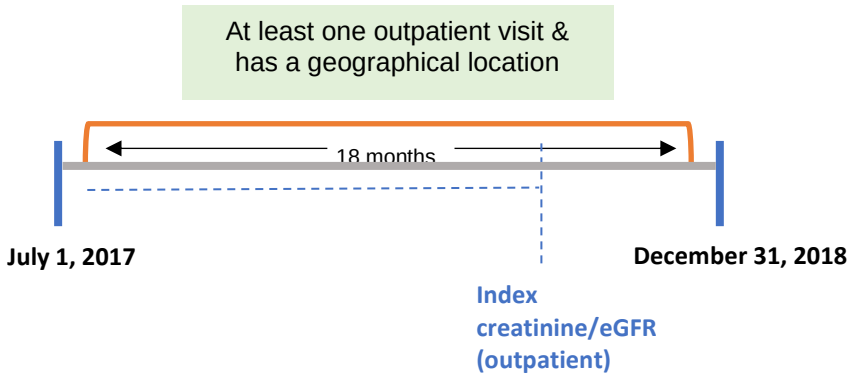
Figure S1. Cohort Construction



Item S1: Details of insurance coverage and methods

- **Defining insurance status (main analysis)**

< 65 years:

- Patient considered to be on Medicaid if most recent insurance was reported as Medicaid (end date is not reported or on or after time of index eGFR and start date is before or at time of index eGFR).
- Patient considered to have "other insurance" if most recent insurance was reported as "other"/private insurance (end date is not reported or on or after time of index eGFR and start date is before or at time of index eGFR).
- Otherwise we considered patient to be uninsured (i.e. at most recent time, patient had no Medicaid or other insurance coverage)

≥ 65 years:

- Patients considered to be on Medicare (Part A, B or C*) if that was the only last insurance reported (end date is not reported or on or after time of index eGFR and start date is before or at time of index eGFR).
- Otherwise patients considered to have in additional to Medicare a supplemental insurance plan

*These include:
MEDICARE PT B ONLY
MEDICARE PT A
RR MEDICARE PT A ONLY
MEDICARE RAILROAD PART B ONLY
MEDICARE
MEDICARE HOMECARE & HOSPICE
ACO MEDICARE
UCARE MEDICARE [Medicare advantage plans]
MEDICARE ADVANTAGE
HEALTHPARTNERS MEDICARE ADVANTAGE
HUMANA MEDICARE ADVANTAGE
UNITED HEALTHCARE MEDICARE ADVANTAGE
ATENA MEDICARE ADVANTAGE
OSF MEDICARE ADVANTAGE
BCBS MEDICARE ADVANTAGE

- **Defining insurance status (sensitivity analysis)**

< 65 years:

- Patient considered to be on Medicaid if they had only Medicaid coverage from 6/1/2017 to 12/31/2018 (not other insurance). Patient considered to have "other insurance" if most recent insurance was reported as "other"/private insurance (if they only had other insurance coverage 100% of the time from 6/1/2017 to 12/31/2018)
- Otherwise we considered patient to be uninsured

≥ 65 years:

- Patients considered to be on Medicare (Part A, B or C) if that was the only insurance reported from 6/1/2017 to 12/31/2018

- Patients considered to have Medicare and supplemental insurance if they were covered by supplemental insurance plans 100% of the time from 6/1/2017 to 12/31/2018 and no coverage by Medicare plan A, B or C

- **Details on insurance coverage:**

  - **Part A** covers inpatient hospital stays, skilled nursing facility (SNF) stays, some home health visits, and hospice care. Part A benefits are subject to a deductible. Part A also requires coinsurance for extended inpatient hospital and SNF stays.

  - **Part B** covers physician visits, outpatient services, preventive services, and some home health visits. Many Part B benefits are subject to a deductible, and, typically, coinsurance of 20 percent.

  - **Part C (Medicare Advantage):** You can may be required to use doctors and hospitals within the plan network. You are able to see specialist only with a referral and physician should be within the network. There are network restrictions. However, emergency care is covered within the US and when you travel. Mostly, there are specific periods when you can enroll or switch to another Medicare part C plan. You usually pay a low or $0 monthly premium but you pay co-pays and co-insurance and deductibles when you use services. Prescription drug coverage is included.

  - **Medicare supplemental insurance plans:** You can select your doctors and hospitals as long as they accept Medicare patients. You are able to see specialist without a referral and there are no network restrictions across the US. You can also apply and buy Medicare supplemental insurance once you are ≥65 years. As far as cost, you pay a monthly plan premium in addition to Part B premium, however out of pocket costs are limited. For prescription drug coverage, participants should get Plan D coverage as well since supplemental insurance plans don't usually cover prescription drugs.

