

## Supplemental Online Content

Yaffe K, Vittinghoff E, Dublin S, et al. Effect of personalized risk-reduction strategies on cognition and dementia risk profile among older adults: the SMARRT randomized clinical trial. *JAMA Intern Med*. Published online November 27, 2023. doi:10.1001/jamainternmed.2023.6279

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

eTable. Instruments and EHR Definitions Used for Risk Factor Screening and Enrollment Eligibility

<b>Risk Factor</b>	<b>Criteria</b>
Physical inactivity	< 30 minutes moderate intensity most days (<150 minutes/week, Surgeon General guidelines)
Uncontrolled hypertension	Systolic blood pressure (BP) $\geq$ 140 or diastolic BP $\geq$ 90 at least twice in past six months from EHR
Poor sleep	Problems with sleep 3+ nights/week and bothered “somewhat” or more by this
Risky medications	Two or more fills of medication deemed risky for cognition in the same class on the 2015 Beers Criteria in the past six months from EHR pharmacy dispensing data
Depression	Score $\geq$ 10 on the Patient Health Questionnaire-8 <sup>1</sup>
Uncontrolled diabetes	Hemoglobin A1C $\geq$ 8.0 in the past 12 months from EHR
Social isolation	Score $\geq$ 6 on the UCLA 3-Item Loneliness Scale <sup>2</sup>
Smoking	Self-reported current smoking

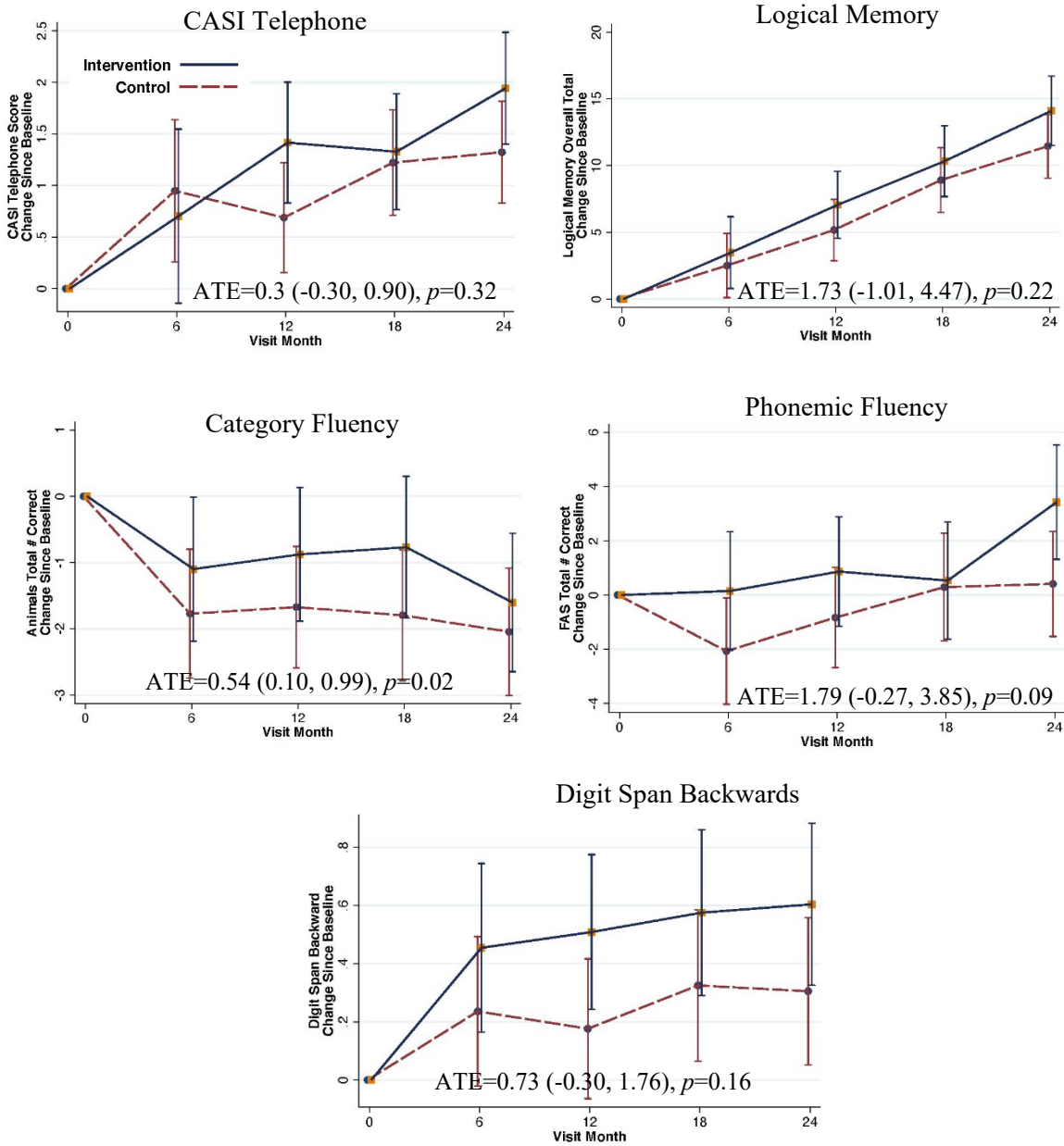
EHR=Electronic Health Records

<sup>1</sup>=Kroenke K, Strine TW, Spitzer RL, Williams JB, Berry JT, Mokdad AH (2009) The PHQ-8 as a measure of current depression in the general population. *J Affect Disord* **114**, 163-173.

