**Supplement 1: ICD-9 and ICD-10 discharge diagnosis codes**

| Condition | ICD-9 | ICD-10 |
|---|---|---|
| **Asthma** | 493 | J45 |
| **CVD** | | |
| Myocardial Infarction | 410, 412 | I21, I22, I25.2 |
| Stroke | 398.91, 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 425.4, 425.5, 425.6, 425.7, 425.8, 425.9, 430, 431, 432.0, 432.1, 432.9, 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91, 435, 436, 436.0, 436.00, 436.9, 436.90, 852.00-852.06, 852.09, 852.20-852.26, 852.29, 852.40–852.46, 852.49, 853.0 | I09.9, I11.0, I13.0, I13.2, I25.5, I42.0, I42.5, I42.6, I42.7, I42.8, I42.9, I60, I61, I62, I63, I64, P29.0 |
| CHF | 428 | I43, I50 |
| **Depression** | 296.2, 296.3, 296.5, 300.4, 309, 311 | F20.4, F31.3-5, F32, F34.1, F41.2, F43.2 |
| **Diabetes** | 250 | E10–E14 |
| **Hypertension** | 401, 402, 403, 404, 405 | I10, I11, I12, I13, I14, I15 |

**Supplement 2: Parametrization of difference in difference model**

$$\text{Logit}(P[Y_{kiT} = 1]) = \beta_{k0} + \beta_{k1} * I(T_i = 1) + \beta_{k2} * (G_i = 1) * I(T_i = 1) + \beta_{k3} * C_i$$
$$\text{Log}(Z_{kiT}) = \beta_{k0} + \beta_{k1} * I(T_i = 1) + \beta_{k2} * (G_i = 1) * I(T_i = 1) + \beta_{k3} * C_i + \log(t)$$

where
$Y_{kiT}$: binary indicator for the $k^{th}$ health outcome (CVD, diabetes, etc.) at time T
$Z_{iT}$: count of outpatient encounters at time T
$t$: length of follow-up in calendar years at time T
$T_i$: binary indicator for the time period (0: baseline or 1: follow-up)
$G_i$: binary indicator for whether the individual is in a block group that gentrified
$C_{iT}$: covariates at time T
$\beta_k$: vector of regression coefficients for the $k^{th}$ health outcome

Here, $\beta_1$ represents the change in log odds (or, for outpatient visits, the log of expected rate) of having the outcome for individuals within a block group that did not gentrify; $\beta_1 + \beta_2$ change in log odds/ log of expected rate of having the outcome for individuals within a block group that did gentrify; and $\beta_2$ represents the difference in the change in log odds of having the outcome (or log of expected rate for outpatient visits) comparing individuals in a block group that did gentrify to individuals in a block group that did not gentrify, conditional on covariates.

**Supplement 3: Eligibility criteria and variables used to define gentrification**

| | Steinmetz-Wood* | Ding | Hirsch |
|---|---|---|---|
| **Eligibility** | Negative z-score in baseline year relative to broader area average and SD in household income, rent price, percent with bachelor's degree and positive z-score in percent below poverty level | Median household income below the citywide median at baseline | >50 people<br>Top quartile of household income |
| **Variables** | Median household income<br>Proportion of population with bachelor's degree<br>Average rent<br><br>Proportion of population with low income<br><br>Proportion of population aged 30–44 (not used in final definition) | Median household income<br>Median gross rent<br>Median home value<br><br>Median increase in its share of college educated residents | Percent with bachelor's degree<br>Median contract rent price<br>Median home value |
| **Gentrified** | Difference between baseline and follow-up (1996–2006) z-scores was positive for all indicators except for proportion of low income, which needed to be negative. Binary variable created. | Above citywide median percentage increase in either median gross rent or median home value AND an above citywide median increase in its share of college-educated residents. | Gentrification: 50–100% in change in college-educated residents from baseline to follow-up AND<br>(50–75% in change in median monthly contract rent between baseline and follow-up Or<br>50–75% in change in median home value between baseline and follow-up)<br><br>Intense gentrification: 50–100% in change in college-educated residents from baseline to follow-up AND<br>(75–100% in change in median monthly contract rent between baseline and follow-up Or<br>75–100% in change in median home value between baseline and follow-up) |

