SUPPLEMENTAL MATERIALS

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Supplemental Figure 1. Changes in physical function measures over the course of the study according to treatment assignment

Least square means estimates of gait speed (m/s) and six-min walk distances (m) in standard-of-care (N=52) and SLIMM (N=54) in mixed effects models are presented

Supplemental Table 1. Baseline Characteristics$^\$$ by standard-of-care (N=47) and SLIMM (N=44) groups for those who completed the study

	Standard-of-care	SLIMM
	N=47	N=44
Demographics		
Age, years	70 ± 12	73 ± 9
Female, n (%)	23 (49)	16 (36)
White race, n (%)	41 (87)	44 (100)
Hispanic ethnicity, n (%)	3 (6)	1 (2)
Some college or more, n (%)	41 (87)	42 (95)
Comorbidities		
Type 2 diabetes, n (%)	15 (32)	16 (36)
Coronary Artery Disease, n (%)	10 (21)	9 (20)
Hypertension, n (%)	36 (77)	36 (82)
Congestive heart failure, n (%)	8 (17)	0 (0)
Peripheral Vascular Disease, n (%)	3 (6)	2 (5)
Chronic Lung Disease , n (%)	10 (21)	9 (20)
History of cancer, n (%)	15 (32)	22 (50)
Ever smoked, n (%)	19 (40)	12 (27)
Past or current alcohol, n (%)	25 (53)	23 (52)
CKD stages, n (%)		
Stage 2	1 (2)	4 (9)
Stage 3	38 (81)	35 (79)
Stage 4	3 (6)	4 (9)
Stage 5	5 (11)	1 (2)
Clinical Measurements		
eGFR*	44 ± 12	45 ± 14
Systolic BP, mmHg	132 ± 20	128 ± 17
Diastolic BP, mmHg	75 ± 13	72 ± 11
Body mass index, kg/m^2	30.3 ± 3.7	30.2 ± 3.8

Body fat, %	34 (26, 39)	30 (25, 40)
Gait speed, m/s	1.06 ± 0.20	1.06 ± 0.20
Six-minute walk distance, m	386 ± 61	392 ± 74
Accelerometry		
Standardized[#] sedentary duration, minutes per day	40 ± 8	41 ± 8
Standardized[#] stepping duration, minutes per day	6 ± 3	5 ± 2
Steps per day	5332 (4106, 7248)	4991 (3821, 6574)
Estimated stepping activities energy expenditure (kcal/kg/day)	0.70 ± 1.26	0.38 ± 0.42

[$]Mean ± SD or median (25th, 75th percentiles) for continuous variables and N (%) for categorical variables are presented.

* Excludes participants on dialysis or transplant recipients

[#] Standardized to 16 waking hours per day

Supplemental Table 2. Overall treatment effects of the intervention[$] on primary and secondary endpoints based on accelerometry in SLIMM group (N =51) compared to standard-of-care group (N = 50) in those without Stage 2 CKD

	Within SLIMM group	Within standard-of-care group	Between groups difference
	Mean change from baseline (95% CI)	Mean change from baseline (95% CI)	SLIMM – standard-of-care (95% CI)
Common time-points[#]			
Primary endpoints			
Sedentary duration, min/d	-22(-41,-2)	-7(-25,12)	-15(-41,11)
Stepping duration, min/d	8(2,15)	2(-5,9)	6(-3,16)
Secondary endpoints			
Number of steps/d	884(349,1418)	176(-344,695)	708(-26,1442)
Estimated stepping activities energy expenditure (kcal/kg/day)	0.24(0.09,0.38)	-0.02(-0.17,0.12)	0.26(0.06,0.45)
All time-points[^]			
Primary endpoints			
Sedentary duration, min/d	-21.6(-40.9,-2.3)	-5.7(-24.4,13)	-15.9(-42.4,10.5)
Stepping duration, min/d	8.4(1.6,15.3)	2.3(-4.3,8.9)	6.1(-3.1,15.4)
Secondary endpoints			
Number of steps/d	889(354,1425)	133(-387,654)	756(21,1491)
Estimated stepping activities energy expenditure (kcal/kg/day)	0.23(0.08,0.37)	-0.03(-0.18,0.11)	0.26(0.06,0.46)

[$]In mixed effect models adjusted for baseline values of the given outcome variable

[#]Comparing baseline to the average of week 8, 16, and 24 for both groups

[^]Comparing baseline to the average of week 4, 8, 12, 16, 20 and 24 in the SLIMM group and week 8, 16 and 24 in the SOC group.

Supplemental Table 3. Treatment effects of intervention[$] on primary and secondary endpoints based on accelerometry in SLIMM group (N =54) compared to standard-of-care group (N = 52) at weeks 8, 16 and 24

	8 week Mean (95% CI)	16 week Mean (95% CI)	24 week Mean (95% CI)
Primary endpoints			
Sedentary duration, min/d	-16 (-45, 14)	-16 (-49, 18)	-10 (-50, 29)
Stepping duration, min/d	8 (-3, 19)	7 (-6, 19)	-1 (-13, 11)
Secondary endpoints			
Number of steps/d	907 (102, 1711)	756 (-421, 1932)	280 (-651, 1212)
Estimated stepping activities energy expenditure (kcal/kg/day)	0.31(0.11,0.5)	0.22(-0.08,0.52)	0.24(-0.02,0.49)

[$] In mixed effect models adjusted for baseline values of the given outcome variable

Supplemental Table 4. Estimated weekly energy expenditure* with SLIMM intervention$ compared to achieving weekly goal of moderate activity$ or vigorous activity$

	Kcal/kg/d increase	Kcal/ week increase
Overall stepping activity energy expenditure difference between SLIMM and standard-of-care participants	0.27	166
Stepping activity energy expenditure difference between SLIMM group that achieved stepping goal and standard-of-care participants	0.73	450
Replacing sedentary (1.25 MET) with moderate exercise (3 MET) 20 min/d	0.58	359
Replacing sedentary (1.25 MET) with vigorous exercise (6 MET) 10 min/d	0.79	488

*For a SLIMM study participant weighing 88kg, which corresponds to the mean weight of participants in the study

$For all activities, the difference in total energy expenditure minus the assumed resting energy expenditure of 1.25 METs/hr was calculated as the activity energy expenditure

Supplemental Figure 1 Changes in physical function measures over the course of the study according to treatment assignment