SUPPLEMENTAL FIGURE LEGENDS

Supplemental Figure 1. Distribution of the cumulative number of health-related deficits among Health ABC participants. Health ABC participants were scored with respect to the 45 health deficits listed in Supplemental Table 2. The grey background region outlines the fraction of participants categorized as "frail" according to published guidelines (i.e., index > 0.20, see Searle et al. 2008, *BMC Geriatr* 8:24).

Supplemental Figure 2. Overview of data mining procedure used to identify variables that best predict mortality in the Health ABC cohort. A total of 3300 variables were identified using information collected from Health ABC participants during baseline (year 1) examinations (X_1, X_2… X_{3300}). Of these variables, we identified 825 that met inclusion criteria (X_1, X_2… X_{825}). One or more data vectors were generated from each of the 825 variables (i.e., 0-1 indicators for categorical variables or alternatively scaled versions of each continuous variable), which yielded a total of 3683 representative data vectors (V_1, V_2… V_{3683}) that were examined in cross-validation simulation trials. The 3683 vectors were evaluated using a computationally efficient procedure in which all vectors were first screened using a small number of simulation trials, with subsequent re-evaluation of only high-scoring vectors using a larger number of simulation trials. In the first cross-validation screen, all 3683 vectors were evaluated using 30 cross-validation trials per vector. From these experiments, the top 500 vectors with strongest prognostic value were identified (i.e., those with the largest mean AUC in the 30 cross-validation trials; $V_{(1)}$, $V_{(2)}$… $V_{(500)}$). In the second screen, the top 500 vectors were re-evaluated using 300 cross-validation trials per vector. From these experiments, the to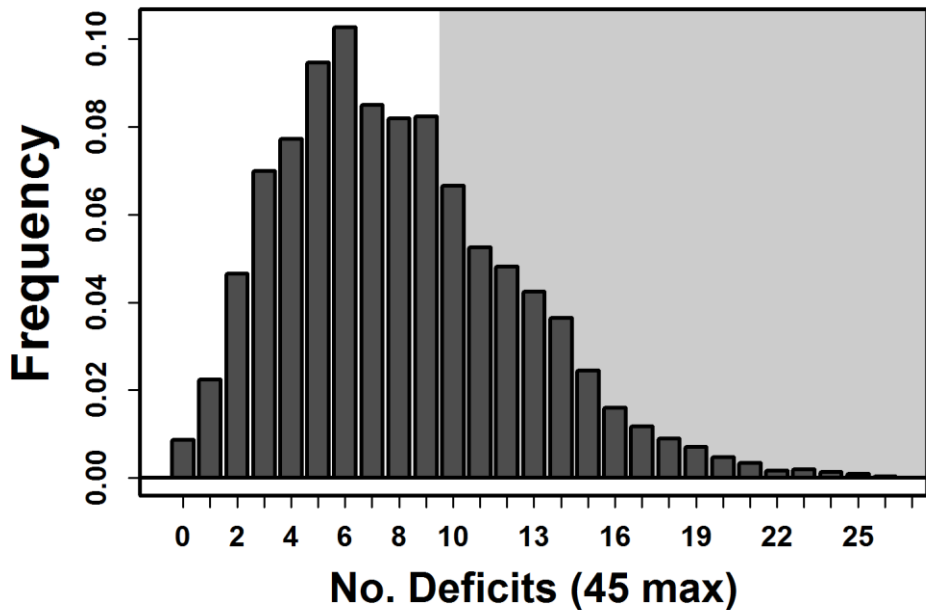p 50 vectors with strongest prognostic value were identified ($V_{(1)}$, $V_{(2)}$… $V_{(50)}$). In the third screen, relative value of the top 50 vectors was

established by calculating the average AUC across 30,000 simulation trials. The 50 vectors were then re-assigned to the variables from which they were derived, yielding a ranking of the top p variables (with $p \leq 50$). If two or more vectors mapped to the same variable, then the largest mean AUC estimate among all associated vectors was assigned to that variable.
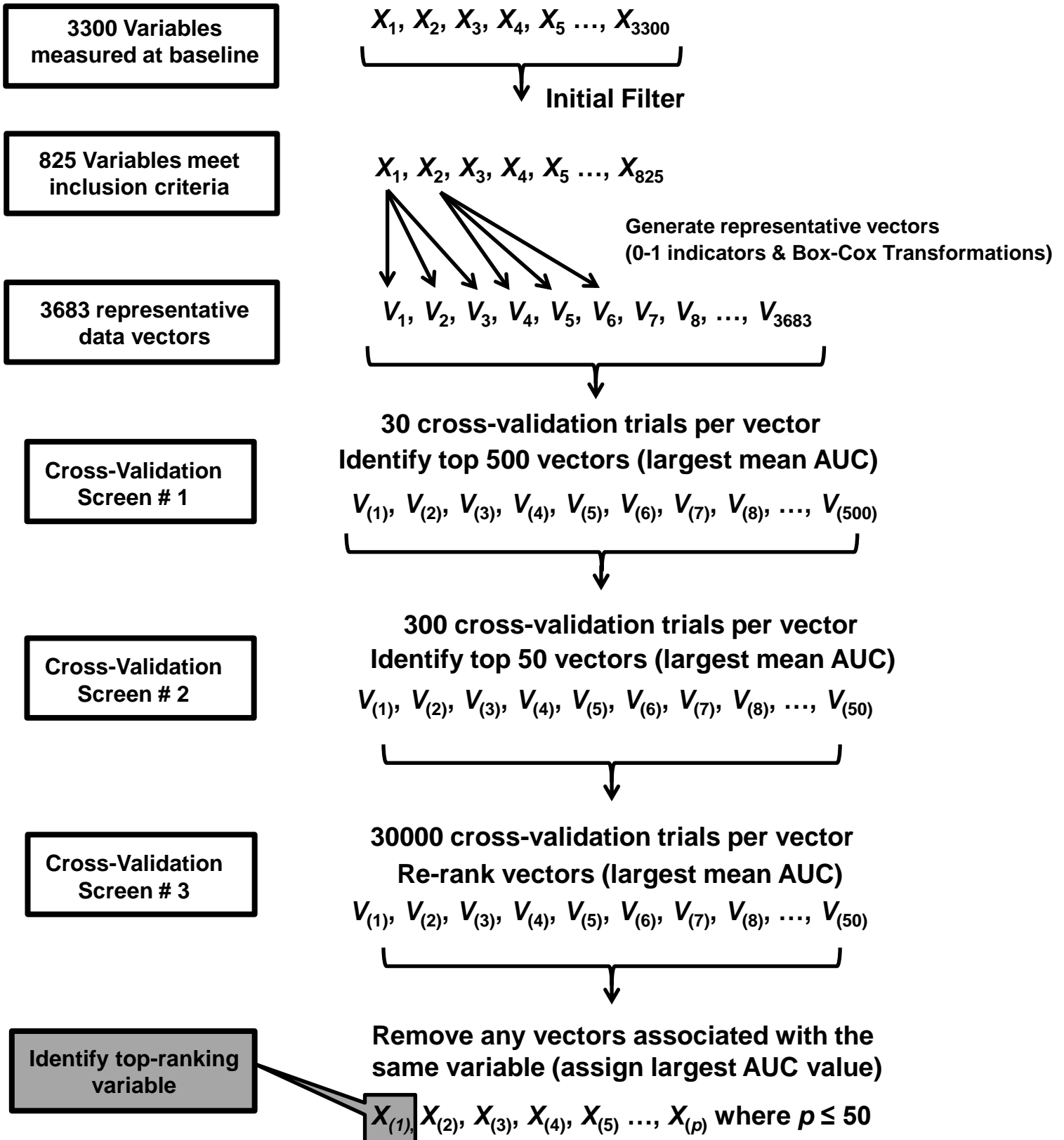
Supplemental Figure 3. DSST score and cystatin C predict mortality better than chronological age and a health deficit index in the full Health ABC cohort and 24 of 25 subgroups. Ten-fold cross-validation was used to evaluate the relative prognostic value of DSST score, cystatin C, chronological age, and a 45-variable health deficit index (Supplemental Table 2) in the full Health ABC cohort and each of 25 subgroups. The horizontal axis shows the average AUC among 20,000 simulation trials conducted for each variable with respect to each participant group. Error bars denote the standard deviation among all 20,000 AUC estimates (standard errors are < 0.001 in each case). To ensure comparability among variables, calculations were performed using the same sample size in each group (n values are listed in the left margin), with any missing values imputed using the nearest neighbor method. For each subgroup, an asterisk symbol (*) denotes the largest average AUC value among the four variables.