* Definition used in the main analysis

**Supplement 4: Comparison of baseline characteristics of definitions used in sensitivity analysis**

| | Ding | | | Hirsch | | |
|---|---|---|---|---|---|---|
| | Did Not Gentrify | Gentrified | | Did Not Gentrify | Gentrification | Intense Gentrification |
| | (N=16139) | (N=2015) | | (N=23754) | (N=5877) | (N=6804) |
| **Block groups** | **42** | **7** | | **58** | **13** | **16** |
| **Demographics** | | | **Demographics** | | | |
| **Female** | 9029 (55.9%) | 1047 (52.0%) | **Female** | 13450 (56.6%) | 3387 (57.6%) | 3742 (55.0%) |
| **Age (yrs) (Median, 25th–75th)** | 41.7, (28.2–54.5) | 40.3, (28.0–52.1) | **Age (yrs) (Median, 25th–75th)** | 43.2, (29.5–55.7) | 43.1, (29.8–55.5) | 45.0, (31.9–57.4) |
| Percent 65+ | 1809 (11.2%) | 134 (6.7%) | Percent 65+ | 2788 (11.7%) | 722 (12.3%) | 995 (14.6%) |
| **Race** | | | **Race** | | | |
| Black | 11987 (74.3%) | 1397 (69.3%) | Black | 14557 (61.3%) | 3835 (65.3%) | 2811 (41.3%) |
| Other | 1373 (8.5%) | 180 (8.9%) | Other | 1975 (8.3%) | 440 (7.5%) | 561 (8.2%) |
| White | 2779 (17.2%) | 438 (21.7%) | White | 7222 (30.4%) | 1602 (27.3%) | 3432 (50.4%) |
| **Payor** | | | **Payor** | | | |
| Private | 5616 (42.5%) | 635 (39.8%) | Private | 10393 (52.9%) | 2501 (51.1%) | 3244 (57.1%) |
| Public | 5712 (43.2%) | 704 (44.2%) | Public | 7081 (36.0%) | 1821 (37.2%) | 1933 (34.0%) |
| Self-Pay | 1899 (14.4%) | 255 (16.0%) | Self-Pay | 2175 (11.1%) | 569 (11.6%) | 505 (8.9%) |
| **Variables to Define Gentrification** | | | **Variables to Define Gentrification** | | | |
| **Median Household Income ($)** | 29967 (8380) | 25734 (10906) | **Median Household Income ($)** | 42836 (16726) | 36591 (12101) | 45775 (16459) |
| **Percent Bachelor's Degree** | 20.5 (16.1) | 18.8 (14.4) | **Percent Bachelor's Degree** | 33.1 (23.0) | 29.4 (16.2) | 41.2 (19.9) |
| **Average Rent ($)** | 749 (155) | 679 (231) | **Median Home Value ($)** | 832 (198) | 832 (159) | 878 (238) |
| **Median Home Value ($)** | 120908 (69324) | 124836 (31733) | **Median Rent ($)** | 151929 (79320) | 137071 (43751) | 168880 (64918) |

