**Supplemental Table 1.** Association of skilled nursing facility characteristics and county SARS-CoV-2 prevalence with the probability of a facility having at least one resident with SARS-CoV-19 (n=3,357)

| Characteristic | Marginal Effect | Standard Error | 95% CI | | $P$ |
|---|---|---|---|---|---|
| No. Beds (10s) | 0.90 | 0.159 | 0.576 | 1.230 | <0.001 |
| Admissions per bed per year | 0.09 | 0.663 | -1.276 | 1.455 | 0.89 |
| Mean resident age | 0.22 | 0.116 | -0.022 | 0.456 | 0.07 |
| % Black | 0.19 | 0.095 | -0.003 | 0.386 | 0.05 |
| % dementia | -0.03 | 0.051 | -0.130 | 0.079 | 0.62 |
| 1-2 Star-rating for health inspections (Ref. 3) | 0.67 | 1.388 | -2.191 | 3.525 | 0.64 |
| 4-5 Star-rating for health inspections (Ref. 3) | -2.88 | 1.058 | -5.062 | -0.702 | 0.01 |
| 1-2 Star-rating for staffing (Ref. 3) | 0.57 | 1.570 | -2.664 | 3.802 | 0.72 |
| 4-5 Star-rating staffing (Ref. 3) | -1.91 | 1.597 | -5.195 | 1.383 | 0.24 |
| Infection control citation | 1.10 | 1.790 | -2.586 | 4.788 | 0.54 |
| County Prevalence (%) | 33.64 | 11.683 | 9.574 | 57.698 | 0.008 |

Note: Analysis was conducted on 341 Genesis and 3,016 non-Genesis skilled nursing facilities. The outcome was whether or not a facility had at least one resident with SARS-CoV-2 as of April, 21, 2020 (date when collection of state data for non-Genesis facilities was completed). Point estimates are obtained from a linear regression model with state effects. Standard errors were clustered by state. County prevalence (as of April 21, 2020) is represented as a percentage in the model, such that a 1 percent change is equivalent to a change in 1000 cases per 100,000 population. Ref=reference group

**Supplemental Table 2.** Association between skilled nursing facility characteristics and count of SARS-CoV-2 resident cases among Genesis facilities with an outbreak (n=154).

| Characteristic | Marginal Effect | Standard Error | 95% CI | | P |
|---|---|---|---|---|---|
| No. Beds (10s) | 1.96 | 0.53 | 0.92 | 2.99 | <0.001 |
| Admissions per bed per year | -3.53 | 1.96 | -7.37 | 0.31 | 0.07 |
| Mean resident age | 0.79 | 0.70 | -0.58 | 2.17 | 0.26 |
| % Black | -0.13 | 0.18 | -0.49 | 0.23 | 0.29 |
| % dementia | 0.13 | 0.12 | -0.11 | 0.36 | 0.48 |
| Star-rating for health inspections | 1.52 | 2.21 | -2.81 | 5.85 | 0.49 |
| Star-rating for staffing | -1.75 | 3.28 | -8.18 | 4.68 | 0.59 |
| Infection control citation | -5.84 | 5.05 | -15.75 | 4.06 | 0.25 |
| Facility underwent full testing | 6.44 | 5.69 | -4.72 | 17.60 | 0.26 |
| County prevalence (%) | 12.60 | 4.17 | 4.42 | 20.78 | 0.003 |
| Date of first county case | -0.84 | 0.36 | -1.55 | -0.14 | 0.02 |

Note: Analysis was conducted on 154 Genesis skilled nursing facilities reporting at least one confirmed resident case as of May 4, 2020. Point estimates are obtained from a Poisson regression model with standard errors clustered by state. Marginal effects were calculated using predictive margins. County prevalence (as of May 4, 2020) is represented as a percentage in the model, such that a 1 percent change is equivalent to a change in 1000 cases per 100,000 population.