Appendix 1.

As noted in the Statistical Analysis section, sensitivity analyses were conducted using fractional logit regression (Papke and Wooldridge, 1996) to assess the robustness of the linear regression findings for the bounded proportional outcome. Table A1 presents the results, which are qualitatively consistent with the primary linear regression analysis in terms of direction, magnitude, and statistical significance

Table A1. Fractional logit regression sensitivity analysis (n=81 provinces)

Variable	Odds ratio	SE	z	p	95% CI
University education rate (%)	0.94	0.07	-0.84	0.402	0.82 to 1.08
Population served per EMS station (1000s)	1.15	0.06	2.68	0.007	1.04 to 1.27
Number of EMS stations	1.00	0.01	0.58	0.564	0.99 to 1.02
Population per family physician unit (1000s)	8.45	3.76	3.98	<0.001	3.53 to 20.21

Papke LE, Wooldridge JM. Econometric methods for fractional response variables with an application to 401(k) plan participation rates. J Appl Econometrics. 1996;11:619-32. All estimates derived from fractional logit regression with robust standard errors. All percentage values were divided by 100 and modelled as fractional values on the 0-1 scale. Odds ratios greater than 1 indicate a positive association with the false alarm rate (i.e., higher values of the predictor are associated with higher rates); odds ratios less than 1 indicate a negative association