

## ONLINE SUPPLEMENT

### Predictors of decline in medication adherence: Results from CoSMO

Type of manuscript: original research

Running head: Decline in adherence in older adults

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**Supplemental Table S1: Annual rate of decline in antihypertensive medication adherence by participant characteristics**

	Time Periods at Risk*	Number of Events	Annual Rate of Decline	p-value
<i>Overall</i>	3,721	159	4.3	
<b><i>Socio-Demographics and Patient Characteristics</i></b>				
Age ≥ 75 years	1,912	90	4.7	
Age < 75 years	1,809	69	3.8	0.178
Female	2,201	84	3.8	
Male	1,520	75	4.9	0.098
Black race	1,117	46	4.1	
White race	2,604	113	4.3	0.760
Married	2,090	79	3.8	
Not married	1,631	80	4.9	0.092
High school education or greater	2,969	129	4.3	
Less than high school education	750	30	4.0	0.677
Low hypertension knowledge	1,141	56	4.9	
Not low hypertension knowledge	2,580	103	4.0	0.203

**Clinical / Treatment Variables**

Hypertension duration $\geq$ 10 years	2,327	103	4.4	
Hypertension duration < 10 years	1,383	56	4.1	0.583
Charlson comorbidity index score $\geq$ 2†	1,945	88	4.5	
Charlson comorbidity index score < 2†	1,776	71	4.0	0.428
Body mass index: $\geq$ 25 kg/m <sup>2</sup>	2,777	117	4.2	
Body mass index: < 25 kg/m <sup>2</sup>	855	39	4.6	0.661
3+ classes of antihypertensive medication†	1,594	63	4.0	
1 or 2 classes of medication†	1,973	90	4.6	0.372
Calcium Channel Blocker Use†	1,610	56	3.5	
No Calcium Channel Blocker Use†	1,957	97	5.0	0.030
Beta Blocker use†	1,684	74	4.4	
No Beta Blocker use†	1,883	79	4.2	0.770
Angiotension receptor blocker use†	837	37	4.4	
No Angiotension receptor blocker use†	2,730	116	4.3	0.830

Diuretic use†	2,162	87	4.0	
No Diuretic use†	1,405	66	4.7	0.332
Ace Inhibitor use†	1,823	81	4.4	
No Ace Inhibitor use†	1,744	72	4.1	0.643

### ***Health Care System Variables***

Not satisfied with overall health care	155	8	5.2	
Satisfied with overall health care	3,456	148	4.3	0.599
Not satisfied with communication	329	20	6.1	
Satisfied with communication	3,260	135	4.1	0.099
Not satisfied with access to health care	149	7	4.7	
Satisfied with access to health care	3,462	149	4.3	0.817
Reduced medication due to cost	103	6	5.8	
Did not reduce medication due to cost	3,615	153	4.2	0.431
≥ 6 to the primary care physician per year†	956	38	4.0	
< 6 visits to the primary care physician†	2,753	121	4.4	0.580

Filled antihypertensive medications in drug tier 3†	678	27	4.0	
Filled antihypertensive medications in drug tiers 1 and 2 only†	2,889	126	4.4	0.661

### ***Psychosocial / Behavioral Variables***

Ever smoker	1,817	88	4.8	
Never smoker	1,797	68	3.8	0.117
≥ 2 alcoholic beverages / wk	803	38	4.7	
< 2 alcoholic beverages / wk	2,795	117	4.2	0.502
Reduced sexual functioning	2,196	101	4.6	
Normal sexual functioning	1,525	58	3.8	0.238
Depressive symptoms present	477	33	6.9	
Depressive symptoms absent	3,244	126	3.9	0.002
Low health-related quality of life (mental)	1,128	56	5.0	
Not Low health-related quality of life (mental)	2,576	103	4.0	0.182
Low health-related quality of life (physical)	1,228	67	5.5	0.014

Not Low health-related quality of life (physical)	2,476	92	3.7	
Low social support	1,306	68	5.2	
Not low social support	2,415	91	3.8	0.038
Low coping	1,765	73	4.1	
High coping	1,954	86	4.4	0.690
High stress	1,032	59	5.7	
Low stress	2,572	97	3.8	0.010
High Stressful Life Events score	1,035	64	6.2	
Low Stressful Life Events score	2,529	88	3.5	<0.001

### ***Self-Management Behaviors***

Complementary and Alternative Medicine Use	861	37	4.3	
No Complementary and Alternative Medicine Use	2,860	122	4.3	0.968
Blood pressure checks at home	1,988	83	4.2	
No blood pressure checks at home	1,725	76	4.4	0.729

Trying to control or lose weight	2,295	97	4.2	
Not trying to control or lose weight	1,426	62	4.4	0.859
Cutting down on sodium intake	2,928	120	4.1	
Not cutting down on sodium intake	793	39	4.9	0.311
Increasing number of fruits and vegetables	2,646	111	4.2	
Not increasing number of fruits and vegetables	1,075	48	4.5	0.712

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\* Time periods at risk were approximately one year. Participants could contribute up to 2 time periods of risk. Those who declined in adherence at the first time period were excluded from the second time period.

† In the prior year