- **Selection bias:** Biases that arise from the procedure by which individuals are selected into the analysis

  Hernán, Miguel A.; Hernández-Díaz, Sonia; Robins, James M. A Structural Approach to Selection Bias, Epidemiology: September 2004 - Volume 15 - Issue 5 - p 615-625 doi: 10.1097/01.ede.0000135174.63482.43

- **Effect Modification/Interaction:**
  We are interested in studying the interaction between A and B (two exposures of interest) on D (outcome). Our exposures A and B are categorical. The recommendation made by VanderWeele et al is to assess effect modification on the additive scale (using relative excess risk due to interaction [RERI]) and on multiplicative scale. On both scales we can assess whether the interaction is significant or not.
  Additive interaction measures the extent to which the effect of the two factors (A and B) together exceeds the effect of each considered individually. Multiplicative interaction measures the extent to which the effect of two factors (A and B) together exceeds the product of the effects of the two factors considered separately.

  For example: We are studying the interaction between tract SES (exposure A) and hypertension (exposure B) with CKD prevalence (outcome). We want to know whether

the association of tract SES with CKD prevalence differs by hypertension status? We test for interaction, if significant we present the stratified results. We can test for interaction on both the multiplicative and additive scale. Results for the multiplicative scale can be obtained easily from the model using any programing language; you add the interaction term A*B (tract SES*hypertension) to the model and assess direction of interaction (positive if >1 or negative if <1) and significance. For additive scale you have to calculate RERI, all values can be obtained from the model output. You assess significance and direction of interaction (positive if >0 and negative if <0). The formulas are presented below:

Ratio of PRs (interaction on multiplicative scale): $e^{\beta(\text{low tract SES}) + \beta(\text{hypertension}) + \beta(\text{low tract SES*hypertension})} / e^{(\beta(\text{low tract SES}) * e^{\beta(\text{hypertension})})} = PR_{(\text{low SES tract and hypertension vs. high SES tract and no hypertension})} / PR_{(\text{low SES tract and no hypertension vs. high SES tract and no hypertension})} * PR_{(\text{high SES tract and hypertension vs. high SES tract and no hypertension})}$

We obtain a Ratio of PRs(95%CI) and p-value. If ratio of PRs is >1 and p-value <0.05, this indicates that the positive (direction of interaction) interaction on the multiplicative scale is significant. This means that there were some indications that the estimated joint effect on the PR scale of tract SES and hypertension together was greater than the product of the estimated effects of tract SES alone and hypertension alone so that there was positive interaction on the multiplicative scale.

RERI is calculated as follows (interaction on the additive scale): $e^{\beta(\text{low tract SES}) + \beta(\text{hypertension}) + \beta(\text{low tract SES*hypertension})} - e^{(\beta(\text{low tract SES}) + \beta(\text{hypertension}))} + 1 = PR_{(\text{low SES tract and hypertension vs. high SES tract and no hypertension})} + PR_{(\text{low SES tract and no hypertension vs. high SES tract and no hypertension})} + PR_{(\text{high SES tract and hypertension vs. high SES tract and no hypertension})} + 1$

We obtain a RERI(95%CI) and p-value. If RERI>0 and p-value <0.05, this indicates that the positive (direction of interaction) interaction on the additive scale is significant. This means that were some indications that the estimated joint effect on the additive scale of tract SES and hypertension together was greater than the sum of the estimated effects of tract SES and hypertension alone so that there was a positive interaction on the additive scale.

In our example, hypertension modified the association of tract SES on CKD prevalence on both scales i.e. both the multiplicative and additive interactions were significant. Therefore, we stratified our analysis by hypertension status and reported these results.

References:
Van Der Weele TJ, Knol MJ. A tutorial on interaction. Epidemiol Method. 2014;3(1):33–72.
Knol MJ, VanderWeele TJ. Recommendations for presenting analyses of effect modification and interaction. *Int J Epidemiol*. 2012;41(2):514-520. doi:10.1093/ije/dyr218

- **Defining chronic kidney disease:**
  We used the CKD-EPI calculator to obtain eGFR values.
  Levey AS, Stevens LA, Schmid CH, et al. A new equation to estimate glomerular filtration rate. *Ann Intern Med.* 2009;150(9):604-612.
  The American Society of Nephrology and the National Kidney Foundation have a current taskforce to reevaluate including race in the calculation to diagnose kidney disease.
  We removed race from the CKD-EPI calculation and assessed the difference in number of patients classified as having CKD (eGFR<60 ml/min/1.73m^2) vs. no CKD (eGFR≥60 ml/min/1.73m^2).