Supplemental Figure 4. DSST score and cystatin C improve the prediction accuracy of models that already include age and sex. Ten models were evaluated based upon their ability to predict mortality among HABC participants, including five univariate models (top) and five multivariate models (bottom). The average AUC was calculated for each model based upon 20,000 cross-validation trials (right margin). Error bars show the standard deviation among AUC estimates in the 20,000 cross-validation trials.
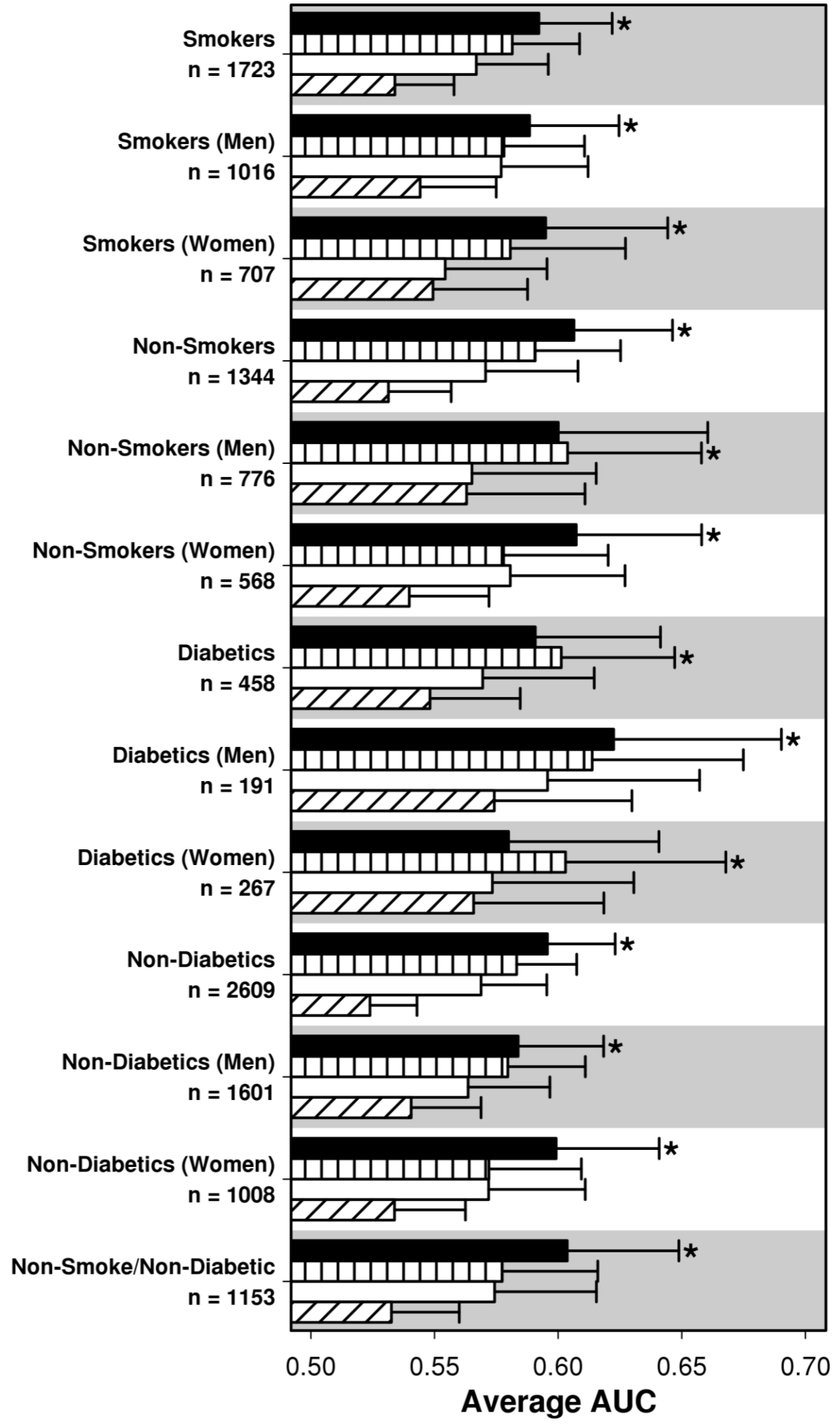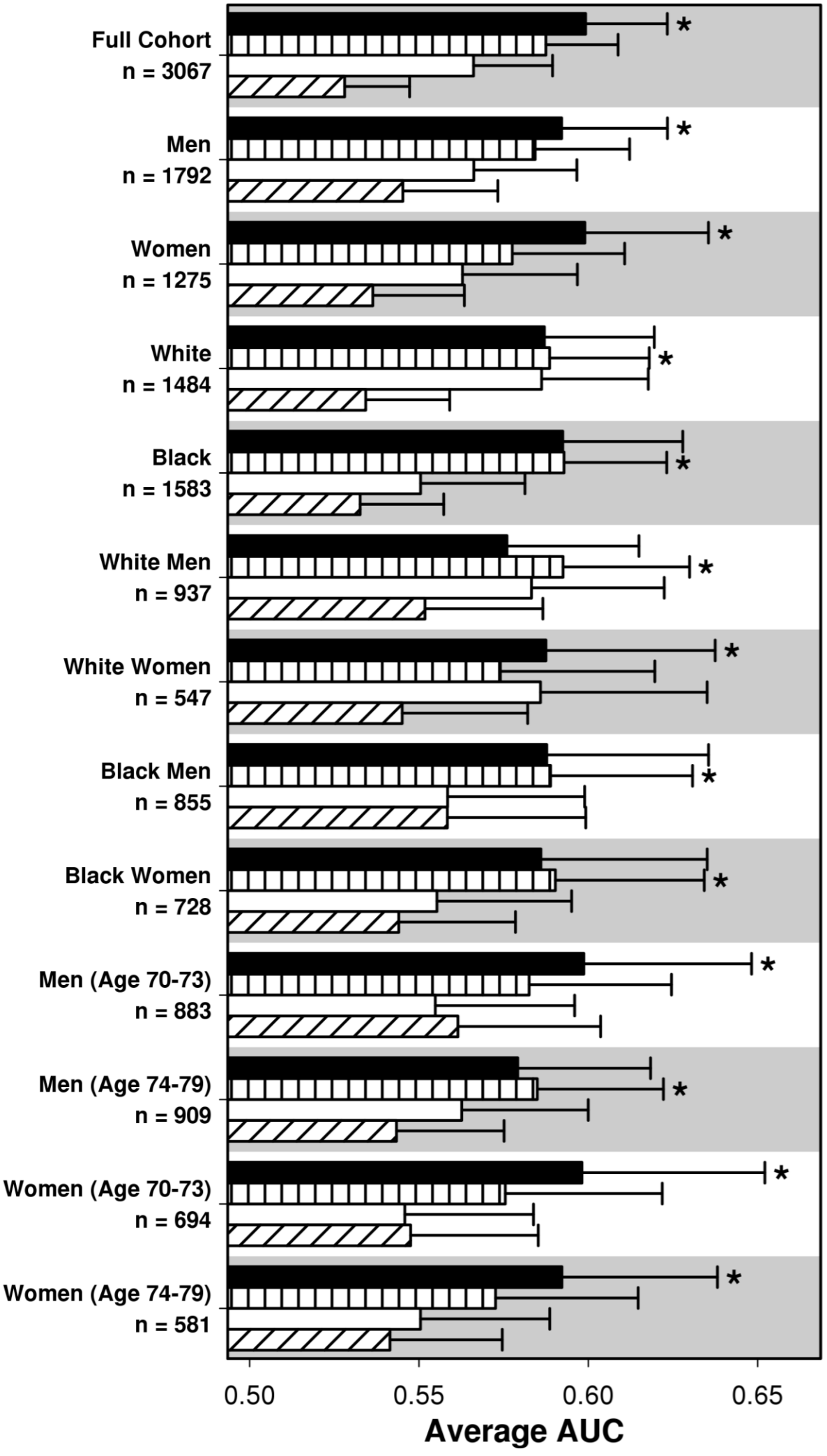
Supplemental Figure 1
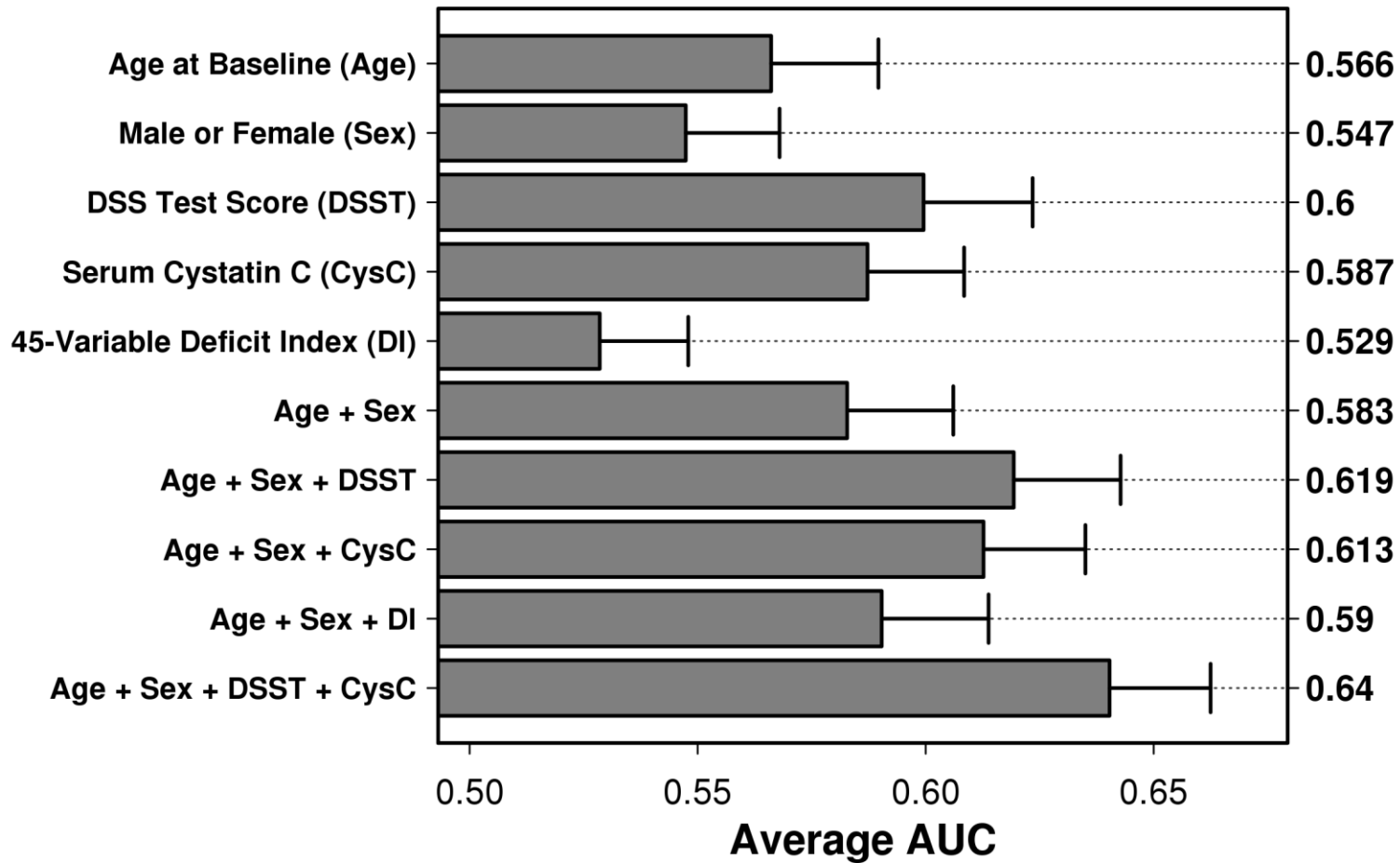
Data Mining Procedure (Overview)

3300 Variables measured at baseline	$X_1, X_2, X_3, X_4, X_5 \ldots, X_{3300}$

Initial Filter

825 Variables meet inclusion criteria	$X_1, X_2, X_3, X_4, X_5 \ldots, X_{825}$

Generate representative vectors
(0-1 indicators & Box-Cox Transformations)

3683 representative data vectors	$V_1, V_2, V_3, V_4, V_5, V_6, V_7, V_8, \ldots, V_{3683}$

30 cross-validation trials per vector
Identify top 500 vectors (largest mean AUC)

Cross-Validation Screen # 1	$V_{(1)}, V_{(2)}, V_{(3)}, V_{(4)}, V_{(5)}, V_{(6)}, V_{(7)}, V_{(8)}, \ldots, V_{(500)}$

300 cross-validation trials per vector
Identify top 50 vectors (largest mean AUC)

Cross-Validation Screen # 2	$V_{(1)}, V_{(2)}, V_{(3)}, V_{(4)}, V_{(5)}, V_{(6)}, V_{(7)}, V_{(8)}, \ldots, V_{(50)}$

30000 cross-validation trials per vector
Re-rank vectors (largest mean AUC)

Cross-Validation Screen # 3	$V_{(1)}, V_{(2)}, V_{(3)}, V_{(4)}, V_{(5)}, V_{(6)}, V_{(7)}, V_{(8)}, \ldots, V_{(50)}$

Remove any vectors associated with the same variable (assign largest AUC value)

Identify top-ranking variable	$X_{(1)}, X_{(2)}, X_{(3)}, X_{(4)}, X_{(5)} \ldots, X_{(p)}$ where $p \leq 50$

Supplemental Figure 3

Supplemental Figure 4

Model	Average AUC
Age at Baseline (Age)	0.566
Male or Female (Sex)	0.547
DSS Test Score (DSST)	0.6
Serum Cystatin C (CysC)	0.587
45-Variable Deficit Index (DI)	0.529
Age + Sex	0.583
Age + Sex + DSST	0.619
Age + Sex + CysC	0.613
Age + Sex + DI	0.59
Age + Sex + DSST + CysC	0.64

Supplemental Table 1. Characteristics of the Health ABC cohort at baseline examination.

The table lists the mean (standard deviation) for key baseline measures among men and women in the Health ABC cohort. Sample sizes differ slightly among variables since missing values were excluded from calculations ($1562 \leq n \leq 1583$ for men; $1459 \leq n \leq 1484$ for women).

Variable	Men	Women
Age	74.31 (2.87)	74.03 (2.87)
Body Weight (Kg)	81.35 (13.2)	70.56 (14.71)
Body Mass Index (Kg/m2)	27.05 (3.92)	27.7 (5.49)
Sitting systolic BP (mmHg)	135.14 (20.78)	136.44 (21.2)
Sitting diastolic BP (mmHg)	72.68 (11.37)	70.17 (11.88)
Cystatin C (mg/L)	1.08 (0.36)	1.01 (0.33)
Creatinine (mg/dL)	1.18 (0.44)	0.95 (0.36)
DSST score	33.75 (14.42)	37.04 (14.59)
Smoking (pack-years)	26.37 (31.05)	12.27 (22.85)

Supplemental Table 2. Components of the 45-variable health deficit index. The index was constructed following guidelines proposed by Searle et al. 2008 (*BMC Geriatr* 8:24). The individual variables were scored dichotomously as a deficit (value = 1) or a non-deficit (value = 0). For each Health ABC participant, these scored values (0 or 1) were summed across the 45 variables and the index value was equal to the sum total, divided by the total number of variables (i.e., 45).

Variable Index	Description	Scored as Deficit
1	In general how would you say your health is? (1 = excellent; 2 = very good; 3 = good; 4 = fair; 5 = poor; 6 = don't know; 7 = refused)	5 = poor
2	During the past 12 months, have you been a patient in the hospital for more than one night? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
3	During the past 12 months, did you stay in bed all or most of the day because of an illness or injury? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
4	During the past 12 months, did you cut down on things you usually do, such as going to work out or work around the house, because of an illness or injury? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
5	During the past 12 months, did you have the flu or a flu-like illness that kept you in bed for at least a day? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
6	Because of a health or physical problem, do you have difficulty standing up from a chair without using your arms? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
7	Because of a health or physical problem, do you have difficulty lifting or carrying something weighing 10 pounds, for example a small bag of groceries or an infant? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
8	Because of a health or physical problem, do you have difficulty stooping, crouching or kneeling? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
9	Do you have any difficult pushing or pulling large objects, like a living room chair? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
10	Do you have any difficulty doing heavy work around the house like vacuuming, shoveling snow, mowing or raking the lawn, gardening or scrubbing windows, walls or floors? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes

11	Do you have any difficult using your fingers to grasp or handle? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
12	Do you have any difficulty rasing your arms up over your head? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
13	Do you have an illness or condition that interferes with your appetite or ability to eat? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
14	Are there days when you don't feel like eating at all? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
15	Because of a health or physical problem, do you have any difficulty preparing meals? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
16	Because of a health or physical problem, do you have any difficulty shopping for food? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
17	At the present time, do you feel like you are underweight, about the right weight, or overweight? (1 = underweight; 2 = about the right weight; 3 = overweight; 8 = don't know; 7 = refused)	1 = underweight or 3 = overweight
18	Did you experience any bodily pain in the last 30 days? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
19	Has a doctor ever told you that you have arthritis? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
20	Have you ever had pain lasting at least one month in or around the knee? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
21	Have you ever had pain lasting at least one month in or around either hip? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
22	In the past 12 months, have you had pain lasting at least one month in your feet, toes or ankles? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
23	In the past 12 months, have you had pain lasting at least one month in either shoulder? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
24	In the past 12 months, have you had pain lasting at least one month in your neck? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
25	In the past 12 months, have you had any pain in your back? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
26	During the past 12 months, have you fallen and landed on the ground or floor? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
27	During the past 12 months, have you fainted, blacked out or lost consciousness? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes

28	Has a doctor ever told you that you have osteoporosis, sometimes called thin or brittle bones? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
29	Has a doctor ever told you that you broke or fractured a bone after the age of 45? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
30	Has a doctor ever told you that you had a fracture of the spine or of a vertebrae? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
31	Has a doctor ever told you that you had heart attack or myocardial infarction? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
32	Has a doctor ever told you that you had congestive heart failure? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
33	Has a doctor ever told you that you had stroke, CVA, or cerebrovascular accident? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
34	Has a doctor ever told you that you had hypertension or high blood pressure? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
35	Have you ever had any pain or discomfort in your chest? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
36	Do you get a pain or discomfort in your leg(s) when you walk? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
37	Has a doctor ever told you that you have asthma? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
38	Has a doctor ever told you that you had cancer, a malignant growth, or malignant tumor? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
39	Has a doctor ever told you that a stomach, or duodenal ulcer? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
40	Has a doctor ever told you that you had diabetes or sugar diabetes? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
41	In the past 12 months, have you leaked even a small amount of urine untintentionally? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
42	Has a doctor ever told you that you have glaucoma? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
43	Has a doctor ever told you that you have macular degeneration? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
44	Do you wear a hearing aid? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes
45	Do you feel that any difficulty with your hearing limits or hampers your social life? (1 = yes; 2 = no; 8 = don't know; 7 = refused)	1 = yes

Supplemental Table 3. Partial list of phenotypic and genetic measures included in screen (483 of 825 measures). A total of 825 variables were identified that satisfied all inclusion criteria and were screened as part of the data mining procedure described in the manuscript (see Supplemental Figure 2). Variables were generated based upon information collected during a telephone interview, final eligibility assessment, recruitment status form and baseline questionnaire, imaging data processed and interpreted by specialists (e.g., soft tissue computed tomography, DXA and ECG), biospecimen analysis (e.g., blood and urine), and analysis of genetic polymorphisms. The table lists a subset of the 825 measures (483 / 825) that were significantly associated with mortality in univariate Cox regression models (P < 0.05). Variables in the table are ranked according to the p-value (final column) associated with the estimated hazard ratio (fourth column). Cox regression models were fit based upon mortality data from *n* HABC participants lacking missing data with respect to a given variable (see third column).

HABC Variable ID	Description	*n*	HR (95% CI)	P-value
CYST_UNCAL1	Serum cystatin C (mg/L)	3038	1.79 (1.66,1.93)	1.22E-51
DSS	DSST score (No. correct substitutions)	3028	0.977 (0.974,0.981)	2.21E-36
CREATIN1	Serum creatinine (mg/dL)	3041	1.44 (1.36,1.53)	1.14E-34
MMMSCORE	Teng 3MS score (0 – 100) (Teng and Chui 1987, J Clin Psychiatry 48:314-318)	3057	0.97 (0.966,0.975)	7.26E-31
HABCPPB	Health ABC performance score (0 - 4) (Simonsick et al 2001, J Gerontol A Biol Sci Med Sci 56:M644-M649)	2950	0.591 (0.537,0.649)	1.04E-27
MHHCCHF	Has a Dr. ever told you that you have congestive heart failure? 1 if yes, 0 otherwise.	3066	3.21 (2.55,4.04)	3.44E-23
FSBTIME	Full standing balance test time (0 – 90 secs)	3003	0.991 (0.989,0.993)	2.79E-20
FSBRATIO	Standing balance time ratio (i.e., full standing balance test time (0 - 90 secs) divided by 90)	3003	0.429 (0.359,0.514)	2.79E-20
EPESEPPB	EPESE performance battery score (0 - 12) (Studenski et al. 2003, J Am Geriatr Soc 51:314-322)	3015	0.863 (0.836,0.89)	3.54E-20
SIXMWTM	Time to walk 6 m (sec)	3044	1.2 (1.15,1.25)	1.02E-19
BASEAGE	Age at baseline exam	3067	1.09 (1.07,1.11)	1.26E-19
Y1UWPACE	Walking speed (m/sec) over 6 m	3047	0.349 (0.278,0.439)	2.37E-19
Y1UWRATIO	Usual walk performance ratio (i.e., walking speed (m/sec) over 3, 4, or 6 m divided by 2)	3047	0.122 (0.0772,0.193)	2.57E-19
Y1cargly	Indicator variable for antiarrhythmic meds. 1 if yes, 0 otherwise.	3058	2.19 (1.84,2.6)	4.33E-19
P3UPTM1	Balance walks: usual pace trial 1 time	3043	1.14 (1.11,1.18)	4.73E-18
WHENSTOP	Was long distance corridor walk completed? 1 if yes, 0 otherwise.	3067	0.608 (0.543,0.681)	5.96E-18
QRS	ECG QRS duration	3060	1.01 (1.01,1.01)	2.23E-17
P3UPTM2	Balance walks: usual pace trial 2 time	3043	1.17 (1.12,1.21)	9.4E-17
PACKYR1	Pack-years exposure to cigarettes	3021	1.01 (1,1.01)	9.59E-17

TOTPF	Total % body fat	2959	0.971 (0.964,0.978)	2.91E-16
WKAINDEX	Walking ability index (0 = unable; 9 = easy)	2962	0.873 (0.845,0.902)	3.63E-16
NWPACE	Walking speed for narrow walk (6 m)	3044	0.643 (0.578,0.715)	4.68E-16
NWRATIO	Narrow walk performance ratio (i.e., walking speed for narrow 6 m walk divided by 2)	3044	0.415 (0.336,0.513)	4.69E-16
SMK1	smoking: 1 if current smoker, 0 otherwise	3062	1.84 (1.58,2.13)	9.5E-16
RESISTIN1	Plasma resistin (ng/mL)	3038	1.01 (1.01,1.01)	5.11E-15
HG_A1C1	Hemoglobin A1c (%)	2989	1.17 (1.12,1.21)	1.53E-14
FPLDKKWK	Kcal/kg/week doing laundry	3050	0.921 (0.901,0.941)	7.82E-14
Y1rxtot	Total number of prescription medications	3048	1.07 (1.05,1.09)	1E-13
EASEQM	Ease walking 1/4 mice (0 = unable; 6 = easy)	2962	0.721 (0.661,0.786)	1.03E-13
P1GLU	Was glucose tolerance test done? 1 if yes, 0 otherwise.	3053	0.628 (0.556,0.71)	1.11E-13
Y1loopdi	Indicator variable for diuretic use with congestive heart failure. 1 if yes, 0 otherwise.	3058	1.99 (1.66,2.39)	1.5E-13
CRP_LCBR1	Serum c-reactive protein (ug/mL, core measurement by LCBR)	3031	1.03 (1.02,1.04)	1.63E-13
MHHCHAMI	Has a Dr. ever told you that you had a heart attack? 1 if yes, 0 otherwise.	3065	0.59 (0.513,0.679)	1.66E-13
EASE1M	Ease walking 1 mine (0 = difficult; 3 = very easy)	2962	0.845 (0.808,0.884)	1.88E-13
Y1dibdrg	Indicator variable for insulin and antidiabetic medications. 1 if yes, 0 otherwise.	3058	1.67 (1.46,1.92)	1.96E-13
P4BLU2	Teng MMS, Question 17a. What three words did I ask you to remember earlier? 1 if participant correctly recalls the word "blue", 0 otherwise.	3055	0.624 (0.549,0.708)	3.34E-13
GENDER	Sex. 1 if female, 0 otherwise.	3067	0.678 (0.611,0.753)	3.65E-13
SBSCORE	EPESE summary score for standing balance results	3064	3.71 (2.59,5.3)	6.58E-13
LBSGDIAB	Has a Dr. ever told you that you have diabetes? 1 if no, 0 otherwise.	3066	0.622 (0.546,0.708)	6.67E-13
BQSC100	Have you smoked at least 100 cigarettes? 1 if yes, 0 otherwise.	3067	1.48 (1.33,1.65)	7.7E-13
LPFICD	Do you (and your husband/wife/partner) own any CDs (certificates of deposit), savings bonds, or treasury bills? 1 if no, 0 otherwise.	3027	1.47 (1.32,1.64)	8.18E-13
P4LCRY	In what way are laughing and crying alike? 1 if participant answers erroneously or refuses to answer (e.g., states differences, gives unrelated answer), 0 otherwise.	3054	1.51 (1.35,1.7)	1.37E-12
LONGQRS	ECG long QRS duration	3060	1.83 (1.55,2.17)	1.71E-12
VDEFCOD	1 if participant has ventricular conduction defect of type "intraventricular block", 0 otherwise.	3067	3.75 (2.59,5.42)	2.26E-12

LLFEV1R6	Lower limit of normal FEV1/FEV6 based on reference range published in Hankinson	3067	0.811 (0.765,0.86)	2.6E-12
HR	Heart rate	3066	1.02 (1.01,1.02)	4.42E-12
P4LKE	Teng MMS, Question 14b.Please write the following sentence: I would like to go out. 1 if participant correctly writes the word "like", 0 otherwise.	3050	0.535 (0.447,0.64)	7.6E-12
P3SEC	Seconds to complete 5 chair stands	2958	1.04 (1.03,1.05)	7.87E-12
RTHSFD	R Thigh Subcutaneous Fat Density (HU)	3008	1.02 (1.01,1.02)	8.94E-12
CSRATIO	Chair stands performance ratio (i.e., chair stands per second divided by 1). Value = 1 if ratio is larger than 1.	3028	0.205 (0.13,0.324)	8.95E-12
THSFDavg	Thigh subcutaneous fat density (average of left and right thigh, HU)	3008	1.02 (1.01,1.02)	9.7E-12
P4HON2	Teng MMS, Question 17c. What three words did I ask you to remember earlier? 1 if participant spontaneously recalls the word "honesty", 0 otherwise.	3054	0.687 (0.617,0.765)	1.02E-11
LTHSFD	Left thigh subcutaneous fat density (HU)	3008	1.02 (1.01,1.02)	1.51E-11
DID2MINW	Completed 2 minute walk? 1 if yes, 0 otherwise.	3067	0.631 (0.551,0.723)	2.82E-11
FPHOSP12	During the past 12 months, have you been a patient in a hospital for one or more nights? 1 if no, 0 otherwise.	3066	0.638 (0.559,0.729)	3E-11
P4SCR	Teng MMS, Question 9.What animals have four legs? Tell me as many as you can.	3053	0.939 (0.922,0.957)	3.13E-11
P320TR1	20 cm narrow walk (trial 1). Did participant stay inside the lines? 1 if yes, 0 otherwise.	3034	0.68 (0.607,0.763)	3.81E-11
BQWT25	What was your usual weight at about age 25? If you don't remember exactly, please make your best guess	2993	1.01 (1,1.01)	4.53E-11
P4BLRM	Teng MMS, Question 5b. What three words did I ask you to remember earlier? 1 if participant spontaneously recalls the word "blue", 0 otherwise.	3057	0.669 (0.594,0.755)	6.31E-11
LTHBONE	Left thigh bone area (cm-sq)	3018	1.15 (1.1,1.2)	6.98E-11
P320TR2	20 cm narrow walk (trial 2). Did participant stay inside the lines? 1 if yes, 0 otherwise.	3034	0.685 (0.611,0.767)	7.06E-11
ITAREA	Inter trochanter area (cm-sq)	3040	1.04 (1.03,1.05)	8.01E-11
CHR5PACE	Chair stands per second (i.e., number of chair stands completed in 5 seconds divided by 5)	3028	0.222 (0.141,0.35)	8.43E-11
NWSCORE	EPESE category for narrow walk. 1 if catgory 4 (best performance), 0 otherwise.	3044	0.692 (0.619,0.774)	9.35E-11
P3TR1	Standing balance (Trial 1): I would like you to try to stand on one	2961	0.62 (0.536,0.718)	1.5E-10