**Supplement 5a: Sensitivity of models to a gentrification definition with fewer criteria – Ding definition**

| | | | | |
|---|---|---|---|---|
| Intercept | 0 | 0 | 0 | <0.001 |
| Time | 1.85 | 1.74 | 1.97 | <0.001 |
| Gentrification | 1.1 | 0.93 | 1.3 | 0.28 |
| **Diabetes** | | | | |
| Intercept | 0.02 | 0.02 | 0.02 | <0.001 |
| Time | 1.55 | 1.50 | 1.60 | <0.001 |
| Gentrification | 1.07 | 0.96 | 1.19 | 0.23 |
| **Hypertension** | | | | |
| Intercept | 0.02 | 0.02 | 0.02 | <0.001 |
| Time | 1.59 | 1.53 | 1.66 | <0.001 |
| Gentrification | 0.94 | 0.86 | 1.03 | 0.20 |
| **Obesity** | | | | |
| Intercept | 0.07 | 0.06 | 0.08 | <0.001 |
| Time | 3.26 | 3.15 | 3.39 | <0.001 |
| Gentrification | 0.94 | 0.86 | 1.03 | 0.20 |
| **Depression** | | | | |
| Intercept | 0.04 | 0.03 | 0.04 | <0.001 |
| Time | 2.37 | 2.28 | 2.46 | <0.001 |
| Gentrification | 1.10 | 0.99 | 1.23 | 0.07 |
| **Asthma** | | | | |
| Intercept | 0.05 | 0.04 | 0.05 | <0.001 |
| Time | 1.94 | 1.87 | 2.02 | <0.001 |
| Gentrification | 1.13 | 1.00 | 1.28 | 0.04 |
| **Emergency Department** | | | | |
| Intercept | 0.73 | 0.68 | 0.79 | <0.001 |
| Time | 2.03 | 1.95 | 2.11 | <0.001 |
| Gentrification | 1.10 | 1.02 | 1.19 | 0.01 |
| **Inpatient** | | | | |
| Intercept | 0.02 | 0.02 | 0.02 | <0.001 |
| Time | 1.20 | 1.13 | 1.28 | <0.001 |
| Gentrification | 1.09 | 0.97 | 1.22 | 0.15 |
| **Outpatient** | | | | |
| Intercept | 0.27 | 0.24 | 0.29 | <0.001 |
| Time | 1.14 | 1.11 | 1.17 | <0.001 |
| Gentrification | 0.98 | 0.93 | 1.05 | 0.61 |

Models adjusted for age, race, ICE, sex, insurance status, and the individual-level clustering effect.

**Supplement 5b: Sensitivity of models to a 2 stage (i.e., less and more intense) gentrification definition – Hirsch definition**

| CVD | Estimate | 95% CI | | p-value |
|---|---|---|---|---|
| Intercept | 0 | 0 | 0 | <0.001 |
| Time | 1.88 | 1.80 | 1.97 | <0.001 |
| Gentrification | 1.04 | 0.94 | 1.15 | 0.48 |
| Intense Gentrification | 1.00 | 0.91 | 1.11 | 0.96 |
| **Diabetes** | | | | |
| Intercept | 0.02 | 0.02 | 0.02 | <0.001 |
| Time | 1.54 | 1.51 | 1.58 | <0.001 |
| Gentrification | 0.97 | 0.91 | 1.04 | 0.35 |
| Intense Gentrification | 0.90 | 0.84 | 0.96 | 0.002 |
| **Hypertension** | | | | |
| Intercept | 0.02 | 0.02 | 0.02 | <0.001 |
| Time | 1.52 | 1.48 | 1.57 | <0.001 |
| Gentrification | 0.97 | 0.92 | 1.03 | 0.35 |
| Intense Gentrification | 0.89 | 0.84 | 0.95 | <0.001 |
| **Obesity** | | | | |
| Intercept | 0.08 | 0.08 | 0.09 | <0.001 |
| Time | 3.05 | 2.97 | 3.13 | <0.001 |
| Gentrification | 0.94 | 0.89 | 1.00 | 0.04 |
| Intense Gentrification | 0.86 | 0.82 | 0.91 | <0.001 |
| **Depression** | | | | |
| Intercept | 0.04 | 0.04 | 0.04 | <0.001 |
| Time | 2.27 | 2.21 | 2.33 | <0.001 |
| Gentrification | 1.02 | 0.96 | 1.09 | 0.54 |
| Intense Gentrification | 1.06 | 1.00 | 1.14 | 0.06 |
| **Asthma** | | | | |
| Intercept | 0.05 | 0.04 | 0.05 | <0.001 |
| Time | 1.92 | 1.86 | 1.98 | <0.001 |
| Gentrification | 1.00 | 0.93 | 1.08 | 0.95 |
| Intense Gentrification | 0.97 | 0.89 | 1.05 | 0.40 |
| **Emergency Department** | | | | |
| Intercept | 0.62 | 0.58 | 0.65 | <0.001 |
| Time | 1.90 | 1.84 | 1.96 | <0.001 |
| Gentrification | 1.03 | 0.98 | 1.08 | 0.30 |
| Intense Gentrification | 1.09 | 1.04 | 1.15 | <0.001 |
| **Inpatient** | | | | |
| Intercept | 0.02 | 0.01 | 0.02 | <0.001 |

