

Supplemental Table 4. Sensitivity Analysis using Multivariate Regression

Individual DM Status – Multivariate Logistic Regression Results				
<i>Category</i>	<i>Factor</i>	<i>Mean (SD) [Range]</i>	<i>Coefficient (SE)</i>	<i>AUROC</i>
Demographic	Age	49.4 (15.9) [20.0-80.0]	0.00437 (0.000169)*	0.689 0.704
	Female	50.9	-0.0174 (0.00531)*	
	African American	10.2	0.0508 (0.00699)*	
	Hispanic	14.2	0.0273 (0.00652)*	
Socioeconomic	Household Income	NA	-0.00567 (0.000882)*	0.668
	Some College	61.1	-0.0111 (0.00582)†	
County-Level DM Prevalence – Multivariate Linear Regression Results				
<i>Category</i>	<i>Factor</i>	<i>Mean (SD) [Range], %</i>	<i>Coefficient (SE)</i>	<i>R²</i>
Demographic	Percent < 18 years old	22.3 (3.5) [0.0-40.9]	0.0567 (0.0112)*	0.377 0.619
	Percent > 65 years old	18.4 (4.6) [4.6-56.3]	0.0894 (0.00879)*	
	Percent Female	49.9 (2.3) [27.8-56.6]	0.220 (0.0143)*	
	Percent African American	9.0 (14.3) [0.0-85.2]	0.0465 (0.00230)*	
	Percent Hispanic	9.3 (13.7) [0.5-96.3]	-0.0502 (0.00223)*	
Socioeconomic	Median Household Income	91.3 (2.1) [84.6-100.0]	-0.284 (0.0191)*	0.4
	Percent Some College	57.2 (11.6) [15.1-94.1]	-0.0869 (0.00339)*	

Multiple regression results for models using factors shared between NHANES (individual-level) and CHR (county-level) datasets applying the same definition of DM (i.e. self-reported DM only) for both datasets. For female gender, Hispanic and African-American race/ethnicity, and education level factors from the individual-level (NHANES) data, summary characteristics are expressed in terms of percent of total sample; not all summary statistics could be calculated. Similarly, for household income from the individual-level data, values were collected and stored as ranges of income; summary statistics could not be calculated. Finally, for county-level median household income, variables were normalized and scaled to have a maximum value of 100.

*p<0.001

†p<0.05