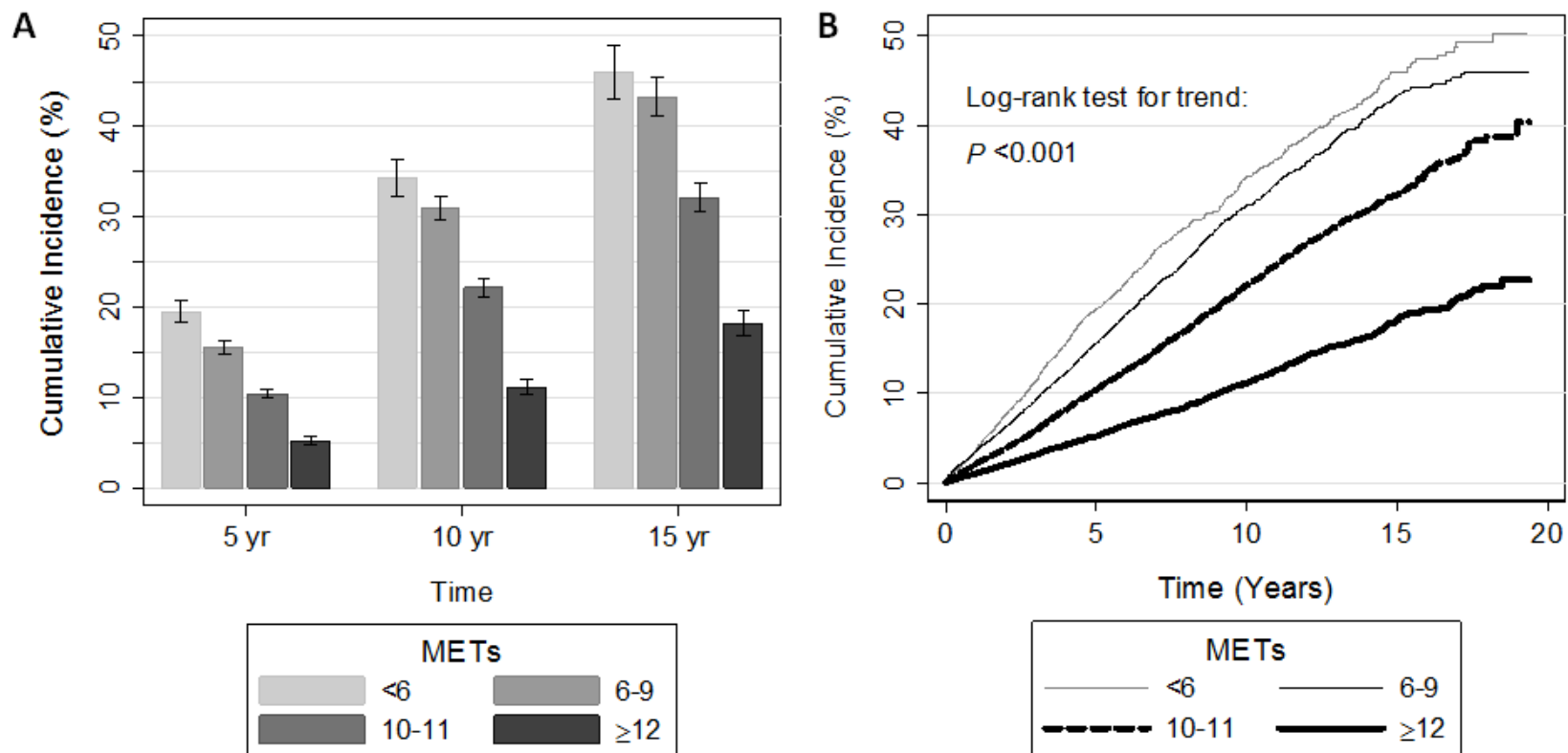


SUPPLEMENTARY DATA

**Supplementary Figure 1.** (A) Cumulative incidence (%) of incident diabetes at 5-, 10-, and 15-yr by category of peak baseline metabolic equivalents (METs): <6 (light gray), 6-9, 10-11, and  $\geq 12$  (dark gray). (B) Kaplan-Meier cumulative incidence curve of incident diabetes by category of METs. *P*-value was determined via a log-rank test.

