FIG E1. Smoother splines for daily pollen and mold measures.
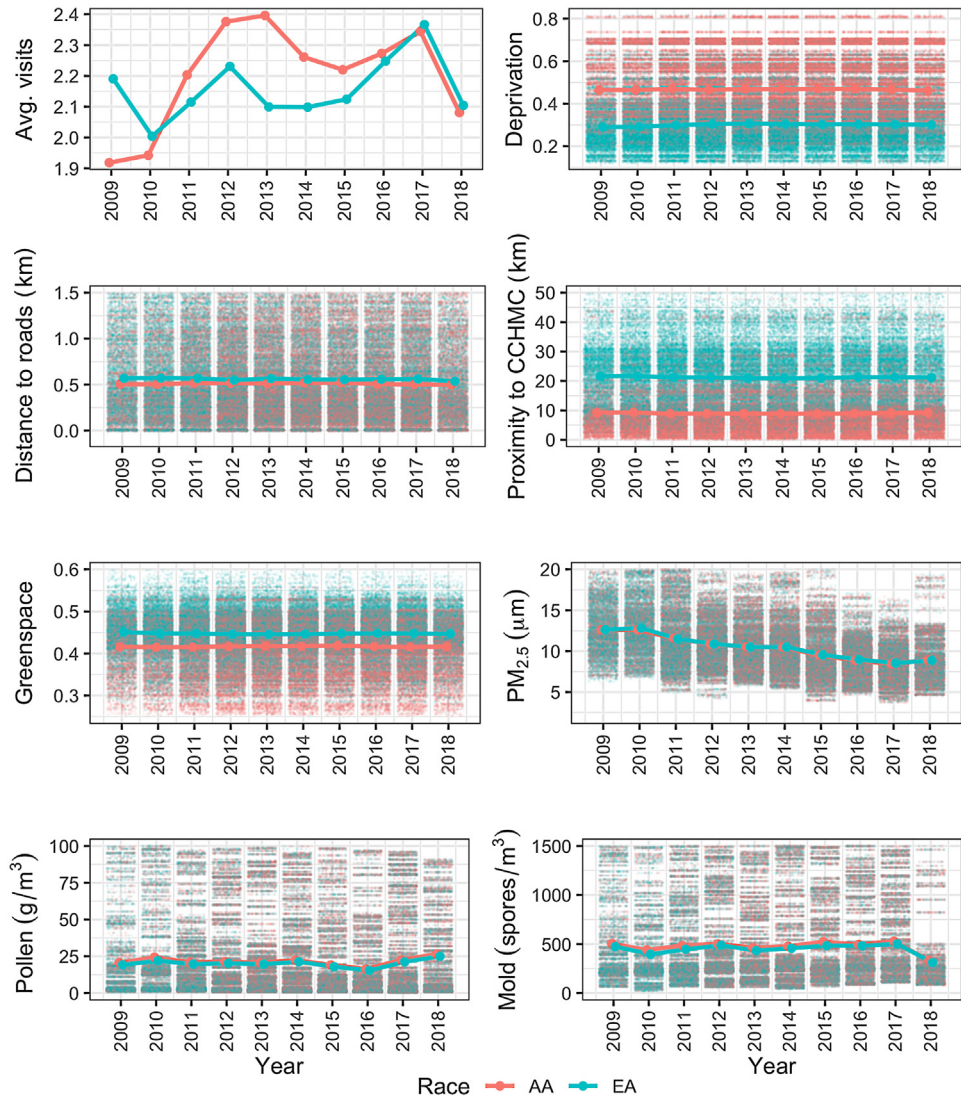
FIG E2. Longitudinal exploratory data analysis of neighborhood-level factor per year by race. *Avg.*, Average.
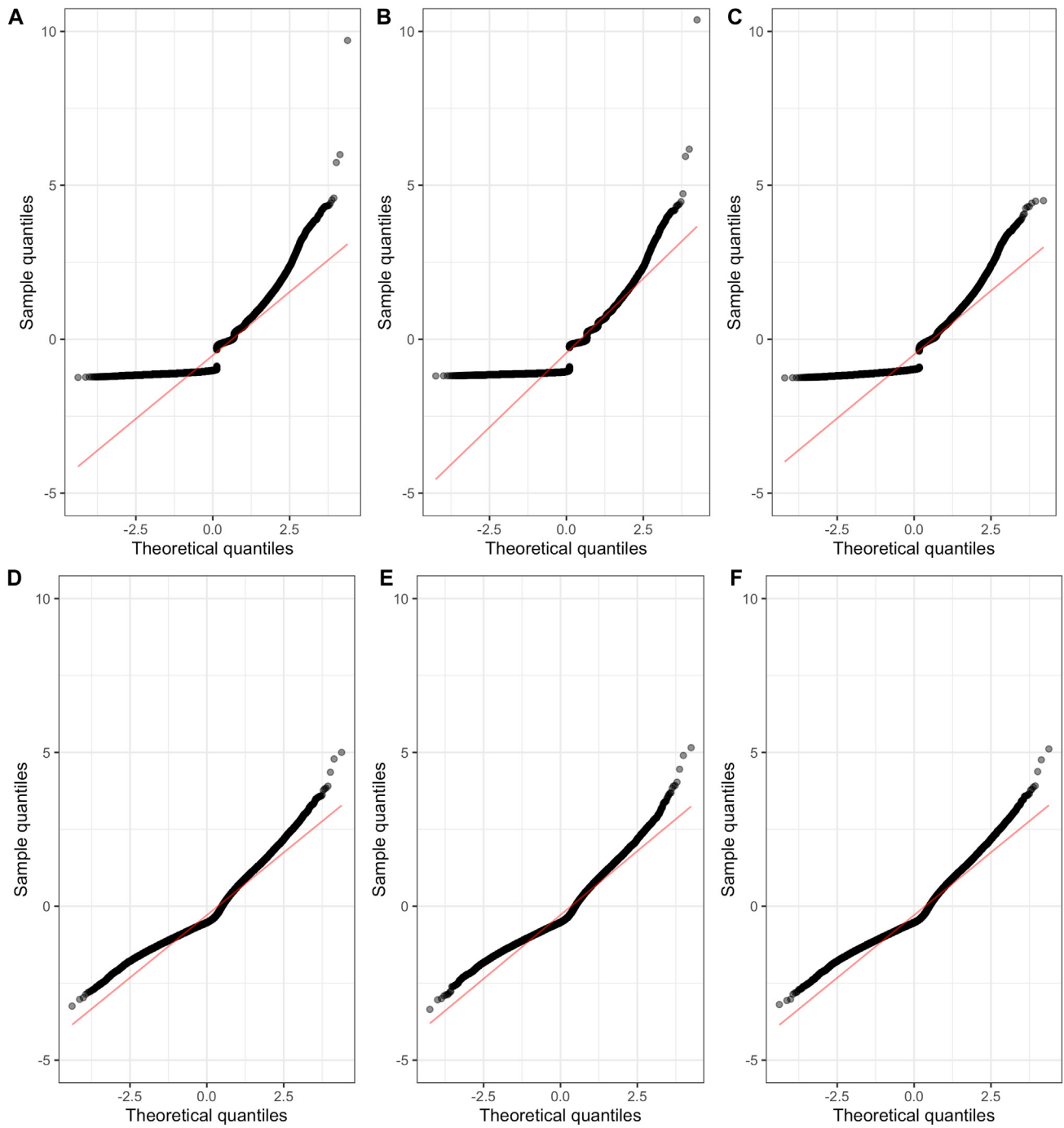
FIG E3. Calibration plots: (**A**) negative binomial model using full cohort, (**B**) negative binomial model using AAs cohort, (**C**) negative binomial model using EAs model, (**D**) mixed-effects negative binomial model using full cohort, (**E**) mixed-effects negative binomial model using AAs cohort, and (**F**) mixed-effects negative binomial model using EAs cohort.

TABLE E1. Unadjusted associations for frequent ED utilization and multicollinearity assessment (VIF) for ED visits

Characteristic	Expected visits (95% CI)	P value*	VIF
Age	2.076 (2.064-2.089)	<.001	1.05
Sex			
Female	Ref		
Male	2.015 (2.003-2.027)	<.001	1.01
Race			
EA	Ref		
AA	2.065 (2.052-2.077)	<.001	1.72
Insurance type			
Commercial	Ref		
Medicaid	2.099 (2.086-2.112)	<.001	1.35
Deprivation index	2.018 (2.006-2.03)	<.001	1.72
Proximity to CCHMC's facility (km)	1.972 (1.96-1.983)	<.001	1.67
Proximity to major roads (km)	1.986 (1.975-1.998)	<.001	1.16
Proportion of green space	1.973 (1.961-1.984)	<.001	1.31
$PM_{2.5}$	1.959 (1.948-1.97)	<.001	1.29
Daily pollen exposure (g/m^3)	1.966 (1.955-1.977)	<.001	1.33
Daily mold exposure (spores/m^3)	2.043 (2.03-2.055)	<.001	1.32

Ref, Reference group; *VIF*, variance inflation factor.

*$P < .05$ is statistically significant.