with AE's	7 (4.7%)	11 (7.3%)	18 (6.0%)
AE's per Participant			
1	6	10	16
3	-	1	1
5	1	-	1
# Events	11	13	24
Severity			
Mild	1 (9.1%)	2 (15.4%)	3 (12.5%)
Moderate	5 (45.5%)	8 (61.5%)	13 (54.2%)
Severe	4 (36.4%)	3 (23.1%)	7 (29.2%)
Life threatening	1 (9.1%)	0 (0%)	1 (4.2%)
Specific Protocol-Mandated Intervention-related Events			
Death	0	NA	0
Device Removal	0	NA	0
Re-Intubation	0	NA	0
Patient Falls	0	NA	0
# Events	11	13	24
Relationship			
Not Related	10 (90.9%)	13 (100%)	23 (95.8%)
Remotely	0 (0%)	0 (0%)	0 (0%)
Possible	1 (9.1%)	0 (0%)	1 (4.2%)
Probable/Definite	0 (0%)	0 (0%)	0 (0%)

AE = Adverse Events; Relationship = occurring during the delivery of the Standardized Rehabilitation Therapy sessions. NA= not applicable. Severity were consistent with National Institutes of Health guidelines (please see on-line protocol document and [https://www.nia.nih.gov/sites/default/files/niaaeandsaeguidelinesfinal011012\\_0.doc.](https://www.nia.nih.gov/sites/default/files/niaaeandsaeguidelinesfinal011012_0.doc.), last accessed 5-27-2016)