Diao JA, Wu GJ, Taylor HT, et al. Clinical implications of removing race from estimates of kidney function. JAMA. Published online December 2, 2020. doi:10.1001/jama.2020.22124

Here are our results:

	Have eGFR <60 ml/min/1.73m^2	Have eGFR ≥60 ml/min/1.73m^2
CKD-EPI formula	25,097	160,172
CKD-EPI formula without race	24,310	160,959

Based on these results, if we are to exclude race from the formula 787 more individuals would have been classified as having an eGFR<60. This is 0.4% of the total cohort. Based on these results, we report our findings using CKD-EPI formula including race.

Table S1. Comparison of Fairview patients to the 7-county Minneapolis/St Paul metropolitan area

	Fairview population (included in our analysis)	**Census data (7 county metro area)**
Median Age[1]	55	36*
% Black	9%	8%
% Male	45%	49%
%Medicaid[2]	3%	7%
Number of census tracts	677	704
Population by County, n(%)		
Anoka	27,503 (15%)	331,649 (12%)
Carver	2,158 (1%)	91,355 (3%)
Dakota	44,298 (24%)	399,443 (14%)
Hennepin	75,169 (41%)	1,158,039 (40%)
Ramsey	19,436 (11%)	510,885 (18%)
Scott	10,203 (5%)	130,689 (5%)
Washington	6,502 (4%)	238,721 (8%)
Total population	*185,269*	*2,860,781*

[1]Median age in Fairview population before excluding patients <18 years

[2]Medicaid in Fairview population is calculated for those ≥ 18 years with Medicaid coverage

Medicaid coverage (Medicaid or other means-tested public coverage) for census data include individuals ≥18 years with coverage through Medicaid, Medical Assistance or any kind of government assistance plan for those with low incomes or a disability from 2012 American Community Survey: 5-Year Data [2008-2012].

*Census data is not restricted to adults >18 years. Median age here is of all the population.

Table S2A. Characteristics of population by tract socioeconomic status in the Twin Cities metro area for individuals <65 years

	High SES (4th quartile of median value of owner occupied housing units[≥ $231,300]) N= 56,973	**Low SES (1st quartile of median value of owner occupied housing units [< $165,200])** N=12,149
CKD, n(%)	6,089 (11%)	1,818 (15%)
Individual level characteristics		
Age, mean (SD)	46.7 ± 12.6	44.4 ± 12.7
Male, n(%)	26,961 (47%)	5,332 (44%)
Black	3,301 (6%)	2958 (24%)
Smoker, n(%)	18,545 (33%)	5,469 (45%)
Insurance		
Medicaid, n(%)	1,454 (3%)	881 (7%)
Blood Pressure (BP)		
Systolic BP, mmHg	124.4± 16.7	126.0 ± 17.8
Diastolic BP, mmHg	77.9 ± 11.1	78.8 ± 11.7
Medical History		
Hypertension, n(%)	17,080 (30%)	4,332 (36%)
Diabetes, n(%)	5,510 (10%)	2,139 (18%)
Obese (BMI≥ 30 kg/m^2), n(%)	19,452 (38%)	5,117 (47%)
Cardiovascular disease, n(%)	3,355 (6%)	990 (8%)
Stroke, n(%)	915 (2%)	258 (2%)
Hyperlipidemia, n(%)	18,087 (32%)	3,464 (29%)
Cancer, n(%)	2,461 (4%)	389 (3%)

CKD: chronic kidney disease; Cardiovascular disease includes congestive heart failure, acute myocardial infarction, ischemic heart disease, and peripheral vascular disease

Table S2B. Characteristics of population by tract socioeconomic status in the Twin Cities metro area for individuals < 65 years