| | | | | |
|---|---|---|---|---|
| Time | 1.18 | 1.12 | 1.23 | <0.001 |
| Gentrification | 1.04 | 0.97 | 1.12 | 0.23 |
| Intense Gentrification | 1.02 | 0.95 | 1.09 | 0.64 |
| **Outpatient** | | | | |
| Intercept | 0.26 | 0.25 | 0.29 | <0.001 |
| Time | 1.10 | 1.08 | 1.12 | <0.001 |
| Gentrification | 0.98 | 0.94 | 1.01 | 0.14 |
| Intense Gentrification | 0.98 | 0.95 | 1.02 | 0.30 |

Models adjusted for age, ICE, sex, insurance status, and the individual-level clustering effect.

**Supplement 6a: Association between gentrification and health and health care utilization stratified by age**

| CVD | | <65 years old | | | | >= 65 years old | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Estimate* | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | | 0.92 | 0.73 | 1.14 | 0.43 | 0 | 0 | 0 | <0.001 | 0.53 |
| **Ding** | | 1.16 | 0.96 | 1.41 | 0.13 | 0 | 0 | Inf | 0.12 | 0.13 |
| **Hirsch** | | | | | | | | | | |
| | Less | 1.04 | 0.91 | 1.19 | 0.54 | 1.02 | 0.89 | 1.18 | 0.74 | 0.18 |
| | More | 1.13 | 0.99 | 1.29 | 0.07 | 0.86 | 0.75 | 0.99 | 0.04 | 0.72 |
| **Diabetes** | | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | | 0.96 | 0.85 | 1.09 | 0.56 | 1.08 | 0.84 | 1.39 | 0.55 | 0.23 |
| **Ding** | | 1.04 | 0.92 | 1.16 | 0.54 | 0.96 | 0.75 | 1.23 | 0.73 | 0.85 |
| **Hirsch** | | | | | | | | | | |
| | Less | 0.99 | 0.92 | 1.07 | 0.84 | 0.91 | 0.8 | 1.04 | 0.16 | 0.11 |
| | More | 0.94 | 0.87 | 1.02 | 0.13 | 0.78 | 0.69 | 0.89 | <0.001 | 0.02 |
| **Hypertension** | | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | | 0.95 | 0.85 | 1.07 | 0.41 | 0.85 | 0.59 | 1.23 | 0.39 | 0.44 |
| **Ding** | | 0.93 | 0.84 | 1.02 | 0.13 | 0.78 | 0.56 | 1.08 | 0.14 | 0.28 |
| **Hirsch** | | | | | | | | | | |
| | Less | 0.96 | 0.91 | 1.03 | 0.25 | 1.00 | 0.85 | 1.19 | 0.97 | 0.001 |
| | More | 0.89 | 0.83 | 0.94 | <0.001 | 0.91 | 0.78 | 1.05 | 0.19 | 0.24 |
| **Obesity** | | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | | 0.87 | 0.78 | 0.97 | 0.01 | 0.93 | 0.73 | 1.19 | 0.58 | 0.99 |
| **Ding** | | 0.90 | 0.82 | 0.99 | 0.04 | 0.90 | 0.7 | 1.15 | 0.40 | 0.84 |
| **Hirsch** | | | | | | | | | | |
| | Less | 0.95 | 0.89 | 1.01 | 0.08 | 0.97 | 0.85 | 1.10 | 0.63 | 0.83 |
| | More | 0.86 | 0.80 | 0.91 | <0.001 | 0.89 | 0.79 | 1.01 | 0.07 | 0.47 |
| **Depression** | | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | | 1.01 | 0.89 | 1.15 | 0.85 | 1 | 0.75 | 1.34 | 1.00 | 0.43 |

| | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
|---|---|---|---|---|---|---|---|---|---|
| **Ding** | 1.03 | 0.92 | 1.15 | 0.59 | 1.15 | 0.87 | 1.52 | 0.32 | 0.58 |
| **Hirsch** | | | | | | | | | |
| Less | 1.05 | 0.98 | 1.13 | 0.17 | 0.93 | 0.8 | 1.07 | 0.31 | 0.06 |
| More | 1.09 | 1.01 | 1.17 | 0.02 | 0.94 | 0.82 | 1.07 | 0.36 | 0.04 |
| **Asthma** | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | 1.08 | 0.93 | 1.25 | 0.32 | 0 | 0 | Inf | 0.16 | 0.09 |
| **Ding** | 1.10 | 0.97 | 1.25 | 0.14 | 1.11 | 0.8 | 1.53 | 0.54 | 0.46 |
| **Hirsch** | | | | | | | | | |
| Less | 0.99 | 0.91 | 1.08 | 0.76 | 1.01 | 0.85 | 1.2 | 0.92 | 0.16 |
| More | 0.99 | 0.91 | 1.08 | 0.86 | 0.81 | 0.68 | 0.97 | 0.02 | 0.32 |
| **Emergency Department** | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | 1.07 | 0.98 | 1.17 | 0.14 | 1.27 | 1.01 | 1.59 | 0.04 | 0.51 |
| **Ding** | 1.07 | 0.98 | 1.16 | 0.12 | 1.23 | 0.98 | 1.55 | 0.08 | 0.30 |
| **Hirsch** | | | | | | | | | |
| Less | 1.03 | 0.98 | 1.09 | 0.24 | 1.01 | 0.90 | 1.13 | 0.86 | 0.58 |
| More | 1.10 | 1.04 | 1.16 | <0.001 | 0.99 | 0.89 | 1.11 | 0.90 | 0.14 |
| **Inpatient Department** | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | 1.04 | 0.91 | 1.20 | 0.53 | Inf | 0 | Inf | 0.06 | 0.94 |
| **Ding** | 1.04 | 0.91 | 1.17 | 0.59 | 0 | 0 | 0 | 0.05 | 0.87 |
| **Hirsch** | | | | | | | | | |
| Less | 1.04 | 0.95 | 1.13 | 0.41 | 1.06 | 0.93 | 1.20 | 0.37 | 0.33 |
| More | 1.01 | 0.93 | 1.11 | 0.78 | 0.99 | 0.87 | 1.11 | 0.82 | 0.40 |
| **Outpatient Department** | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | 0.91 | 0.84 | 0.98 | 0.01 | 0.97 | 0.86 | 1.1 | 0.64 | 0.26 |
| **Ding** | 0.99 | 0.92 | 1.06 | 0.70 | 0.92 | 0.82 | 1.05 | 0.22 | 0.19 |
| **Hirsch** | | | | | | | | | |
| Less | 0.98 | 0.94 | 1.02 | 0.29 | 0.98 | 0.93 | 1.05 | 0.61 | 0.58 |
| More | 0.98 | 0.94 | 1.02 | 0.39 | 0.99 | 0.93 | 1.06 | 0.87 | 0.74 |

Models adjusted for age, ICE, sex, insurance status, and the individual-level clustering effect.
* Estimate refers to effect of gentrification for distinct definitions of gentrification

