# Daily routine as a potential intervention mechanism for improved medication taking

Tara Klinedinst, Lauren Opsasnick, Michael Wolf, Rachel O'Conor

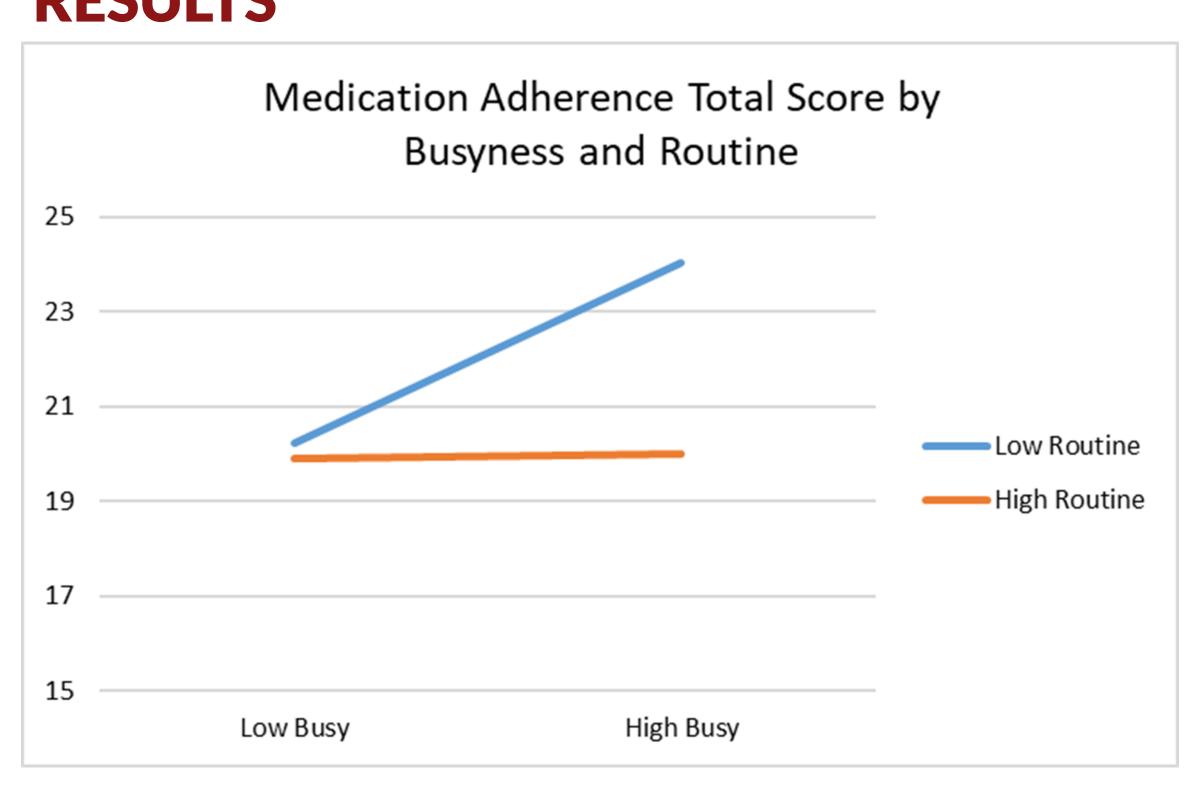
### **INTRO**

- Less than 50% of older adults take their medication as prescribed
- Busyness (density of activities) and routine (patterns of organizing time) make up the structure of daily life and likely impact medication-taking behaviors

### **METHODS**

- N = 405 older adults with adequate cognitive capacity
- Data from an ongoing cognitive aging cohort study of older adults in Chicago
- We grouped daily routine and busyness into tertiles (low, moderate, and high)
- We used multivariable models to assess the effect of busyness and routine tertiles on medication adherence; we included a busyness x routine interaction term in our final model

### **RESULTS**



# Among busy older adults, having a stable daily routine is related to better medication taking behaviors





Feinberg School of Medicine



## DISCUSSION

- This research demonstrates the potential of routine as a modifiable factor in improving medication taking behaviors in busy older adults.
- Daily routines add predictability and facilitate health behaviors

#### Participant characteristics and daily routine and busyness (n=405)

		Routine		Busyness	
Characteristic	n (%)	Mean	p value	Mean	p value
	,	(SD)	•	(SD)	•
Age			0.25	,	<0.001
60-64	44 (10.9)	13.0 (2.5)		18.8 (5.7)	
65-74	239 (59.0)	13.5 (3.1)		17.0 (4.9)	
75+	122 (30.1)	13.8 (2.9)		15.6 (4.2)	
Biological sex	•		0.47	, ,	0.004
Male	114 (28.2)	13.7 (2.9)		15.7 (4.7)	
Female	291 (71.8)	13.4 (3.0)		17.2 (4.9)	
Income	•		<0.001	, ,	0.32
<\$10,000	38 (9.5)	11.1 (3.1)		16.8 (4.9)	
\$10,000 - \$24,999	76 (19.0)	13.1 (3.1)		15.9 (5.0)	
\$25,000 - \$49,999	90 (22.4)	13.4 (2.9)		17.0 (4.6)	
>\$50,000	197 (49.1)	14.2 (2.6)		17.1 (4.9)	
Race			<0.001		0.31
White	229 (56.7)	14.0 (2.8)		16.5 (4.9)	
Black	153 (37.9)	12.6 (3.0)		17.0 (4.9)	
Other	22 (5.4)	14.5 (2.9)		18.0 (4.9)	
Prescription			0.07		0.78
Medications					
0 – 1	77 (19.0)	14.0 (2.6)		17.0 (4.8)	
2 - 4	157 (38.8)	13.7 (2.8)		16.6 (4.6)	
5+	171 (42.2)	13.1 (3.2)		16.9 (5.2)	
Health Literacy			< 0.001		0.09
Adequate	290 (71.6)	13.8 (2.8)		17.1 (4.9)	
Limited	115 (28.4)	12.7 (3.2)		16.1 (4.8)	
MMSE			0.02		0.34
No Impairment	380 (94.1)	13.6 (2.9)		16.9 (4.9)	
Mild Impairment	24 (5.9)	12.2 (3.8)		15.9 (5.3)	

### FINANCIAL DISCLOSURE

This work was completed while the first author was supported by funding from the National Institute on Disability, Independent Living, and Rehabilitation Research and the Administration on Community Living (grant number 12877426). This study was funded by a grant from the National Institutes of Health (R01AG030611), with institutional support from UL1TR001422. The funding agency played no role in the study design, collection of data, analysis or interpretation of data. Dr. O'Conor is supported by the Claude D. Pepper Older Americans Independence Center at Northwestern Feinberg School of Medicine (P30AG059988) and a training grant from the National Institute on Aging (K01AG070107).