CARDIOVASCULAR DEATH CODES			
ICD10 CODES*	CONDITION		
I00-I78	Major cardiovascular diseases		
100-109,111,113,120-151	Diseases of heart		
I00-I09	Acute rheumatic fever and chronic rheumatic heart diseases		
I11	Hypertensive heart disease		
I13	Hypertensive heart and renal disease		
I20-I25	Ischemic heart diseases		
I21-I22	Acute myocardial infarction		
I24	Other acute ischemic heart diseases		
I20,I25	Other forms of chronic ischemic heart disease		
I25.0	Atherosclerotic cardiovascular disease, so described		
I20,I25.1-I25.9	All other forms of chronic ischemic heart disease		
I26-I51	Other heart diseases		
I33	Acute and subacute endocarditis		
I30-I31,I40	Diseases of pericardium and acute myocarditis		
150	Heart failure		
I26-I28,I34-I38,I42-I49,I51	All other forms of heart disease		
I10,I12	Essential (primary) hypertension and hypertensive renal disease		
I60-I69	Cerebrovascular diseases		
I70	Atherosclerosis		
I71-I78	Other diseases of circulatory system		
I71	Aortic aneurysm and dissection		
I72-I78	Other diseases of arteries, arterioles and capillaries		
I80-I99	Other disorders of circulatory system		

Supplemental Table 1. Diagnostic codes used to ascertain cardiovascular cause of death.

*Cause of death was ascertained using ICD-9 and ICD-10 codes for deaths occurring pre- and post-1999. Deaths occurring pre-1999 were coded under ICD-9 guidelines were recoded into comparable ICD-10 based underlying cause of death groups by the National Center for Health Statistics.

Supplemental Table 2. Comparison of baseline characteristics between thyroid functional status

	EUTHYROID	SUBCLINICAL HYPOTHYROID
	(n=14,130)	(n=568)
TSH (mIU/L)	, ,	
Median	1.49	5.73
[IQR]	[1.00, 2.10]	[5.20, 7.14]
Min-Max	0.39-4.60	4.65-10.0
Age (years)	45.4 ± 19.2	59.0 ± 19.6
		p<0.001
Female sex	52.4%	61.8%
		p<0.001
Race		
White	40.1%	58.5%
African-American	28.1%	10.4%
Mexican-American	27.6%	27.5%
Other	4.1%	3.7%
		p<0.001
Diabetes		^
Yes	7.5%	10.4%
No	92.4%	89.4%
Don't Know/Blank	0.1%	0.2%
		p=0.03
Active smoking	26.1%	14.1%
		p<0.001
$eGFR (ml/min/1.73m^2)$		^
>60	93.9%	80.8%
30-59	5.7%	17.1%
<30	0.4%	2.1%
		p<0.001
ACR (mg/g)		
<30	87.1%	78.5%
30-299	8.9%	13.4%
≥300	1.9%	3.2%
Missing	2.1%	4.9%
C C		< 0.001
Congestive Heart Failure		
Yes	2.9%	7.4%
No	97.1%	92.6%
		< 0.001
Hypertension		
Yes	25.4%	35.2%
No	73.8%	64.8%
Don't Know/Blank	0.9%	0.0%
		p<0.001
Hypercholesterolemia		^
Yes	16.5%	25.5%
No	33.0%	36.3%
Don't Know/Blank	50.6%	38.2%
		p<0.001
Prior stroke		*
Yes	2.4%	5.6%

categories as defined by thyrotropin levels only.*

No	97.6%	94.4%
Don't Know/Blank	0.0%	0.0%
		p<0.001
Prior MI		
Yes	3.7%	8.3%
No	95.2%	90.5%
Don't Know/Blank	1.2%	1.2%
		p<0.001
BMI (kg/m ²)		
<18.5	2.2%	1.6%
18.5-24.9	38.3%	34.2%
25-29.9	34.4%	35.7%
30-34.9	16.1%	16.6%
35-39.9	5.7%	8.1%
≥ 40	3.3%	3.9%
		p=0.1
Exogenous thyroid hormone use	1.3%	7.6%
		p<0.001

* Data presented as mean +/- SD or proportions unless otherwise indicated. Significance testing compared between subclinical hypothyroid and euthyroid subjects by 2-sample t-test, Wilcoxon rank sum test, or chi-squared test.

† Thyroid functional status categorized as: euthyroid (TSH within reference range); subclinical hypothyroid (TSH >ULN and ≤ 10 mIU/L).

TSH, thyrotropin; TT4, total thyroxine; eGFR, estimated glomerular filtration rate; ACR, urine albumin/creatinine ratio; MI, myocardial infarction; CHF, congestive heart failure, BMI, body mass index; ULN, upper limit normal.

1 Supplemental Figure Legends

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Supplemental Figure 1. Comparison of the association between subclinical hypothyroidism (thyrotropin 3 4 [TSH] >assay upper limit of normal and ≤ 10 mIU/L) vs. euthyroidism (TSH within referent range) with 5 all-cause mortality, stratified by pre-existing congestive heart failure (CHF) status. Analyses adjusted for 6 age, sex, race/ethnicity, diabetes, smoking, hypertension, hypercholesterolemia, prior stroke, prior 7 myocardial infarction, body mass index, albumin/creatinine ratio, and estimated glomerular filtration rate 8 (each specified as per Table 1). Statistical significance of effect modification was assessed by likelihood 9 ratio testing. 10 Supplemental Figure 2. Comparison of the association between subclinical hypothyroidism (thyrotropin 11 12 [TSH] >assay upper limit of normal and ≤ 10 mIU/L) vs. euthyroidism (TSH within referent range) with all-cause mortality, stratified by race (black vs. non-black). Analyses adjusted for age, sex, diabetes, 13 14 smoking, hypertension, hypercholesterolemia, prior stroke, prior myocardial infarction, pre-existing CHF, 15 body mass index, albumin/creatinine ratio, and estimated glomerular filtration rate (each as specified in

16 Table 1). Statistical significance of effect modification was assessed by likelihood ratio testing.

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All-Cause Mortality





p-interaction=0.08