**Supplement 6b: Association between gentrification and health and health care utilization stratified by sex**

| | | Male | | | | Female | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CVD** | | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | | 0.92 | 0.69 | 1.23 | 0.57 | 0.93 | 0.74 | 1.17 | 0.55 | 0.94 |
| **Ding** | | 1.10 | 0.85 | 1.43 | 0.47 | 1.10 | 0.88 | 1.37 | 0.40 | 0.90 |
| **Hirsch** | | | | | | | | | | |
| | Less | 1.01 | 0.85 | 1.19 | 0.95 | 1.06 | 0.93 | 1.2 | 0.39 | 0.59 |
| | More | 1.06 | 0.91 | 1.25 | 0.45 | 0.97 | 0.85 | 1.1 | 0.59 | 0.26 |
| **Diabetes** | | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | | 1.02 | 0.85 | 1.23 | 0.83 | 0.98 | 0.84 | 1.14 | 0.79 | 0.68 |
| **Ding** | | 1.05 | 0.89 | 1.23 | 0.59 | 1.08 | 0.94 | 1.25 | 0.26 | 0.64 |
| **Hirsch** | | | | | | | | | | |
| | Less | 0.87 | 0.78 | 0.98 | 0.02 | 1.03 | 0.95 | 1.12 | 0.47 | **0.01** |
| | More | 0.87 | 0.78 | 0.97 | 0.01 | 0.92 | 0.84 | 1.01 | 0.07 | 0.44 |
| **Hypertension** | | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | | 0.90 | 0.77 | 1.05 | 0.17 | 1.02 | 0.88 | 1.19 | 0.75 | 0.06 |
| **Ding** | | 0.92 | 0.81 | 1.05 | 0.22 | 0.96 | 0.84 | 1.09 | 0.53 | 0.92 |
| **Hirsch** | | | | | | | | | | |
| | Less | 0.98 | 0.9 | 1.06 | 0.59 | 0.97 | 0.9 | 1.05 | 0.49 | 0.62 |
| | More | 0.91 | 0.84 | 0.99 | 0.03 | 0.88 | 0.81 | 0.95 | 0.001 | **0.002** |
| **Obesity** | | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | | 0.82 | 0.7 | 0.95 | 0.01 | 0.95 | 0.83 | 1.08 | 0.42 | 0.09 |
| **Ding** | | 0.96 | 0.84 | 1.09 | 0.51 | 0.93 | 0.82 | 1.05 | 0.23 | 0.55 |
| **Hirsch** | | | | | | | | | | |
| | Less | 0.90 | 0.83 | 0.98 | 0.02 | 0.97 | 0.9 | 1.04 | 0.37 | **0.05** |
| | More | 0.89 | 0.82 | 0.97 | 0.01 | 0.84 | 0.78 | 0.91 | <0.001 | **<0.001** |
| **Depression** | | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | | 0.93 | 0.76 | 1.15 | 0.51 | 1.12 | 0.96 | 1.3 | 0.14 | 0.13 |

| | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
|---|---|---|---|---|---|---|---|---|---|
| **Ding** | 1.01 | 0.85 | 1.2 | 0.93 | 1.15 | 1.01 | 1.32 | 0.03 | 0.24 |
| **Hirsch** | | | | | | | | | |
| Less | 1.00 | 0.89 | 1.12 | 0.97 | 1.03 | 0.95 | 1.12 | 0.44 | 0.61 |
| More | 1.09 | 0.97 | 1.21 | 0.13 | 1.05 | 0.97 | 1.14 | 0.23 | 0.30 |
| **Asthma** | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | 1.07 | 0.84 | 1.35 | 0.58 | 1.02 | 0.86 | 1.22 | 0.8 | 0.80 |
| **Ding** | 1.10 | 0.90 | 1.35 | 0.36 | 1.16 | 0.99 | 1.35 | 0.06 | 0.83 |
| **Hirsch** | | | | | | | | | |
| Less | 0.91 | 0.79 | 1.05 | 0.20 | 1.05 | 0.96 | 1.16 | 0.30 | 0.07 |
| More | 0.95 | 0.83 | 1.09 | 0.51 | 0.97 | 0.88 | 1.07 | 0.58 | 0.88 |
| **Emergency Department** | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | 0.98 | 0.87 | 1.11 | 0.78 | 1.22 | 1.08 | 1.37 | 0.001 | **0.01** |
| **Ding** | 1.09 | 0.98 | 1.22 | 0.11 | 1.11 | 1.00 | 1.24 | 0.06 | 0.99 |
| **Hirsch** | | | | | | | | | |
| Less | 1.03 | 0.96 | 1.11 | 0.45 | 1.03 | 0.96 | 1.09 | 0.46 | 0.81 |
| More | 1.10 | 1.02 | 1.18 | 0.01 | 1.09 | 1.02 | 1.16 | 0.01 | 0.82 |
| **Inpatient Department** | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | 1.11 | 0.92 | 1.34 | 0.28 | 1.07 | 0.92 | 1.26 | 0.38 | 0.85 |
| **Ding** | 1.20 | 1.02 | 1.42 | 0.03 | 1.00 | 0.86 | 1.16 | 0.98 | 0.15 |
| **Hirsch** | | | | | | | | | |
| Less | 1.04 | 0.93 | 1.17 | 0.45 | 1.05 | 0.96 | 1.15 | 0.32 | 0.94 |
| More | 0.98 | 0.87 | 1.09 | 0.68 | 1.05 | 0.95 | 1.15 | 0.36 | 0.72 |
| **Outpatient Department** | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | 0.97 | 0.86 | 1.10 | 0.66 | 0.91 | 0.85 | 0.99 | 0.03 | 0.63 |
| **Ding** | 0.99 | 0.89 | 1.10 | 0.87 | 0.98 | 0.91 | 1.06 | 0.64 | 0.87 |
| **Hirsch** | | | | | | | | | |
| Less | 0.97 | 0.92 | 1.03 | 0.35 | 0.98 | 0.94 | 1.02 | 0.26 | 0.76 |