	leg for 30 seconds. You may stand on either leg, whichever is more comfortable. Try to hold your foot up until I say stop. If you lose your balance put your foot down. 1 if participant holds position for 30 seconds, 0 otherwise.			
BQUWOWRW	At the present time, do you feel like you are underweight, about the right weight, or overweight? 1 if "overweight", 0 otherwise.	3062	0.711 (0.64,0.789)	1.63E-10
ABVFD	Abdomen visceral fat density (HU)	2954	1.02 (1.01,1.02)	2.95E-10
CSAINDEX	Climbing stairs ability index (0 = unable; 9 = easy)	2961	0.898 (0.869,0.929)	3.07E-10
GLUCOSE1	Serum glucose (mg/dL)	3040	1 (1,1)	3.12E-10
HTOTAREA	Hip total area (cm-sq)	3040	1.03 (1.02,1.03)	3.61E-10
RTHBONE	Right thigh bone area (cm-sq)	3019	1.15 (1.1,1.19)	4.68E-10
DID6MNW	Was the 6 m narrow walk completed? 1 if yes, 0 otherwise.	3046	0.655 (0.573,0.749)	5.44E-10
LPFIMF	Do you (are your husband/wife/partner) own any stock or stock mutual funds? 1 if no, 0 otherwise.	3027	1.4 (1.26,1.56)	8.32E-10
MHCSSURG	Have you ever had any medical or surgical procedure in your heart, neck or blood vessels, such as angioplasty or bypass surgery? 1 if yes, 0 otherwise.	3067	1.51 (1.32,1.72)	8.63E-10
PM50CUR	Percent weight change from age 50 to baseline exam	2961	0.987 (0.983,0.991)	9.29E-10
HHKKWK	Kcal/kg/week doing household chorse	3067	0.995 (0.993,0.996)	9.97E-10
Y1nitrat	Indicator variable for antianginal medications. 1 if yes, 0 otherwise.	3058	1.83 (1.5,2.22)	1.01E-09
FPHSTAT	In general, how would you say your health is? 1 if "fair", 0 otherwise.	3066	1.51 (1.32,1.72)	1.02E-09
LPFIIRA	Do you (and your husband/wife/partner) own an IRA or a KEOGH account? 1 if no, 0 otherwise.	3030	1.4 (1.26,1.57)	1.36E-09
OMUTEETH	Do you have any remaining natural teeth? 1 if yes, 0 otherwise.	3060	0.693 (0.615,0.78)	1.46E-09
BQWTMAX	What is the most you've ever weighed?	3049	1 (1,1.01)	1.6E-09
FAST8GLU1	Fasting serum glucose (mg/dL)	2972	1 (1,1)	1.63E-09
RTHSFA	Right thigh subcutaneous fat area (cm-sq)	3008	0.996 (0.995,0.997)	2.01E-09
BQDA5XDA	Was there ever a time in your life when you drank 5 or more drinks of any kind of alcoholic beverage almost every day? 1 if yes, 0 otherwise.	3064	1.6 (1.38,1.87)	2.05E-09
RACE	Race. 1 if "black", 0 if "white"	3067	1.37 (1.24,1.52)	2.31E-09
P3STS	Semi-tandem stand: I would like you to try to stand with the side of the heel of one foot touching the big toe of the other foot for about 30 seconds. You may put either foot in front, whichever is more comfortable. You can use your arms and body to maintain your	3057	0.623 (0.533,0.728)	2.42E-09

	balance. Try to hold your feet in position until I say stop. 1 if participant holds position for 30 seconds, 0 otherwise.			
EASE2F	Ease climbing two flights of stairs (0 = difficult; 3 = very easy)	2961	0.87 (0.831,0.911)	2.63E-09
LPFIMMA	Do you (and your husband/wife/partner) own a money market account? 1 if no, 0 otherwise.	3027	1.4 (1.25,1.56)	2.81E-09
CAT5CS	EPESE score for chair stands. 1 if score is zero (worst performance), 0 otherwise.	3028	1.44 (1.27,1.62)	2.97E-09
Y1calcm	Indicator for calcium supplement. 1 if yes, 0 otherwise.	3058	0.633 (0.544,0.737)	3.68E-09
THSFA	Total (R+L) thigh cutaneous fat area (cm-sq)	3008	0.998 (0.998,0.999)	4.24E-09
BQWT50	What was your usual weight at about age 50? If you don't remember exactly, please make your best guess	2967	1 (1,1.01)	5.05E-09
EXCLUDE1	Were there reasons to exclude the participant from completing the long distance corridor walk (e.g., ECG abnormality, elevated standing blood pressure, cardiac surgery, worsening cardiac symptoms, elevated heart rate, missing ECG reading)? 1 if no, 0 otherwise.	3067	0.656 (0.569,0.757)	6.62E-09
P4BORNY	Teng MMS, Question 1c. What year were you born?	3052	1.7 (1.42,2.04)	6.74E-09
BQSHNAPS	During a usual week, how many times do you nap for 5 minutes or more?	2997	1.03 (1.02,1.05)	7.14E-09
FREE_TEST1	Serum free testosterone (pg/mL)	3017	1.03 (1.02,1.05)	0.000000011
LTHSFA	Left thigh subcutaneous fat area (cm-sq)	3008	0.996 (0.995,0.998)	0.000000011
P3UP2	Balance walks (usual pace, trial 2): Number of steps. I want you to walk down the hall normally, at a comfortable pace, ignoring the colored lines.	3046	1.09 (1.06,1.12)	1.13E-08
P4SHRM	Teng MMS, Question 5a. What three words did I ask you to remember earlier? 1 if participant spontaneously recalls the word "shirt", 0 otherwise.	3058	0.72 (0.643,0.806)	1.23E-08
RTHSFSD	Right thigh subcutaneous fat density standard deviation (HU)	3008	1.03 (1.02,1.04)	1.29E-08
ALK_PHOS1	Serum alkaline phosphatase (U/L)	3041	1 (1,1)	1.34E-08
MHHCCVA	Has a Dr. ever told you that you had stroke, CVA or cerebrovascular accident? 1 if yes, 0 otherwise.	3066	0.486 (0.379,0.624)	1.56E-08
PPB12CAT	HABCPPB category. 1 if category 9 (2.66 < HABCPPB ≤ 3.0), 0 otherwise.	2950	0.604 (0.506,0.72)	1.79E-08
MHLCEMPH	Has a Dr. ever told you that you had emphysema? 1 is yes, 0 otherwise.	3066	1.96 (1.55,2.48)	1.88E-08
P4HNRM	Teng MMS, Question 5c. What three words did I ask you to	3057	0.742 (0.668,0.824)	2.55E-08

	remember earlier? 1 if participant spontaneously recalls the word "honesty", 0 otherwise.			
Y1antang	Indicator variable for antianginal meds. 1 if yes, 0 otherwise.	3058	1.35 (1.22,1.51)	2.58E-08
P2AAPR	Was it possible to obtain ankle-arm blood pressure? 1 if yes, 0 otherwise.	3055	0.587 (0.487,0.708)	0.000000026
CRP_CALIB1	Serum C reactive protein (um/mL) (recalibrated for longitudinal comparison with measures generated by Wake Forest)	3031	1 (1,1)	3.34E-08
BQMORE	Did you ever drink more than you do now? 1 if no, 0 otherwise.	3066	0.747 (0.673,0.83)	0.000000047
P4TST	Indicator for ability to complete sample DSST. 1 if yes, 0 otherwise.	3056	0.519 (0.41,0.657)	5.17E-08
P2POPS	Pulse obliteration level (palpated systolic) (mmHg)	3067	1.01 (1,1.01)	5.29E-08
THIMFDavg	Thigh intermuscular fat density (HU) (left and right average)	3008	1.01 (1.01,1.02)	6.15E-08
P2RL3	Was isokinetic strength test (kin-com) completed? 1 if no, 0 otherwise.	2981	1.53 (1.31,1.78)	6.43E-08
QMI	Indicator for presence of Q-wave myocardial infarction. 1 if yes, 0 otherwise.	3067	1.79 (1.45,2.21)	7.05E-08
LTHIMFD	Left thigh intermuscular fat density (HU)	3008	1.01 (1.01,1.02)	7.22E-08
EDUC	Less than high school education? 1 if yes, 0 otherwise.	3059	1.37 (1.22,1.54)	7.96E-08
MHHCHBP	Has a doctor ever told you that you have hypertension or high blood pressure? 1 if no, 0 otherwise.	3067	0.75 (0.675,0.833)	8.02E-08
Y1hypgly	Indicator for oral hypoglycemics. 1 if yes, 0 otherwise.	3058	1.55 (1.32,1.81)	8.91E-08
P3TS1	Tandem stand (trial 1). Now I would like you to try to stand with the heel of one foot in front of and touching the toes of the other foot. You may use your arms and body to maintain your balance. Try to hold your feet in position until I say stop. If you lose your balance, take a step, like this. 1 if participant holds position for 30 seconds, 0 otherwise.	3047	0.751 (0.675,0.835)	0.000000108
P2AARB1	Systolic blood pressure measurement # 1 (brachial / arm)	3041	1.01 (1,1.01)	0.00000012
RLEGFAT	Right leg fat (gm)	3042	1 (1,1)	0.000000121
RTHIMFD	Right thigh intermuscular fat density (HU)	3008	1.01 (1.01,1.02)	0.000000126
LARMAREA	Left arm area (cm-sq)	3040	1 (1,1)	0.000000138
P4OUT	Please write the following sentence: I would like to go out. 1 if participant correctly writes the word "out", 0 otherwise.	3049	0.472 (0.356,0.624)	0.000000143
BQAPPET	In the past month, would you say that your appetite or desire to eat has been…? 1 if "very good", 0 otherwise.	3065	0.756 (0.681,0.839)	0.000000155
LEGFATavg	Average leg fat (left and right) (gm)	3041	1 (1,1)	0.000000163

P3UP1	Balance walks (usual pace, trial 1): Number of steps. I want you to walk down the hall normally, at a comfortable pace, ignoring the colored lines.	3047	1.08 (1.05,1.11)	0.000000178
LLNFEV1R	Lower limit of normal for FEV1/FVC (FEV1: forced expiratory volume in one second; FVC: forced vital capacity)	3067	0.902 (0.867,0.938)	0.000000211
LARMLEAN	Left arm fat-free mass (gm)	3040	1 (1,1)	0.000000226
P4SH2	Teng MMS, Question 17a.What three words did I ask you to remember earlier? 1 if participant correctly recalls the word "shirt", 0 otherwise.	3055	0.743 (0.664,0.832)	0.000000226
P4ETSL	Teng MMS, Question 10c. In what way are eating and sleeping alike? 1 if "not attempted/disabled", 0 otherwise.	3058	1.36 (1.21,1.52)	0.000000239
LLEGFAT	Left leg fat (gm)	3043	1 (1,1)	0.00000026
Y1hbpdrg	Indicator variable for any antihypertensive agent. 1 if yes, 0 otherwise.	3058	1.32 (1.19,1.47)	0.000000275
LPFICASA	Please tell me if you (and your husband/wife/partner) own a checking or savings account. 1 if no, 0 otherwise.	3032	1.75 (1.41,2.17)	0.000000289
TOTKKWK	Total Kcal/kg/week	3067	0.998 (0.997,0.999)	0.000000298
Y1UWSCR	EPESE walking speed category. 1 if category 4 (best performance), 0 otherwise.	3047	0.601 (0.494,0.73)	0.000000322
CHEADLEA	Head lean (gm)	3048	1 (1,1)	0.000000327
ITBMC	Inter trochanter bone mineral content (gm)	3040	1.02 (1.01,1.03)	0.00000033
LARMBMC	Left arm bone mineral content (gm)	3040	1 (1,1)	0.000000342
Y1chfdiu	Indicator for diuretic medication for congestive heart failure. 1 is yes, 0 otherwise.	3058	1.41 (1.23,1.6)	0.000000344
EASE1F	Ease climbing one flight of stairs (0 = unable; 6 = very easy)	2963	0.8 (0.734,0.872)	0.000000349
CLARMLEA	Left Arm lean (gm)	3048	1 (1,1)	0.000000356
LPFIIN25	The following question refers to your personal family income for the last year including all sources such as wages, salaries, Social Security or retirement benefits, help from relatives, rent from property and so forth. Was it more than $25,000? 1 if no, 0 otherwise.	3040	1.31 (1.18,1.46)	0.000000363
P4GO	Teng MMS, Question 14. Please write the following sentence: I would like to go out. 1 if participant correctly writes the word "go", 0 otherwise.	3049	0.561 (0.449,0.701)	0.000000393
Y1insuln	Indicator for insulin medications. 1 if yes, 0 otherwise.	3058	1.78 (1.42,2.23)	0.000000472
Y1antarr	Indicator variable for antiarrhythmic medications. 1 if yes, 0	3058	1.35 (1.2,1.51)	0.000000577

