Regression Summaries

September 29, 2023

Call: lm(formula = avg_d_mbps_winsorized college + clinic + university + school + hospital, data = municipality_database)

Residuals: Min 1Q Median 3Q Max -10.402 -4.189 -1.965 1.657 52.394

Coefficients: Estimate Std. Error t value $\Pr(>|t|)$ (Intercept) 8.732841 0.179646 48.611 <2e-16 *** college 0.096236 0.067451 1.427 0.1538 clinic -0.139506 0.085864 -1.625 0.1044 university 0.328383 0.132829 2.472 0.0135 * school -0.006551 0.013362 -0.490 0.6240 hospital 0.034167 0.014376 2.377 0.0176 * — Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '. 0.1 ' 1

Residual standard error: 7.066 on 2037 degrees of freedom Multiple R-squared: 0.02491, Adjusted R-squared: 0.02251 F-statistic: 10.41 on 5 and 2037 DF, p-value: 7.1e-10

Call: lm(formula = avg_u_mbps_winsorized college + clinic + university + school + hospital, data = municipality_database)

Residuals: Min 1Q Median 3Q Max -5.624 -3.118 -1.775 0.736 44.713

Coefficients: Estimate Std. Error t value $\Pr(>|\mathbf{t}|)$ (Intercept) 5.68111 0.15269 37.206 <2e-16 *** college -0.02626 0.05733 -0.458 0.647 clinic 0.01682 0.07298 0.231 0.818 university 0.12550 0.11290 1.112 0.266 school -0.01448 0.01136 -1.275 0.203 hospital 0.01646 0.01222 1.347 0.178 — Signif. codes: 0 '***' 0.001 '**' 0.05 '' 0.1 ' ' 1

Residual standard error: 6.006 on 2037 degrees of freedom Multiple R-squared: 0.003887, Adjusted R-squared: 0.001442 F-statistic: 1.59 on 5 and 2037 DF, p-value: 0.1596

Call: lm(formula = avg_d_mbps_change college + clinic + university + school + hospital, data = municipality_database)

Residuals: Min 1Q Median 3Q Max -9.75 -3.70 -3.18 -2.29 2208.84

Coefficients: Estimate Std. Error t value $\Pr(>|\mathbf{t}|)$ (Intercept) 3.73822 2.60972 1.432 0.152 college -0.24670 0.96294 -0.256 0.798 clinic 0.33645 1.22482 0.275 0.784 university 0.03192 1.89497 0.017 0.987 school -0.05825 0.19194 -0.303 0.762 hospital -0.02066 0.20462 -0.101 0.920

Residual standard error: 71.1 on 972 degrees of freedom (1065 observations deleted due to missingness) Multiple R-squared: 0.000194, Adjusted R-squared: -0.004949 F-statistic: 0.03772 on 5 and 972 DF, p-value: 0.9992

 $\label{eq:college} \begin{array}{ll} Call: \ lm(formula = avg_u_mbps_change & college + clinic + university + school + hospital, \ data = municipality_database) \end{array}$

Residuals: Min 1Q Median 3Q Max -2.803 -1.434 -1.003 -0.274 121.145 Coefficients: Estimate Std. Error t value $\Pr(>|t|)$ (Intercept) 1.335185 0.184708 7.229 9.87e-13 *** college -0.075990 0.068154 -1.115 0.265 clinic 0.092993 0.086689 1.073 0.284 university 0.007374 0.134120 0.055 0.956 school -0.016066 0.013585 -1.183 0.237 hospital -0.004062 0.014482 -0.281 0.779 — Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 ': 0.1 ' ' 1

Residual standard error: 5.032 on 972 degrees of freedom (1065 observations deleted due to missingness) Multiple R-squared: 0.003301, Adjusted R-squared: -0.001826 F-statistic: 0.6439 on 5 and 972 DF, p-value: 0.6663

Estimate Std. Error t value $\Pr(>|t|)$ Min. :-0.139506 Min. :0.01254 Min. :-1.19365 Min. :0.00000 1st Qu.: 0.003628 1st Qu.:0.02853 1st Qu.: 0.06595 1st Qu.:0.02105 Median : 0.065201 Median :0.09111 Median : 1.66049 Median :0.10286 Mean : 1.507595 Mean :0.12682 Mean : 4.65140 Mean :0.18867 3rd Qu.: 0.270347 3rd Qu.:0.16246 3rd Qu.: 2.50480 3rd Qu.:0.20983 Max. : 8.732841 Max. :0.37224 Max. :23.46039 Max. :0.68706

Estimate Std. Error t value $\Pr(>|t|)$ Min. :-0.026262 Min. :0.004117 Min. :-1.0643 Min. :0.00000 1st Qu.:-0.006743 1st Qu.:0.022664 1st Qu.:-0.3410 1st Qu.:0.04311 Median : 0.016644 Median :0.063751 Median : 0.7911 Median :0.22978 Mean : 0.966526 Mean :0.099551 Mean : 3.2938 Mean :0.31441 3rd Qu.: 0.098329 3rd Qu.:0.088344 3rd Qu.: 3.3405 3rd Qu.:0.52058 Max. : 5.681109 Max. :0.360177 Max. :15.7731 Max. :0.82851

Estimate Std. Error t value $\Pr(>|t|)$ Min. :-0.246699 Min. :0.02175 Min. :-1.15615 Min. :0.1804 1st Qu.:-0.048850 1st Qu.:0.08247 1st Qu.:-1.03520 1st Qu.:0.2269 Median : 0.005634 Median :0.20532 Median :-0.38546 Median :0.2678 Mean : 0.630166 Mean :0.59089 Mean :-0.07042 Mean :0.3561 3rd Qu.: 0.260321 3rd Qu.:0.26351 3rd Qu.: 0.96545 3rd Qu.:0.3289 Max. : 3.738219 Max. :2.78849 Max. : 1.34059 Max. :0.8583

Estimate Std. Error t value $\Pr(>|t|)$ Min. :-0.075990 Min. :0.002998 Min. :-3.4886 Min. :0.000000 1st Qu.:-0.013065 1st Qu.:0.009502 1st Qu.:-2.5668 1st Qu.:0.000773 Median : 0.001656 Median :0.025557 Median :-0.6046 Median :0.002307 Mean : 0.223239 Mean :0.054502 Mean : 0.2761 Mean :0.177489 3rd Qu.: 0.071588 3rd Qu.:0.045253 3rd Qu.: 2.4143 3rd Qu.:0.132570 Max. : 1.335185 Max. :0.216930 Max. : 6.1549 Max. :0.884071