| More | 0.95 | 0.90 | 1.00 | 0.06 | 1.00 | 0.96 | 1.05 | 0.99 | 0.78 |
|------|------|------|------|------|------|------|------|------|------|

Models adjusted for age, race, ICE, sex, insurance status, and the individual-level clustering effect.

* Estimate refers to effect of gentrification for distinct definitions of gentrification

**Supplement 6c: Association between gentrification and health and health care utilization stratified by race**

| CVD | | Non-Black | | | | Black | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Estimate | Lower CL | Upper CL | p-value | Estimate | Lower CL | Upper CL | p-value | p-int |
| **Main** | | 0.43 | 0.17 | 1.08 | 0.07 | 1.00 | 0.83 | 1.20 | 0.98 | 0.07 |
| **Ding** | | 0.90 | 0.61 | 1.32 | 0.58 | 1.16 | 0.96 | 1.40 | 0.12 | 0.12 |
| **Hirsch** | | | | | | | | | | |
| | Less | 1.00 | 0.83 | 1.20 | 1.00 | 1.07 | 0.94 | 1.20 | 0.30 | 0.56 |
| | More | 0.92 | 0.80 | 1.07 | 0.30 | 1.10 | 0.96 | 1.27 | 0.17 | 0.05 |
| **Diabetes** | | | | | | | | | | |
| **Main** | | 0.83 | 0.57 | 1.20 | 0.31 | 1.03 | 0.91 | 1.17 | 0.66 | 0.32 |
| **Ding** | | 1.05 | 0.85 | 1.30 | 0.64 | 1.06 | 0.94 | 1.2 | 0.350 | 0.78 |
| **Hirsch** | | | | | | | | | | |
| | Less | 0.99 | 0.88 | 1.12 | 0.89 | 0.96 | 0.89 | 1.04 | 0.340 | 0.50 |
| | More | 0.84 | 0.75 | 0.93 | <0.001 | 1.02 | 0.93 | 1.12 | 0.710 | <0.001 |
| **Hypertension** | | | | | | | | | | |
| **Main** | | 0.86 | 0.63 | 1.18 | 0.36 | 0.98 | 0.87 | 1.10 | 0.74 | 0.65 |
| **Ding** | | 0.87 | 0.73 | 1.04 | 0.12 | 0.96 | 0.86 | 1.08 | 0.52 | 0.46 |
| **Hirsch** | | | | | | | | | | |
| | Less | 1.05 | 0.95 | 1.16 | 0.31 | 0.93 | 0.87 | 1 | 0.06 | 0.03 |
| | More | 0.87 | 0.8 | 0.94 | <0.001 | 0.97 | 0.89 | 1.05 | 0.43 | <0.001 |
| **Obesity** | | | | | | | | | | |
| **Main** | | 0.86 | 0.63 | 1.15 | 0.31 | 0.92 | 0.82 | 1.02 | 0.10 | 0.91 |
| **Ding** | | 0.85 | 0.72 | 1.01 | 0.06 | 0.98 | 0.88 | 1.09 | 0.66 | 0.29 |