	otherwise.			
HQSUPCOV	In addition to Medicare, do you have a health insurance plan, Medigap, or other supplemental coverage which pays for any part of a hospital, doctor's or surgeon's bill? 1 if no, 0 otherwise.	3065	1.37 (1.21,1.56)	0.000000627
RARMAREA	Right arm area (cm2)	3028	1 (1,1)	0.000000743
RARMLEAN	Right arm fat-free mass (gm)	3027	1 (1,1)	0.000000763
RARMBMC	Right arm bone mineral content (gm)	3028	1 (1,1)	0.000000772
THSCLOC	Thigh CT scan location (mm) (location of the thigh image plane, measured from the medial edge of the greater trochanter on the CT scout image)	3002	1.01 (1,1.01)	0.00000082
LTHSFSD	L thigh subcutaneous fat density standard deviation (HU)	3008	1.03 (1.02,1.04)	0.000000831
P2SH2	Standing height: measurement 2 (mm)	3064	1 (1,1)	0.000000836
P4TO	Teng MMS, Question 14. Please write the following sentence: I would like to go out. 1 if participant correctly writes the word "to", 0 otherwise.	3049	0.59 (0.479,0.728)	0.000000844
P2AADOP	Ankle-arm blood pressure: Doppler Systolic (mm Hg)	3032	1.01 (1,1.01)	0.000000919
LTHIMFSD	Left thigh intermuscular fat density standard deviation (HU)	3008	0.95 (0.931,0.97)	0.000000952
P2AAMX	Ankle-arm blood pressure: maximal inflation level	3032	1.01 (1,1.01)	0.00000102
QWVAB	Q-wave myocardial infarction. 1 if absent, 0 otherwise.	3067	0.684 (0.587,0.797)	0.00000113
CRARMLEA	Right Arm lean (gm)	3048	1 (1,1)	0.00000117
FPLWKKWK	Kcal/kg/week doing light housework	3066	0.993 (0.99,0.996)	0.00000122
Q_ANT	Q wave on ECG (leads V1, V2, V3, V4, V5). 1 if no, 0 otherwise.	3067	0.561 (0.443,0.711)	0.00000158
CTRNKLEA	Trunk lean (gm)	3018	1 (1,1)	0.00000168
LPFIFIN	How well does the amount of money you (and your husband/wife/partner) have take care of your needs -- poorly, fairly well, or very well? 1 if "poorly", 0 otherwise.	3044	1.62 (1.33,1.97)	0.00000171
CTOTLEAN	Total Lean (gm)	3051	1 (1,1)	0.0000019
HEADLEAN	Head fat-free mass (gm)	3042	1 (1,1)	0.00000196
TAREA	Trochanter Area	3040	1.06 (1.04,1.09)	0.00000201
P2SH	Standing height (average of 2 measurements) (mm)	3067	1 (1,1)	0.00000221
P4PENT1	Teng MMS, Question 15a. Here is a drawing. Please copy the drawing onto this piece of paper. 1 if "nonpentagon enclosed figure", 0 otherwise.	3050	1.58 (1.31,1.91)	0.00000222
P2SH1	Standing height: measurement 1 (mm)	3067	1 (1,1)	0.00000254
MHLCCOPD	Has a doctor ever told you that you had chronic obstructive lung	3065	0.486 (0.36,0.657)	0.00000263

	disease or COPD? 1 if no, 0 otherwise.			
STWVAB	Major ST or T wave. 1 if abnormal, 0 otherwise.	3067	1.46 (1.25,1.71)	0.00000266
FPGSKKWK	Kcal/kg/week grocery shopping	3067	0.977 (0.968,0.987)	0.00000307
LPFIADQ	In general, how do your finances usually work out at the end of the month? Do you find that you usually end up with some money left over, just enough to make ends meet, or not enough money to make ends meet? 1 if "not enough to make ends meet", 0 otherwise.	3036	1.72 (1.37,2.17)	0.00000312
HTOTBMC	Hip total bone mineral content (gm)	3040	1.01 (1.01,1.02)	0.00000328
TOTFAT	Total fat (gm)	3051	1 (1,1)	0.00000338
CHOLES1	Plasma total cholesterol (mg/dL)	3034	0.997 (0.995,0.998)	0.00000344
NULL19P_773837	Chromosome 19p null SNP (rs773837)	2927	0.772 (0.692,0.861)	0.00000361
P2AARB2	Ankle-arm blood pressure: Brachial measurement # 2 (mm Hg)	3017	1.01 (1,1.01)	0.00000428
P4ARLG	Teng MMS, Question 10a. In what way are an arm and a leg alike? 1 if "error/refused", 0 otherwise.	3057	1.38 (1.2,1.58)	0.00000431
TOTLEAN	Total fat-free mass (gm)	2959	1 (1,1)	0.00000535
HEADFAT	Head fat (gm)	3048	1 (1,1)	0.00000551
DRINKER1	Drinking history at baseline. 1 if "former", 0 otherwise.	3053	1.31 (1.17,1.48)	0.00000778
RTHIMFSD	Right thigh intermuscular fat density standard deviation (HU)	3008	0.954 (0.934,0.974)	0.00000787
P4WLD	Teng MMS, question 14. Please write the following sentence: I would like to go out. 1 if participant correctly writes the word "would", 0 otherwise.	3050	0.632 (0.516,0.773)	0.00000838
HQRRELIG	What is your religious preference? 1 if "Jewish", 0 otherwise.	3059	0.598 (0.476,0.75)	0.00000884
BQNOFAT	Are there days when you don't feel like eating at all? 1 if yes, 0 otherwise.	3066	1.45 (1.23,1.71)	0.00000985
OMESREAD	Wearing glasses or contact lenses if you use them, how much difficulty do you have reading ordinary print in newspapers? 1 if "no difficulty at all", 0 otherwise.	3063	0.744 (0.652,0.848)	0.00000992
LPFEAT	During the past week, how often did you not feel like eating or have a poor appetite? 1 if "rarely or none of the time", 0 otherwise.	3060	0.694 (0.59,0.816)	0.0000101
P2AARP1	Ankle-arm blood pressure: right posterior tibial, measurement # 1 (mm Hg)	2961	0.996 (0.994,0.998)	0.0000105
LLATAB	Area of region defined as left lateral abdominal muscles in the abdominal CT image	2951	1.02 (1.01,1.03)	0.0000108
Y1puldrg	Indicator variable for pulmonary medications. 1 if yes, 0 otherwise.	3058	1.57 (1.28,1.93)	0.0000113
EASEUP	Ease rising from chair (0 = least easy; 6 = easiet)	3064	0.915 (0.88,0.952)	0.0000115
MHLCSBUP	Are you troubled by shortness of breath when hurrying on a level	3062	0.785 (0.704,0.875)	0.0000125

	surface or walking up a slight hill? 1 if "no", 0 otherwise.			
P4PENT2	Teng MMS, Question 15b. Here is a drawing. Please copy the drawing onto this piece of paper. 1 if "nonpentagon enclosed figure", 0 otherwise.	3050	1.46 (1.23,1.73)	0.000013
FAST8CHOL1	Fasting total plasma cholesterol (mg/dL)	2962	0.997 (0.995,0.998)	0.000014
ARYTHTYP	Other type of arrhythmia (not persistent atrial fib. or flutter, intermittent atrial fib. or flutter, sinus bradycardia, Freq. premature vent. beats, persistent ventricular rhythm). 1 if present, 0 otherwise.	3067	1.63 (1.31,2.03)	0.0000142
P4CRD1	Teng MMS, Question 13. Hold up card #1 and say "Please do this" (close your eyes). 1 if participant closes eyes without prompting, 0 otherwise.	3052	0.688 (0.581,0.815)	0.0000156
OMUDENT	Do you wear dentures? 1 if yes, 0 otherwise.	3056	1.26 (1.14,1.4)	0.0000161
Y1cachbk	Indicator variable for antianginal medications. 1 if yes, 0 otherwise.	3058	1.3 (1.15,1.46)	0.0000167
LPSCHOOL	Highest grade of school completed	3064	0.966 (0.951,0.982)	0.0000199
MHCSLGPN	Do you get a pain or discomfort in your leg(s) when you walk? 1 if yes, 0 otherwise.	3065	1.3 (1.15,1.47)	0.0000204
RARMBMD	Right arm bone mineral density (gm/cm2)	3028	2.5 (1.64,3.8)	0.0000207
LARMFAT	Left arm fat (gm)	3048	1 (1,1)	0.000022
AXISAB	Axis abnormality. 1 if absent, 0 otherwise.	3063	0.66 (0.544,0.8)	0.000024
P2AALP2	Ankle-arm blood pressure: Left posterior tibial, measurement # 2 (mm Hg)	2939	0.996 (0.994,0.998)	0.0000249
LATAB	Total (right + left) lateral abdominal muscle area (cm-sq)	2950	1.01 (1,1.01)	0.0000265
PELVAREA	Pelvic area (cm2)	2989	1 (1,1)	0.0000267
P3TH1	Thigh circumference: measurement 1	3062	0.982 (0.974,0.99)	0.0000277
P2AALP1	Ankle-arm blood pressure : left posterior tibial, measurement # 1 (mm Hg)	2941	0.996 (0.995,0.998)	0.0000312
ROSEIC	Rose intermittent claudication score (summary variable from a standard questionnaire on chest pain and intermittent claudication created by Geoffrey Rose et al.)	3052	1.15 (1.07,1.23)	0.0000373
P3TH	Average of baseline thigh circumference measurements (cm)	3063	0.983 (0.974,0.991)	0.0000406
FPVWCURV	Do you currently do volunteer work? 1 if no, 0 otherwise.	3065	1.25 (1.12,1.4)	0.0000422
Y1bronch	Indicator variable for bronchodilator medications. 1 if yes, 0 otherwise.	3058	1.64 (1.29,2.07)	0.0000424
CHSindex	Cumulative number of Cardiovascular Health Study (CHS frailty) index deficits (0, 1, 2, 3, 4, or 5)	2885	2.3 (1.54,3.43)	0.0000427
LPSOSD	Left psoas density standard deviation (HU)	2954	0.962 (0.944,0.98)	0.0000442

MHHCICPL	Has a Dr. ever told you that you have intermittent claudication or pain in your legs from a blockage of the arteries? 1 if yes, 0 otherwise.	3065	1.59 (1.27,1.99)	0.000045
P2SY2	Sitting systolic blood pressure measurement # 2	3066	1 (1,1.01)	0.0000479
LESSOQM	Does participant "walk 1/4 mile less often". 1 if yes, 0 otherwise.	2946	1.34 (1.16,1.54)	0.000048
P3TH2	Thigh circumference: measurement 2	3061	0.983 (0.974,0.991)	0.0000494
SYSBP	Sitting systolic blood pressure, average of two measurements	3067	1 (1,1.01)	0.0000495
EASEHHW	Ease doing housework (0 = least easy; 6 = easiest)	3054	0.93 (0.898,0.964)	0.0000535
LARMBMD	Left arm bone mineral density (gm/cm2)	3040	2.46 (1.59,3.81)	0.0000556
LESSO1F	Does participant "climb stairs less often". 1 if yes, 0 otherwise.	2949	1.4 (1.19,1.66)	0.0000565
BQAPP1YR	Compared to one year ago, how would you rate your appetite or desire to eat? 1 if "about the same as one year ago", 0 otherwise.	3067	0.746 (0.646,0.86)	0.0000578
TIREDQM	Does participant "get tired walking 1/4 mile"? 1 if yes, 0 otherwise.	2949	1.38 (1.18,1.61)	0.0000628
P2SYS	Sitting systolic blood pressure measurement # 1	3067	1 (1,1.01)	0.0000668
HQSSHEAD	Who is the head of your household? 1 if "self", 0 otherwise.	3029	1.29 (1.14,1.47)	0.0000726
EASE20P	Ease lift/carry 20 pounds (0 = difficult; 3 = very easy)	3063	0.92 (0.882,0.959)	0.0000756
P2AARP2	Ankle-Arm blood pressure: right posterior tibial, measurement # 2 (mm Hg)	2954	0.997 (0.995,0.998)	0.0000758
CLLEGLEA	Left Leg lean (gm)	3043	1 (1,1)	0.0000774
HQSSIDOP	When you have an important decision to make, do you have someone to talk to about it? 1 if "always of very often", 0 otherwise.	3060	0.786 (0.698,0.886)	0.0000811
LTHMUSD	Left thigh total muscle density (HU)	3008	0.985 (0.978,0.993)	0.0000852
IL1RN_3213448	Interleukin 1 receptor antagonist (rs3213448)	2929	1.68 (1.3,2.18)	0.0000858
MHHCAPCP	Has a Dr. ever told you that you have angina pectoris or chest pain due to heart disease? 1 if yes, 0 otherwise.	3064	0.752 (0.651,0.868)	0.0000975
BQHT25IN	How tall were you without shoes at about age 25? If you don't remember exactly, please make your best guess.	3004	1.03 (1.02,1.05)	0.0001
BQWTSAT	At this time, how satisfied are you with your weight? 1 if "very", 0 otherwise.	3065	1.25 (1.12,1.4)	0.000104
CTSCANID	CT scanner used. 1 if Centre commons CT scanner, 0 otherwise.	3020	0.813 (0.732,0.904)	0.000119
CRLEGLEA	Right Leg lean (gm)	3042	1 (1,1)	0.000119
FPHC12MO	In the past 12 months, did you do heavy or major chores like scrubbing windows or walls, vacuuming, mopping floors, or cleaning gutters; home maintenance activities like painting, scraping, hanging wall paper, or anything like these activities at	3066	0.809 (0.727,0.901)	0.000119