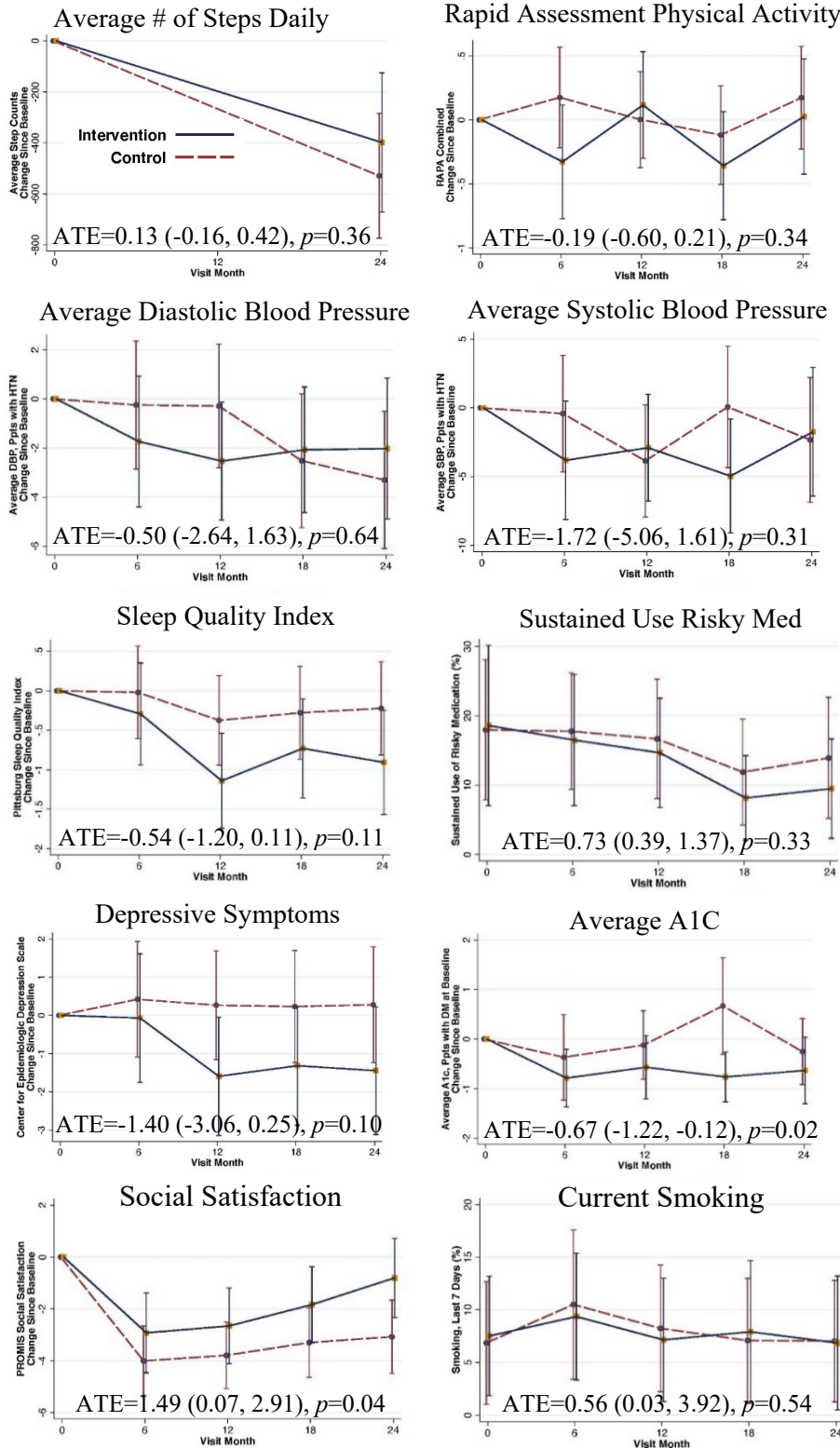
<sup>2</sup>=Hughes ME, Waite LJ, Hawkley LC, Cacioppo JT (2004) A Short Scale for Measuring Loneliness in Large Surveys. *Res Aging* **26**(6): 655-672.

eFigure 1. Individual Cognitive Test Outcomes: Treatment Effect over 24 Months for Cognitive Tests in the SMARTT Study

ATE = Fully adjusted average treatment effect; adjusted for sex, race/ethnicity, education, Elixhauser comorbidity score, and visit by phone. The graphs show the scales of the individual cognitive measures.



eFigure 2. Individual Risk Factor Outcomes: Treatment Effect over 24 Months for Individual Risk Factor Outcomes in the SMARRT Study. ATE = Fully adjusted average treatment effect; adjusted for sex, race/ethnicity, education, Elixhauser comorbidity score, and visit by phone. Lower score is better for Sleep Quality Index and Depressive Symptoms. The graphs show the scales of the individual outcome measures. Analyses for uncontrolled hypertension, uncontrolled diabetes, and risky medications were performed only in individuals who had those risk factors at baseline.



eFigure 3. Primary and secondary outcomes in the Systematic Multi-Domain Alzheimer’s Risk Reduction Trial (SMARRT) by treatment group, models adjusted for sex, race/ethnicity, education, comorbidity score and phone assessment.