	High SES (4th quartile of %>25 years with complete college education[≥ $48.1%]) N=39,229	**Low SES (1st quartile of %>25 years with complete college education [<20.4%])** N=14,637
CKD, n(%)	3,992 (10%)	2,111 (14%)
Individual level characteristics		
Age, mean (SD)	46.2 ± 12.8	45.5 ± 12.8
Male, n(%)	18,412 (47%)	6,636 (45%)
Black	2,628 (7%)	2,596 (18%)
Smoker, n(%)	11,894 (30%)	7,200 (49%)
Insurance		
Medicaid, n(%)	938 (2%)	1,013 (7%)
Blood Pressure (BP)		
Systolic BP, mmHg	123.9 ± 16.6	127.3 ± 17.5
Diastolic BP, mmHg	77.6 ± 11.0	79.2 ± 11.5
Medical History		
Hypertension, n(%)	10,890 (28%)	5,709 (39%)
Diabetes, n(%)	3,664 (9%)	2,569 (18%)
Obese (BMI≥ 30 kg/m^2), n(%)	12,164 (35%)	6,565 (50%)
Cardiovascular disease, n(%)	2,195 (6%)	1,252 (9%)
Stroke, n(%)	597 (2%)	313 (2%)
Hyperlipidemia, n(%)	11,688 (30%)	4,748 (32%)
Cancer, n(%)	1,734 (4%)	514 (4%)

CKD: chronic kidney disease; Cardiovascular disease includes congestive heart failure, acute myocardial infarction, ischemic heart disease, and peripheral vascular disease

Table S2C. Characteristics of population by tract socioeconomic status in the Twin Cities metro area for individuals <65years

	High SES (4th quartile of household income [≥ $62,343]) N=69,141	**Low SES (1st quartile of of household income [<$35,935])** N=15,025
CKD, n(%)	7,926 (12%)	1,731 (12%)
Individual level characteristics		
Age, mean (SD)	46.5 ± 12.5	45.2 ± 13.0
Male, n(%)	31,981 (46%)	6,952 (46%)
Black	5,142 (7%)	2,442 (16%)
Smoker, n(%)	25,193 (36%)	5,844 (39%)
Insurance		
Medicaid, n(%)	2,219 (3%)	706 (5%)
Blood Pressure		
Systolic BP, mmHg	125.2 ± 16.8	125.0 ± 16.8
Diastolic BP, mmHg	78.3 ± 11.1	78.3 ± 10.9
Medical History		
Hypertension, n(%)	22,684 (33%)	4,640 (31%)
Diabetes, n(%)	7,964 (12%)	1,910 (13%)
Obese (BMI≥ 30 kg/m^2), n(%)	26,262 (42%)	5,364 (40%)
Cardiovascular disease, n(%)	4,428 (7%)	1,007 (7%)
Stroke, n(%)	1,171 (2%)	260 (2%)
Hyperlipidemia, n(%)	22,740(33%)	4,196 (28%)
Cancer, n(%)	2,901 (4%)	591 (4%)

CKD: chronic kidney disease; Cardiovascular disease includes congestive heart failure, acute myocardial infarction, ischemic heart disease, and peripheral vascular disease

Table S3A. Characteristics of population by tract socioeconomic status in the Twin Cities metro area for individuals ≥65 years

	High SES (4th quartile of median value of owner occupied housing units[≥ $231,300]) N= 25,967	**Low SES (1st quartile of median value of owner occupied housing units [< $165,200])** N=4,476
CKD, n(%)	9,185 (35%)	1868 (42%)
Individual level characteristics		
Age, mean (SD)	75.0 ± 7.6	76.0 ± 8.3
Male, n(%)	12,167 (47%)	1,773 (40%)
Black	612 (3%)	512 (11%)
Smoker, n(%)	12,536 (48%)	2,294 (51%)
Insurance		
Medicare, n(%)	8,151 (31%)	1,381 (31%)
Blood Pressure		
Systolic BP, mmHg	131.0 ± 18.6	132.4 ± 19.4
Diastolic BP, mmHg	74.3 ± 10.8	74.2 ± 10.8
Medical History		
Hypertension, n(%)	18,133 (70%)	3,379 (76%)
Diabetes, n(%)	5,531 (21%)	1,355 (30%)
Obese (BMI≥ 30 kg/m^2), n(%)	7,851 (33%)	1,558 (37%)
Cardiovascular disease, n(%)	7,951 (31%)	1,388 (31%)
Stroke, n(%)	2,266 (9%)	418 (9%)
Hyperlipidemia, n(%)	18,084 (70%)	3,039 (68%)
Cancer, n(%)	4,402 (17%)	668 (15%)

CKD: chronic kidney disease; Cardiovascular disease includes congestive heart failure, acute myocardial infarction, ischemic heart disease, and peripheral vascular disease

Table S3B. Characteristics of population by tract socioeconomic status in the Twin Cities metro area for individuals ≥65 years