	least 10 times? 1 if yes, 0 otherwise.			
PQBP30DA	Did you experience any bodily pain in the last 30 days? 1 if yes, 0 otherwise.	3067	0.81 (0.728,0.902)	0.000121
BQSHTFS	How often do you experience trouble falling asleep? 1 if "rarely", 0 otherwise.	3063	0.761 (0.661,0.875)	0.000125
P4TAP1	Finger tapping test (trial 1). Number of taps in 15 seconds	3035	0.992 (0.987,0.996)	0.000127
Y1orest	Indicator variable for oral estrogen medication. 1 if yes, 0 otherwise.	3058	0.703 (0.587,0.842)	0.000127
BQDFSHOP	Because of a health or physical problem, do you have any difficulty shopping for food? 1 if no, 0 otherwise.	3064	0.63 (0.498,0.798)	0.000128
AGTM235T	Angiotensin AGT M235T	2926	1.24 (1.11,1.38)	0.000131
RTHTA	Right thigh total area (cm-sq)	3008	0.998 (0.997,0.999)	0.000137
Y1chfvas	Indicator variable for vasodilator or ACE inhibitor medications for congestive heart failure. 1 if yes, 0 otherwise.	3058	1.28 (1.13,1.45)	0.000146
BRISK90	Does participant "walk briskly >= 90 min/week". 1 if yes, 0 otherwise.	3067	0.703 (0.585,0.843)	0.000147
BQWEATLN	How many days per week do you eat lunch? 1 if "four", 0 otherwise.	3018	1.53 (1.23,1.9)	0.000161
P4CITN	Teng MMS, Question 7c. What city/town are we in? 1 if participant answers correctly, 0 otherwise.	3054	0.262 (0.131,0.525)	0.000161
PREDPEF	Predicted peak expiratory flow (ml/sec)	3067	1 (1,1)	0.000167
RLATABSD	Right Lat abdominal density standard deviation (HU)	2950	0.955 (0.932,0.978)	0.000168
TIRED1F	Does participant "get tired climbing stairs"? 1 if yes, 0 otherwise.	2954	1.39 (1.17,1.64)	0.000176
THTA	Total (right + left) total thigh area (cm-sq)	3008	0.999 (0.998,1)	0.000178
HQSSOPID	When other people have an important decision to make, do they talk to you about it? 1 if "never", 0 otherwise.	3055	1.52 (1.22,1.9)	0.000191
LCAINDEX	Lift/carry ability index (0 = unable; 9 = very easy)	3063	0.955 (0.932,0.979)	0.000201
RLATAB	Area - Right Lat abdominal (cm-sq)	2950	1.02 (1.01,1.03)	0.000208
SOFindex_Prefrail	Does the participant exhibit prefrailty according to the SOF frailty index (i.e., 1 of 3 deficits are present)? 1 if yes, 0 otherwise.	3024	1.26 (1.11,1.42)	0.000216
RLEGLEAN	Right leg fat-free mass (gm)	2924	1 (1,1)	0.000241
LLEGLEAN	Left leg fat-free mass (gm)	2945	1 (1,1)	0.000257
LTHTA	Left thigh total area (cm-sq)	3008	0.998 (0.997,0.999)	0.000274
RARMFAT	Right arm fat (gm)	3048	1 (1,1)	0.000275
Y1vitd	Indicator variable for vitamin D supplements. 1 if yes, 0 otherwise.	3058	0.679 (0.55,0.837)	0.000287

RLEGBMD	Right leg bone mineral density (gm/cm2)	2924	1.76 (1.29,2.4)	0.000313
Y1aceinh	Indicator variable for ACE inhibitor medications. 1 if yes, 0 otherwise.	3058	1.28 (1.12,1.47)	0.000325
OMESCON	Do you have glasses or contact lenses? 1 if "yes", 0 otherwise.	3067	0.604 (0.459,0.795)	0.000327
RRIBBMD	Right rib bone mineral density (gm/cm2)	3037	2.69 (1.57,4.63)	0.000335
FPLW12MO	In the past 12 months, did you do light work around the house like cooking meals, baking, washing dishes, making beds, straightening up, dusting or light cleaning, at least 10 times? 1 if yes, 0 otherwise.	3066	0.717 (0.596,0.861)	0.000382
WTOTBMC	Whole Body Total bone mineral content (gm)	2961	1 (1,1)	0.000382
LLEGBMC	Left leg bone mineral content (gm)	2945	1 (1,1)	0.000387
AGT_6	Angiotensin AGT-6G/A	2935	1.21 (1.09,1.35)	0.000459
DEFICITindex	Health deficit index. Cumulative number of heath deficits (0 - 45)	2990	2.58 (1.52,4.38)	0.00046
TWVITMS	Major T-wave items. 1 if present, 0 otherwise.	3067	1.41 (1.16,1.71)	0.000465
LPFIBUS	Please tell me if you (and your husband/wife/partner) own a business or farm? 1 if no, 0 otherwise.	3029	1.32 (1.13,1.54)	0.00049
LEPTIN1	Serum leptin (ng/mL)	3014	0.992 (0.988,0.997)	0.000494
RTHMUSD	Right thigh total muscle density (HU)	3008	0.987 (0.98,0.994)	0.000527
P4INT	Teng MMS, Question 15c. Here is a drawing. Please copy the drawing onto this piece of paper. 1 if "4-corneredenclosure", 0 otherwise.	3051	0.787 (0.688,0.901)	0.000536
LTHQUD	Left thigh quadriceps density (HU)	3008	0.987 (0.98,0.994)	0.000572
P4CNTY	Teng MMS, Question 7b. What county are we in? 1 if participant answers correctly, 0 otherwise.	3056	0.614 (0.466,0.811)	0.000576
OMESCAR	Are you currently driving? 1 if yes, 0 otherwise.	3065	0.801 (0.706,0.909)	0.000586
BQLOSEWT	At the present time, are you trying to lose weight? 1 if yes, 0 otherwise.	3065	0.806 (0.713,0.911)	0.000587
LDL1	Plasma low density lipoprotein (mg/dL)	2992	0.997 (0.996,0.999)	0.000602
P4TAP	Finger tapping test (average between two trials)	3035	0.992 (0.987,0.997)	0.000606
CHSindex_PreFrail	Does the participant exhibit prefrailty according to the CHS frailty index (i.e., 1 of 5 deficits are present)? 1 if yes, 0 otherwise.	2885	1.22 (1.09,1.36)	0.000629
BQSHWUDN	"How often do you wake up during the night and have difficulty getting back to sleep? 1 if "never", 0 otherwise.	3064	1.2 (1.08,1.34)	0.00069
TRUNKFAT	Trunk fat (gm)	3018	1 (1,1)	0.000695
RLEGBMC	Right leg bone mineral content (gm)	2924	1 (1,1)	0.0007
SOFindex	Cumulative number of Study of Osteoporotic Fractures (SOF)	3024	1.76 (1.27,2.44)	0.000704

	deficits (0, 1, 2, or 3)			
P4CHN	Teng MMS, Question 8d. Point to the object or a part of your own body and ask the participant to name it (chin). 1 if participant correctly points, 0 otherwise.	3054	0.358 (0.197,0.649)	0.000716
BQDFPREP	Because of a health or physical problem, do you have any difficulty preparing meals? 1 if no, 0 otherwise.	3064	0.724 (0.6,0.873)	0.000724
P3SCS	Single chair stand. This is a test of strength in your legs in which you stand up from sitting without using your arms. Fold your arms across your chest, like this, and stand when I say GO, keeping your arms in this position. OK? Ready, Go! 1 if "not attempted/refused", 0 otherwise.	3059	2.28 (1.41,3.68)	0.000739
RTHQUD	Right thigh quadriceps density (HU)	3008	0.988 (0.98,0.995)	0.000792
FPFS12MO	During the past 12 months, did you walk up a flight of stairs at least 10 times? 1 if yes, 0 otherwise.	3064	0.789 (0.686,0.906)	0.000828
BQSHMED	How often do you take sleeping pills or other medication to help you sleep? 1 if "rarely", 0 otherwise.	3060	0.609 (0.455,0.815)	0.000837
RPSOSD	Right psoas density standard deviation (HU)	2954	0.968 (0.95,0.987)	0.000864
LPFIIP	Please tell me if you (and your husband/wife/partner) own investment property or housing other than where you currently live? 1 if no, 0 otherwise.	3030	1.24 (1.09,1.4)	0.00087
P2JR	Joint replacement other than knee or hip replacement (e.g., shoulder, elbow). 1 if yes, 0 otherwise.	3038	1.99 (1.33,2.97)	0.000872
FPCUT12	During the past 12 months, did you cut down on things you usually do, such as going to work or working around the house, because of illness or injury? 1 if no, 0 otherwise.	3061	0.799 (0.7,0.912)	0.000875
TBMC	Trochanter bone mineral content	3040	1.03 (1.01,1.05)	0.000891
LLEGBMD	Left leg bone mineral density (gm/cm2)	2945	1.67 (1.23,2.26)	0.000933
LRIBBMD	Left rib bone mineral density (gm/cm2)	3028	2.42 (1.43,4.1)	0.000965
P4SPL	Teng MMS, Question 4. Spell "world". 1 if participant is unable, 0 otherwise.	3054	1.38 (1.14,1.66)	0.001
Y1theoph	Indicator for pulmonary medication use. 1 if yes, 0 otherwise.	3058	1.75 (1.25,2.45)	0.00109
BQWSCALE	Do you have a scale in your house that you can use to weigh yourself? 1 if yes, 0 otherwise.	3066	0.809 (0.712,0.919)	0.00113
P2KNRP	Have you ever had knee replacement surgery where all or part of your joint was replaced? 1 if no, 0 otherwise.	3063	0.646 (0.496,0.842)	0.0012
LSPIBMC	Lumb spine bone mineral content (gm)	3046	1 (1,1.01)	0.00122

OMESQUAL	At the present time, would you say your eyesight (with glasses or contact lenses, if you wear them) is excellent, good, fair, poor, or very poor or are you completely blind? 1 if "excellent", 0 otherwise.	3066	0.8 (0.699,0.916)	0.00128
WTOTAREA	Whole body total area (cm2)	2961	1 (1,1)	0.00128
FPVWCURJ	Do you currently work for pay, either at a regular job, consulting, or doing odd jobs? 1 if no, 0 otherwise.	3063	1.23 (1.08,1.39)	0.00142
FAST8LDL1	Fasting plasma LDL (mg/dL)	2921	0.997 (0.996,0.999)	0.00148
BQSCPOC	Have you ever smoked a pipe or cigars? 1 if no, 0 otherwise.	3067	0.833 (0.743,0.933)	0.00158
LPFHOPE	During the past week, how often have you felt hopeful about the future? 1 if "rarely", 0 otherwise.	3040	1.36 (1.12,1.64)	0.00162
FPLD12MO	In the past 12 months, did you do or help with laundry at least 10 times? 1 if no, 0 otherwise.	3066	1.22 (1.08,1.37)	0.00166
P4DAYWK	Teng MMS, Question 6b. What is the day of the week? 1 if participant answers correctly, 0 otherwise.	3053	0.631 (0.473,0.842)	0.00173
FPVWTV	About how many hours per week do you spend watching television? 1 if "at least 7 but less than 14 hours/week", 0 otherwise.	3058	0.817 (0.719,0.927)	0.00177
PRDFEV1R	Predicted FEV1/FVC (FEV1: forced expiratory volume in one second; FVC: forced vital capacity)	3067	0.95 (0.92,0.981)	0.00182
LPFEFFRT	During the past week, how often did you feel like everything I did was an effort? 1 if "rarely or none of the time (<1 day)", 0 otherwise.	3036	0.82 (0.724,0.929)	0.00189
HSPA1B_2763979	Heat shock 70kDa protein 1B (rs2763979)	2927	1.2 (1.07,1.35)	0.00193
P4IF	Teng MMS, Question 12a. No repeat: "No ifs, ands or buts". 1 if "not attempted/disabled" when trying to repeat "no ifs"	3053	22.4 (3.13,161)	0.00195
WTOTBMD	Whole body total bone mineral density (gm/cm2)	2961	1.83 (1.25,2.68)	0.00196
FPAC12MO	In the past 12 months, did you do aerobics, calisthenics, slimnastics, at least 10 times? 1 if yes, 0 otherwise.	3062	0.806 (0.703,0.924)	0.00198
Y1tricyc	Indicator variable for tetracyclic antidepressant use. 1 if yes, 0 otherwise.	3058	1.55 (1.17,2.05)	0.00222
STSEGDEP	Major ST segment depression. 1 if present, 0 otherwise.	3067	2.42 (1.37,4.28)	0.0023
Y1betabk	Indicator variable for beta-adrenergic blocker medication use. 1 if yes, 0 otherwise.	3058	1.25 (1.08,1.45)	0.00231
LEPR1ID	Leptin receptor I insertion/deletion	2994	0.848 (0.762,0.943)	0.00235
TSPIBMD	Thor spine bone mineral density (gm/cm2)	3054	1.64 (1.19,2.25)	0.00244