### Incident Diabetes



SUPPLEMENTARY DATA

**Supplementary Table 1. Association between METs achieved and incident diabetes (hazard ratios, 95% CI) among patients without a diagnosis of diabetes at baseline within different strata of hemoglobin A1c (A1c)**

	Hazard Ratio (95% CI)			<i>P</i> -interaction*
	Normal A1c <5.7% (N = 2,130)	Pre-diabetic A1c 5.7-6.4% (N = 2,157)	Diabetic A1c ≥6.5% (N = 659)	
<b>Categories of fitness</b>				
<6	1.0 (reference)	1.0 (reference)	1.0 (reference)	0.29
6-9	1.08 (0.68, 1.71)	1.06 (0.80, 1.39)	1.11 (0.85, 1.44)	
10-11	0.79 (0.49, 1.29)	0.92 (0.69, 1.23)	0.76 (0.57, 1.02)	
≥12	0.64 (0.37, 1.13)	0.58 (0.39, 0.85)	0.85 (0.55, 1.31)	
<i>P</i> trend across categories as ordinal variable	0.02	0.006	0.03	
<b>METS per 1 unit</b>	0.93 (0.88, 0.98)	0.95 (0.91, 0.98)	0.96 (0.92, 0.99)	0.14
<i>P</i> value	0.006	0.005	0.03	

Note: METs were assessed via treadmill testing conducted between January 1, 1991 and May 28, 2009. Hemoglobin A1c was measured within 1 year of treadmill testing. Hemoglobin A1c ranges in mmol/mol are <39, 39-47, ≥48.

Adjusted for age, sex, race, history of hypertension, hypertension medication use, angiotensin-converting enzyme inhibitor use, angiotensin II- receptor blocker use, beta-blocker use, diuretic use, history of hyperlipidemia, lipid-lowering medication use, statin use, history of obesity, family history of coronary heart disease, current smoking status, physical activity, pulmonary disease medication use, depression medication use, indication for stress testing, percent heart rate achieved, resting systolic blood pressure, and resting diastolic blood pressure

\*Comparison of hemoglobin A1c strata interaction terms via Wald tests and F-statistics

SUPPLEMENTARY DATA

**Supplementary Table 2. Association between metabolic equivalents (METs) achieved and incident diabetes among patients without diabetes at baseline (hazard ratios, 95% CI) among patients with a hemoglobin A1c < 6.5% (<48 mmol/mol), N = 4,287**

	Hazard Ratio (95% CI)		
	Model 1	Model 2	Model 3
<b>Categories of fitness</b>			
<6	1.0 (reference)	1.0 (reference)	1.0 (reference)
6-9	1.03 (0.81, 1.30)	1.04 (0.82, 1.31)	1.05 (0.83, 1.32)
10-11	0.79 (0.62, 1.01)	0.85 (0.67, 1.09)	0.86 (0.67, 1.10)
≥12	0.48 (0.35, 0.65)	0.55 (0.40, 0.75)	0.55 (0.40, 0.76)
<i>P</i> trend across categories as ordinal variable	<0.001	<0.001	<0.001
<b>METS per 1 unit</b>	0.91 (0.89, 0.94)	0.93 (0.90, 0.96)	0.93 (0.90, 0.96)
<i>P</i> value	<0.001	<0.001	<0.001

Note: METs were assessed via treadmill testing conducted between January 1, 1991 and May 28, 2009. Hemoglobin A1c was measured within 1 year of treadmill testing.

Model 1: Adjusted for age, sex, race

Model 2: Model 1 + history of hypertension, hypertension medication use, angiotensin-converting enzyme inhibitor use, angiotensin II- receptor blocker use, beta-blocker use, diuretic use, history of hyperlipidemia, lipid-lowering medication use, statin use, history of obesity, family history of coronary heart disease, and current smoking status

Model 3: Model 2 + physical activity, pulmonary disease medication use, depression medication use, and indication for stress testing

SUPPLEMENTARY DATA

**Supplementary Table 3. Association between metabolic equivalents (METs) achieved and incident diabetes among patients without diabetes at baseline (hazard ratios, 95% CI) among patients with a body mass index measurement, N = 11,750**

	Hazard Ratio (95% CI)		
	Model 1	Model 2	Model 3
<b>Categories of fitness</b>			
<6	1.0 (reference)	1.0 (reference)	1.0 (reference)
6-9	0.90 (0.81, 1.01)	0.91 (0.81, 1.02)	0.99 (0.88, 1.11)
10-11	0.72 (0.64, 0.82)	0.78 (0.69, 0.88)	0.90 (0.79, 1.02)
≥12	0.45 (0.38, 0.52)	0.52 (0.44, 0.60)	0.64 (0.54, 0.75)
<i>P</i> trend across categories as ordinal variable	<0.001	<0.001	<0.001
<b>METS per 1 unit</b>	0.92 (0.91, 0.94)	0.94 (0.92, 0.95)	0.96 (0.94, 0.97)
<i>P</i> value	<0.001	<0.001	<0.001

Note: METs were assessed via treadmill testing conducted between January 1, 1991 and May 28, 2009.

Model 1: Adjusted for age, sex, race

Model 2: Model 1 + history of hypertension, hypertension medication use, angiotensin-converting enzyme inhibitor use, angiotensin II- receptor blocker use, beta-blocker use, diuretic use, history of hyperlipidemia, lipid-lowering medication use, statin use, history of obesity, family history of coronary heart disease, current smoking status, physical activity, pulmonary disease medication use, depression medication use, and indication for stress testing

Model 3: Model 2 + body mass index