| **Hirsch** | | | | | | | | | | |
| | Less | 0.97 | 0.88 | 1.06 | 0.48 | 0.93 | 0.87 | 1.00 | 0.05 | 0.49 |
| | More | 0.88 | 0.81 | 0.95 | 0.002 | 0.92 | 0.85 | 0.99 | 0.03 | <0.001 |
| **Depression** | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Main** | | 0.93 | 0.66 | 1.3 | 0.66 | 1.07 | 0.94 | 1.22 | 0.28 | 0.67 |
| **Ding** | | 1.05 | 0.87 | 1.27 | 0.58 | 1.12 | 0.98 | 1.27 | 0.09 | 0.85 |
| **Hirsch** | | | | | | | | | | |
| | Less | 1.12 | 1.01 | 1.25 | 0.04 | 0.96 | 0.89 | 1.05 | 0.41 | 0.03 |
| | More | 1.08 | 0.99 | 1.18 | 0.09 | 1.08 | 0.98 | 1.19 | 0.14 | 0.97 |
| **Asthma** | | | | | | | | | | |
| **Main** | | 1.25 | 0.81 | 1.92 | 0.31 | 1.01 | 0.88 | 1.17 | 0.85 | 0.25 |
| **Ding** | | 1.17 | 0.92 | 1.49 | 0.19 | 1.12 | 0.97 | 1.29 | 0.12 | 0.71 |
| **Hirsch** | | | | | | | | | | |
| | Less | 0.95 | 0.82 | 1.09 | 0.48 | 1.03 | 0.94 | 1.13 | 0.57 | 0.35 |
| | More | 0.92 | 0.82 | 1.04 | 0.20 | 1.01 | 0.9 | 1.13 | 0.86 | 0.39 |
| **Emergency Department** | | | | | | | | | | |
| **Main** | | 0.94 | 0.72 | 1.23 | 0.66 | 1.15 | 1.05 | 1.26 | 0.003 | 0.48 |
| **Ding** | | 1.05 | 0.90 | 1.23 | 0.53 | 1.12 | 1.02 | 1.22 | 0.01 | 0.42 |
| **Hirsch** | | | | | | | | | | |
| | Less | 1.22 | 1.11 | 1.33 | <0.001 | 0.96 | 0.91 | 1.02 | 0.22 | <0.001 |
| | More | 1.08 | 1.00 | 1.16 | 0.05 | 1.16 | 1.09 | 1.24 | <0.001 | 0.002 |
| **Inpatient Department** | | | | | | | | | | |
| **Main** | | 1.00 | 0.68 | 1.47 | 0.99 | 1.11 | 0.98 | 1.27 | 1.00 | 0.76 |
| **Ding** | | 1.08 | 0.86 | 1.36 | 0.49 | 1.08 | 0.95 | 1.23 | 0.25 | 0.84 |
| **Hirsch** | | | | | | | | | | |
| | Less | 1.15 | 1.01 | 1.31 | 0.03 | 1.01 | 0.92 | 1.10 | 0.88 | 0.08 |
| | More | 1.00 | 0.9 | 1.11 | 1.00 | 1.08 | 0.98 | 1.19 | 0.11 | 0.03 |
| **Outpatient Department** | | | | | | | | | | |
| **Main** | | 0.9 | 0.67 | 1.19 | 0.45 | 0.94 | 0.87 | 1 | 0.05 | 0.94 |
| **Ding** | | 1.03 | 0.92 | 1.16 | 0.60 | 0.96 | 0.89 | 1.03 | 0.26 | 0.17 |