BQLOS5LB	Have you lost 5 or more pounds at any time over the past 12 months? 1 if yes, 0 otherwise.	3067	1.18 (1.06,1.31)	0.00257
HQRSRVCS	How often do you usually attend relgious services, meetings or activities? 1 if "a few times per year", 0 otherwise.	3062	1.24 (1.07,1.42)	0.00285
LLEGAREA	Left leg area (cm2)	2945	1 (1,1)	0.00294
HQSSFRNE	In a typical week, how often do you get together with friends or neighbors? 1 if "less than once per week", 0 otherwise.	3034	1.21 (1.07,1.37)	0.00296
CHSindex_Frail	Is the participant frail according to the Cardiovascular Health Study (CHS) frailty index? (i.e., two of five frailty components) 1 if yes, 0 otherwise.	2885	1.98 (1.26,3.12)	0.00309
SELL_4987342	Selectin L precursor (rs4987342)	2971	0.834 (0.739,0.941)	0.00313
P4FRHD	Teng MMS, Question 8c. Point to the object or a part of your own body and ask the participant to name it (foreheard). 1 if participant points correctly, 0 otherwise.	3054	0.603 (0.431,0.843)	0.00315
PQAJBP30	In the past 12 months, have you had any pain in your back? 1 is yes, 0 otherwise.	3066	0.852 (0.766,0.948)	0.00322
IL1RN_315949	Interleukin 1 receptor antagonist (rs315949)	2935	1.18 (1.06,1.31)	0.00324
P2BP2	Does the participant have high blood pressure (systolic > 199 mm Hg, or diastolic > 109 mmHg)? 1 if yes, 0 otherwise.	3066	1.66 (1.18,2.33)	0.00329
LTHHAMD	Left thigh hamstrings density (HU)	3008	0.991 (0.985,0.997)	0.00338
Q_INF	Is the ECG Q/R amplitude ratio $\geq$ 1/3, plus Q duration $\geq$ 0.03 sec in lead II? 1 if yes, 0 otherwise.	3067	3.71 (1.54,8.95)	0.00345
PELVBMC	Pelvic bone mineral content (gm)	2989	1 (1,1)	0.00352
LONGPR	Is the ECG P-R interval > 220 msec? 1 if yes, 0 otherwise.	2988	1.38 (1.11,1.71)	0.0037
FPHI12MO	In the past 12 months, did you do any high intensity exercise activities such as bicycling, swimming, jogging, racquet sports or using a stair-stepping, rowing or cross country ski machine or exercycle, at least 10 times? 1 if no, 0 otherwise.	3062	1.2 (1.06,1.36)	0.00378
TYR1042602	Tyrosinase, rs1042602	2965	1.17 (1.05,1.31)	0.00379
FPDIFSTA	Because of a health or physical problem, do you have any difficulty standing up from a chair without using your arms? 1 if no, 0 otherwise.	3065	0.8 (0.687,0.931)	0.00389
P2KYP	Does the participant sit sideways due to kyphosis? 1 if yes, 0 otherwise.	2990	2.02 (1.25,3.25)	0.0041
ABLE5CS	Is the participant able to complete five chair stands? 1 if yes, 0 otherwise.	3038	0.654 (0.489,0.875)	0.00422

LRIBBMC	Left rib bone mineral content (gm)	3028	1 (1,1.01)	0.00442
NBMC	Femoral neck bone mineral content	3040	1.08 (1.02,1.14)	0.00443
PR	ECG PR interval	2988	1 (1,1)	0.00448
HQFEDINS	In addition to Medicare, are you currently covered by any other federal government health insurance programs such as Medicaid, CHAMPUS/VA or other military programs? 1 if yes, 0 otherwise.	3063	1.26 (1.07,1.48)	0.00459
SIM1	Single-minded homolog 1 (rs3734355)	2994	1.23 (1.07,1.43)	0.00466
LBDMKIDN	Has a Dr. ever told you that you have kidney disease? 1 if yes, 0 otherwise.	3064	1.73 (1.18,2.53)	0.00499
P3INYN	Do you have any problems from recent surgery, injury, or other health conditions that might prevent you from standing up from a chair, standing on one leg, or walking? 1 if yes, 0 otherwise.	3051	1.37 (1.1,1.71)	0.00506
FPPA12MO	In the past 12 months, did you do gardening or yardwork, like mowing or raking the lawn, or weeding (or shoveling snow), at least 10 times? 1 if no, 0 otherwise.	3066	1.16 (1.05,1.29)	0.00509
BQWEATBR	Thinking about a usual or normal week, how many days out of the seven days a week do you eat breakfast? 1 if "five", 0 otherwise.	3046	1.6 (1.15,2.23)	0.00514
FPFSKKWK	Kcal/kg/week climbing stairs	2956	0.897 (0.832,0.968)	0.00521
P1BCT	Have you ever been told you have a disorder relating to blood clotting or coagulation? 1 if no, 0 otherwise.	3033	0.733 (0.588,0.913)	0.0055
MHHCTIA	Has a Dr. ever told you that you had TIA, transient ischemic attack, or mini-stroke? 1 if no, 0 otherwise.	3067	0.765 (0.633,0.925)	0.00558
FPEW12MO	In the past 12 months, did you go walking for exercise, at least 10 times? 1 if yes, 0 otherwise.	3066	0.862 (0.776,0.958)	0.00579
P4STE2	Teng MMS, Question 18b. Would you please tell me again where you were born? 1 if participant response corresponds to "not attempted / disabled", 0 otherwise.	3051	7.03 (1.75,28.2)	0.00596
TSPIAREA	Thor spine area (cm2-sq)	3054	0.997 (0.994,0.999)	0.00654
P4PHND	Teng MMS, Question 16c. Take this paper with your left (right for left handed person) hand, fold it in half using both hands, and hand it back to me. 1 if participant correctly completes task, 0 otherwise.	3016	0.658 (0.485,0.891)	0.0069
ALBUMIN1	Serum albumin (g/dL)	3041	0.793 (0.669,0.94)	0.00756
MMMFLAG	Are values missing in the Teng 3MS test? 1 if yes, 0 otherwise.	3058	1.32 (1.08,1.61)	0.00757
PPARGC1A_8192678	Peroxisome proliferative activated receptor-gamma coactivator 1 alpha (rs8192678)	2998	1.16 (1.04,1.29)	0.00786
ACE_ID	ACE insertion deletion (rs1799752)	2966	0.855 (0.762,0.961)	0.00827

HQSSRELY	Does anybody rely on you to do something for them each day, like shopping, cooking, cleaning, repairs, child care, etc? 1 if yes, 0 otherwise.	3061	0.857 (0.763,0.962)	0.00895
LSPIAREA	Lumb spine area (cm2-sq)	3046	1.01 (1,1.01)	0.00896
HEADAREA	Head area (cm2-sq)	3047	1 (1,1.01)	0.00898
FPFSHOT	Did you get a flue shot in the past 12 months? 1 if yes, 0 otherwise.	3062	0.863 (0.772,0.964)	0.00899
AKT1G171T	AKT1 (rs1130214)	2993	1.25 (1.06,1.48)	0.00925
RTHHAMD	Right thigh hamstrings density (HU)	3008	0.992 (0.986,0.998)	0.00937
P4TAP2	Finger tapping test. Number of taps in 15 seconds (trial 2)	3022	0.994 (0.99,0.999)	0.00954
P4NUM	Teng MMS, Question 2. I am going to say three words for you to remember. Repeat them after I have said all three words: shirt, blue, honesty. Number of presentations necessary for participant to repeat the sequence.	3024	1.26 (1.06,1.5)	0.00954
P4SIDE	Indicator variable for not performing the finger tapping test due to exclusions	3037	2.12 (1.2,3.75)	0.00962
FPPWKKWK	Kcal/kg/week doing paid work	3055	0.997 (0.995,0.999)	0.00965
LSPIBMD	Lumb spine BMD (gm/cm2)	3046	1.36 (1.07,1.71)	0.0103
PRFEV1R6	Predicted FEV1/FEV6 (FEV1: forced expiratory volume in 1 second; FEV6: forced expiratory volume in 6 seconds)	3067	0.941 (0.898,0.986)	0.0106
LBOMLOTH	Has a doctor ever told you that you had low thyroid or hypothyroidism? 1 if yes, 0 otherwise.	3066	0.751 (0.603,0.936)	0.0106
HDL1	Plasma high density lipoprotein (mg/dL)	3032	0.996 (0.993,0.999)	0.0108
BQSHEAT	How often do you eat a snack or drink before bedtime to help you sleep? 1 if "sometimes", 0 otherwise.	3055	0.733 (0.576,0.931)	0.0109
HACAT	Walking and exercise kcal category. 1 if category "0", 0 otherwise	3067	1.22 (1.05,1.42)	0.011
P4SEAS	Teng MMS, Question 6c. What season of the year is it? 1 if "not attempted/disabled", 0 otherwise.	3055	12.8 (1.79,91.3)	0.011
NAREA	Femoral neck Area (cm-sq)	3040	1.1 (1.02,1.19)	0.0111
LESSO10P	Lift/carry 10 lbs less often? 1 if "yes", 0 otherwise	3030	1.26 (1.05,1.5)	0.0112
OMESWORY	How often do you worry about your eyesight? 1 if "most of the time", 0 otherwise.	3067	1.46 (1.09,1.95)	0.0114
EASE10P	Ease lift/carry 10 pounds (0 = unable to do; 6 = very easy)	3063	0.943 (0.901,0.987)	0.0117
P4SHLD	Teng MMS, question 8e. What is this part of the body? (point to shoulder) 1 if correct, 0 otherwise.	3053	0.655 (0.472,0.91)	0.0117
FAST8HDL1	Fasting plasma HDL (mg/dL)	2960	0.996 (0.993,0.999)	0.012
P4PENC	Teng MMS, Question 8a. What is this? (point to a pencil) 1 if	3055	0.386 (0.183,0.812)	0.0121

	correct, 0 otherwise.			
WALKCAT	Minutes walking/week category. 1 if "0 min/wk", 0 otherwise	3054	1.15 (1.03,1.27)	0.0123
LPFIOTI	Please tell me if you (and your husband/wife/partner) own any other investments (besides checking or savings account, money market account, CDs, etc.)? 1 if "no", 0 otherwise	3007	1.2 (1.04,1.37)	0.0125
BQSHFESD	How often do you feel excessively (overly) sleepy during the day? 1 if "almost always", 0 otherwise.	3064	1.64 (1.11,2.42)	0.0127
BQSHHRS	How many hours of sleep do you usually get at night?	3010	1.05 (1.01,1.09)	0.0127
OMESGLAU	Has a Dr. ever told you that you have glaucoma? 1 if yes, 0 otherwise.	3066	1.23 (1.04,1.44)	0.0139
HIGHX90	90 min or more high intensity exercise per week. 1 if yes, 0 if no.	3050	0.82 (0.7,0.961)	0.014
PREDFVC	Predicted forced vital capacity (ml)	3067	1 (1,1)	0.0141
CYP19A1_1008805	Aromatase cytochrome P450 subfamily 19 (Cyp19) (rs749292)	2944	1.14 (1.03,1.27)	0.0151
P2MO	Do you have any metal objects in your body, such as a pacemaker, staples, screws, plates, etc? 1 if yes, 0 otherwise.	3065	1.2 (1.04,1.4)	0.0155
DEFICITindex_PreFrail	Does the participant exhibit prefrailty according to the 45-variable health deficit index? 1 if yes, 0 otherwise.	2990	1.14 (1.02,1.27)	0.0156
FPHCKKWK	Kcal/kg/week doing heavy chores	3066	0.995 (0.991,0.999)	0.0158
LLATABSD	Left Lat abdominal density standard deviation (HU)	2951	0.972 (0.95,0.995)	0.0159
LONGQT	Long QT duration	3065	1.23 (1.04,1.46)	0.016
FPDIFHW	Do you have any difficulty doing heavy work around the house like vacuuming, shoveling snow, mowing or raking the lawn, gardening, or scrubbing windows, walls or floors? 1 if no, 0 otherwise.	3065	0.851 (0.745,0.971)	0.0166
BQHT25FT	How tall were you without shoes at about age 25? If you don't remember exactly, please make your best guess.	3019	1.21 (1.03,1.42)	0.017
P3THPA	Thigh circumference midpoint	3063	1.04 (1.01,1.07)	0.0176
RLEGAREA	Right leg area (cm2)	2924	1 (1,1)	0.0176
OMESCAT2	Has a doctor ever told you that you have cataracts in both eyes, at the same time? 1 if yes, 0 otherwise.	3062	1.15 (1.02,1.29)	0.0179
AVDEFTYP	Type of atrioventricular conduction defect. 1 if "long P-R interval", 0 otherwise.	3067	1.27 (1.04,1.56)	0.0183
LPFFAIL	During the past week, how often have you felt that your life has been a failure? 1 if "most or all of the time", 0 otherwise.	3045	1.66 (1.09,2.53)	0.0183
PAI2846	PAI1 2846 A/G (rs6092)	2962	0.824 (0.701,0.968)	0.0187
BQEATJOY	Is meal time enjoyable? 1 if "neither enjoyable nor unenjoyable", 0	3053	1.36 (1.05,1.77)	0.0193

	otherwise.			
P3THDI	Thigh: distance betwn inguinal/patella	3063	1.02 (1,1.03)	0.0205
HSPB2_4252591	Heat shock 27kDa protein 2 (rs4252591)	2961	1.14 (1.02,1.27)	0.0207
TRNKBMC	Trunk bone mineral content (gm)	2945	1 (1,1)	0.0209
MHLCCHBR	Has a doctor ever told you that you had chronic bronchitis? 1 if yes, 0 otherwise.	3067	1.21 (1.03,1.42)	0.0209
PQAJBO12	During the past 12 months, have you fainted, blacked out, or lost conosciousness? 1 if no, 0 otherwise.	3065	0.716 (0.538,0.952)	0.0214
Y1candrg	Indicator variable for anti-cancer medications. 1 if yes, 0 otherwise.	3058	1.64 (1.08,2.5)	0.0215
BQEATSIN	Do you usually eat meals alone? 1 if "all the time", 0 otherwise.	3057	1.2 (1.03,1.41)	0.022
PREDFEV6	Predicted forced expiratory volume in six seconds (ml)	3067	1 (1,1)	0.0221
THIMF	Total (R+L) thigh intermuscular fat area (cm-sq)	3008	1 (1,1.01)	0.0222
BQSHSNOR	Have you ever snored (now or at any time in the past)? 1 if yes, 0 otherwise.	3065	0.879 (0.787,0.982)	0.0226
FPACKKWK	Kcal/kg/week doing aerobic dance	3062	0.986 (0.974,0.998)	0.0227
HQINMED	In addition to Medicare, do you have any health insurance plan that pays for prescription medications? 1 if yes, 0 otherwise.	3062	0.882 (0.791,0.983)	0.0229
LLNPEF	Lower limit of normal for peak expiratory flow (ml/sec)	3067	1 (1,1)	0.023
LPFISUBF	Are you receiving any free or subsidized food, such as food stamps or Meals on Wheels? 1 if yes, 0 otherwise.	3038	1.27 (1.03,1.58)	0.0245
IL62298	IL-6 2290 (rs2069832)	2955	1.13 (1.02,1.26)	0.0248
LPFUNFR	During the past week, how often did you feel as if people were unfriendly? 1 if "most or all of the time", 0 otherwise.	3039	1.87 (1.08,3.23)	0.0248
RTHIMF	Right thigh intermuscular fat area (cm-sq)	3008	1.01 (1,1.02)	0.0249
PPARG_4135256	Peroxisome proliferative activated receptor gamma (rs4135256)	2944	1.38 (1.04,1.82)	0.0251
SAA2_2468844	Serum amyloid A2 (rs2468844)	2949	1.29 (1.03,1.61)	0.0257
P4PFLD	Teng MMS, Question 16b. Take this paper with your left (right for left handed person) hand, fold it in half using both hands, and hand it back to me. 1 if participant correctly folds paper in half, 0 otherwise.	3024	0.733 (0.557,0.964)	0.0263
LTHIMF	Left thigh intermuscular fat area (cm-sq)	3008	1.01 (1,1.02)	0.0266
OMESSWUC	How much difficulty do you have doing work or hobbies that require you to see well up close, such as cooking, sewing, fixing things around the house, or using hand tools? 1 if "stopped doing it for other reasons or not interested in doing this", 0 otherwise.	3066	3.58 (1.15,11.1)	0.0273
OMESACT	The next question is about daily activities that may be affected by	3064	0.824 (0.693,0.979)	0.0274

	your vision, such as your job, housework, child care, school, or community activities. Are you limited in the kinds or amount of work or other activities you can do? 1 if "none of the time", 0 otherwise.			
MHLCPNEU	Has a doctor ever told you that you had pneumonia? 1 if no, 0 otherwise.	3067	0.882 (0.788,0.986)	0.0274
MHCHMGMT	Has a doctor ever told you that you had cancer, a malignant growth, or malignant tumor? 1 if no, 0 otherwise.	3067	0.867 (0.763,0.985)	0.0278
BQWEATEV	Thinking about a usual or normal week, how many days out of the seven days a week do you eat an evening snack? 1 if "zero", 0 otherwise.	2983	1.13 (1.01,1.26)	0.0289
RTHQUSD	Right thigh quadriceps density standard deviation (HU)	3008	1.01 (1,1.02)	0.0294
HIGHXMIN	Sum of minutes per week of aerobic exercise, weight training, and any high intensity activity	3050	0.999 (0.999,1)	0.0301
FPDIFARM	Do you have any difficulty raising your arms up over your head? 1 if yes, 0 otherwise.	3067	1.23 (1.02,1.47)	0.0307
HSPB2_762550	Heat shock 27 kDa protein 2 (rs762550)	2958	0.812 (0.672,0.981)	0.0307
PAI10461	PAI1 10461 A/G (rs2227693)	2984	0.832 (0.703,0.983)	0.0311
PREDMIP	Predicted maximum inspiratory pressure (cm H20)	3067	1 (1,1.01)	0.0325
QCMETPRB	QC abdomen metal problem for computed tomography (soft tissue). 1 if no metal artifact in image, 0 otherwise.	3023	0.468 (0.234,0.939)	0.0325
P1BV3	Phlebotomy: Was the SCAT-1 (5 ml) tube filled to capacity? 1 if yes, 0 otherwise.	3012	0.51 (0.274,0.951)	0.034
LBOMGOUT	Has a doctor ever told you that you had gout? 1 if yes, 0 otherwise.	3067	1.22 (1.01,1.46)	0.0344
P4SPIR	Was the spirometry test completed? 1 if yes, 0 otherwise.	3024	0.819 (0.68,0.986)	0.0347
PAI1_1	Citrated plasma plasminogen activator inhibitor 1 (ng/mL)	3004	1 (1,1)	0.0352
P4PCOR	Take this paper with your left (right for left handed person) hand, fold it in half using both hands, and hand it back to me. 1 if participant does not take paper in correct hand, 0 if performed correctly.	3048	1.2 (1.01,1.43)	0.0354
BMICAT	Body mass index category (1 if BMI > 25; 2 if 25 <= BMI < 30; 3 if BMI >= 30)	3067	0.928 (0.866,0.995)	0.0356
RPSOD	Right psoas density (HU)	2954	0.992 (0.985,1)	0.0357
P2SIDF	Sitting height. Difference between measurements 1 and 2 (mm)	3056	1.02 (1,1.04)	0.0357
FPBED12	During the past 12 months, did you stay in bed all or most of the day because of an illness or injury? Please include days that you	3066	1.15 (1.01,1.31)	0.0359

	were a patient in the hospital. 1 if yes, 0 otherwise.			
P4SHRT	I am going to say three words for you to remember. Repeat them after I have said all three words: shirt, blue, honesty. 1 if partipant does not correctly repeat the word "shirt", 0 otherwise.	3057	1.1 (1.01,1.21)	0.0374
NBMD	Femoral neck bone mineral density	3040	1.48 (1.02,2.15)	0.0377
LTHHAM	Left thigh hamstrings area (cm-sq)	3008	1.01 (1,1.02)	0.0378
BQSHDGES	How often do you not get enough sleep? 1 if "often", 0 otherwise.	3050	0.746 (0.565,0.984)	0.0379
IL6G174C	Interleukin-6 IL6 G174C (rs1800795)	2981	1.12 (1.01,1.25)	0.0388
PREDFEV1	Predicted forced expiratory volume in one second	3067	1 (1,1)	0.0393
ABKVP	Abdomen computed tomography peak kilovolts (energy at which the abdominal CT image is acquired) (kVp)	3022	1.01 (1,1.03)	0.04
LBSGULCR	Has a doctor ever told you that you had a stomach, or duodenal ulcer? 1 if no, 0 otherwise.	3067	0.87 (0.762,0.994)	0.0402
LTHQUSD	Left thigh quadriceps density standard deviation (HU)	3008	1.01 (1,1.02)	0.0402
LPSO	Area - Left psoas (cm-sq)	2954	1.02 (1,1.03)	0.0403
P4AND	Teng MMS, Question 12. Now repeat: "No ifs, ands or buts". 1 if participant does not correctly repeat "ands", 0 otherwise.	3051	1.21 (1.01,1.46)	0.0405
FPGS12MO	In the past 12 months, did you go or help with grocery shopping at least 10 times? (includes help buying, carrying or unpacking groceries). 1 if yes, 0 otherwise.	3065	0.825 (0.686,0.992)	0.0411
AXIS	ECG QRS axis	3063	0.998 (0.997,1)	0.0424
Y1thyr	Indicator variable for thyroid agonist medications. 1 is yes, 0 otherwise.	3058	0.819 (0.675,0.993)	0.0424
HQSSFCX	For the one friend that you see or hear from most, how often do you see or hear from that person? 1 if "about once a month", 0 otherwise.	2970	1.25 (1.01,1.55)	0.0427
CURDRNK1	Current drinking consumption at baseline (1 = No consumption in past year; 2 = Less than once per week; 3 = 1-7 times per; 4 = More than 1 per day)	3055	0.946 (0.896,0.998)	0.0433
P4BUT	Teng MMS, Question 12. Now repeat: "No ifs, ands or buts". 1 if participant does not correctly repeat "buts", 0 otherwise.	3049	1.2 (1,1.43)	0.045
THFOV	Thigh Field of View (mm)	3020	0.999 (0.997,1)	0.0453
CES_D10	CES-D short form score calculated according to Andresen and Malmgren 1994 (Screening for depression in well older adults: evaluation of a short form of the CES-D)	3043	1.01 (1,1.03)	0.0464
DID6MUW	Was the 6m usual walk completed? 1 is yes, 0 if no	3050	0.316 (0.102,0.982)	0.0465

P3RCS	Chair stands: When I say 'Go' stand five times in a row, as quickly as you can, without stopping. Stand up all the way, and sit all the way down each time. 1 if the participant attempted to complete stands but was unable, 0 otherwise.	2996	1.88 (1.01,3.5)	0.0473
Y1ostdrg	Indicator variable for osteoporosis medications. 1 if yes, 0 if no.	3058	0.74 (0.55,0.996)	0.0473
Y1antplt	Indicator variable for any antiplatelet medication. 1 if yes, 0 if no.	3058	1.11 (1,1.24)	0.0473
PROZ_17879696	Protein Z; vitamin K-dependent plasma (rs17879696)	2974	0.857 (0.736,0.998)	0.0474
BMI	Body mass index (kg/m-sq)	3067	0.989 (0.978,1)	0.0478
P4ABEX	CT Tracking: abdominal scan exam number (1 - 899)	2935	1 (1,1)	0.0484
P4KNK	Teng MMS, Question 8g. What is this? (point to the object or a part of your own body and ask the participant to name it). 1 if "not attempted /disabled", 0 otherwise.	3047	2.24 (1,5.01)	0.0486
LBOMPARK	Has a doctor ever told you that you had Parkinson's disease? 1 if yes, 0 otherwise.	3066	1.7 (1,2.87)	0.0494
BQGROC	Do you get the groceries that you need? 1 if "all of the time", 0 otherwise.	3065	0.878 (0.772,1)	0.0495
Y1nsaid	Indicator variable for non-steroidal anti-inflammatory medications. 1 if yes, 0 otherwise.	3058	0.879 (0.773,1)	0.0496

Supplemental Table 4. Top-ranking variables that best predicted mortality over 13 years in the full Health ABC cohort (age- and sex-adjusted models). The table lists 10 variables that best predicted mortality as identified from the data mining and cross-validation procedure described in Supplemental Figure 2. The procedure was identical to that used to generate the variable ranking shown in Table 1, except the screen was performed using three-variable Cox regression models (i.e., variable X + age + sex). Variables listed below were thus able to improve mortality prediction by the largest margin when added to an initial bivariate model with age and sex as predictors. All mean AUC values were calculated using 30,000 cross-validation trials, with standard error less than 0.001 in each case. The standard deviation among AUC statistics generated in the 30,000 simulation trials is listed for each variable in the final column.

Variable	Transformation	Mean AUC	SD (AUC)
DSST score (No. correct substitutions)*	$\lambda = 2$	0.619	0.023
Health ABC performance score (0 - 4)[†]	$\lambda = 2$	0.619	0.022
Serum cystatin C (mg/L)[‡]	$\lambda = 0$	0.613	0.022
Time to walk 6 m (fastest of two trials)[†]	$\lambda = -1$	0.612	0.023
Walking ability index based on self-report (0 = unable; 9 = easy)[†]	$\lambda = 2$	0.608	0.022
EPESE performance battery score $0 - 12$[†]	$\lambda = 2$	0.607	0.022
3MS Score*	$\lambda = 2$	0.607	0.021
Full standing balance test time $0 - 90$ secs[†]	$\lambda = 2$	0.607	0.023
Serum c-reactive protein (µg/mL)[‡]	$\lambda = 0$	0.604	0.023
Stair climbing ability index (0 = unable; 9 =	$\lambda = 2$	0.604	0.023

easy)[†]			

*DSST score (no. correct substitutions) was correlated with 3MS score ($r_s = 0.59$; $P < 0.001$).

[†]Health ABC performance score was correlated with full standing balance test time ($r_s = 0.76$), time taken to walk 6 m ($r_s = -0.70$), EPESE performance battery score ($r_s = 0.69$), walking ability index ($r_s = 0.37$), and stair climbing ability index ($r_s = 0.34$) ($P < 0.001$ for each variable).

[‡]Serum cystatin C was correlated with serum c-reactive protein ($r_s = 0.14$, $P < 0.001$).