	High SES (4th quartile of %>25 years with complete college education[≥ $48.1%]) N=18,223	**Low SES (1st quartile of %>25 years with complete college education [<20.4%])** N=5,188
CKD, n(%)	6,324 (35%)	2,155 (42%)
Individual level characteristics		
Age, mean (SD)	75.0 ± 7.6	75.2 ± 7.7
Male, n(%)	8,556 (47%)	2,217 (43%)
Black	425 (2%)	445 (9%)
Smoker, n(%)	8,684 (48%)	2,754 (53%)
Insurance		
Medicare, n(%)	5,851 (32%)	1,417 (27%)
Blood Pressure (BP)		
Systolic BP, mmHg	131.2 ± 18.7	132.1 ± 18.9
Diastolic BP, mmHg	74.5 ± 10.7	74.1 ± 10.5
Medical History		
Hypertension, n(%)	12,461 (68%)	3,985 (77%)
Diabetes, n(%)	3,664 (20%)	1,631 (31%)
Obese (BMI≥ 30 kg/m^2), n(%)	5,053 (30%)	2,054 (42%)
Cardiovascular disease, n(%)	5,502 (30%)	1,591 (31%)
Stroke, n(%)	1,490 (8%)	460 (9%)
Hyperlipidemia, n(%)	12,510 (69%)	3,698 (71%)
Cancer, n(%)	3,110 (17%)	748 (14%)

CKD: chronic kidney disease; Cardiovascular disease includes congestive heart failure, acute myocardial infarction, ischemic heart disease, and peripheral vascular disease

Table S3C. Characteristics of population by tract socioeconomic status in the Twin Cities metro area for individuals ≥65years

	High SES (4th quartile of household income [≥ $62,343]) N=30,449	**Low SES (1st quartile of of household income [<$35,935])** N=6,337
CKD, n(%)	11,340 (37%)	2,327 (37%)
Individual level characteristics		
Age, mean (SD)	75.1 ± 7.6	75.3 ± 7.6
Male, n(%)	13,917 (46%)	2,847 (45%)
Black	806 (3%)	706 (11%)
Smoker, n(%)	15,178 (50%)	3,070 (48%)
Insurance		
Medicare, n(%)	6,076 (20%)	1,219 (19%)
Blood Pressure (BP)		
Systolic BP, mmHg	131.3 ± 18.8	131.8 ± 18.6
Diastolic BP, mmHg	74.3 ± 10.9	74.6 ± 10.6
Medical History		
Hypertension, n(%)	21,945 (72%)	4,485 (71%)
Diabetes, n(%)	7,266 (24%)	1,545 (24%)
Obese (BMI≥ 30 kg/m^2), n(%)	10,005 (36%)	1,927 (33%)
Cardiovascular disease, n(%)	9,596 (32%)	1,895 (30%)
Stroke, n(%)	2,652 (9%)	548 (9%)
Hyperlipidemia, n(%)	21,565 (71%)	4,251 (67%)
Cancer, n(%)	5,034 (17%)	1,008 (16%)

CKD: chronic kidney disease; Cardiovascular disease includes congestive heart failure, acute myocardial infarction, ischemic heart disease, and peripheral vascular disease

Table S4. Characteristics of population by race in the Twin Cities metro area

	Whites N=146,563	**Black** N=16,130
CKD, n(%)	30,715 (21%)	2,604 (16%)
Individual level characteristics		
Age, mean (SD)	56.9 ± 17.6	47.0 ± 16.5
Male, n(%)	67,070 (46%)	6,681 (41%)
Smoker, n(%)	65,422 (45%)	5,522 (34%)
Insurance		
Medicaid, n(%)	3,077 (2%)	1,298 (8%)
Medicare, n(%)	10,311 (7%)	375 (2%)
Blood Pressure (BP)		
Systolic BP, mmHg	127.6 ± 17.6	127.4 ± 19.3
Diastolic BP, mmHg	77.0 ± 11.2	78.0 ± 12.5
Medical History		
Hypertension, n(%)	69,237 (47%)	6,448 (40%)
Diabetes, n(%)	22,419 (15%)	3,430 (21%)
Obese (BMI≥ 30 kg/m^2), n(%)	54,976 (41%)	6,493 (45%)
Cardiovascular disease, n(%)	23,226 (16%)	1,719 (11%)
Stroke, n(%)	6,355 (4%)	517 (3%)
Hyperlipidemia, n(%)	68,471 (47%)	4,744 (29%)
Cancer, n(%)	12,984 (9%)	648 (4%)
Median value of owner occupied housing units		
Q1: < $165,200	9,480 (7%)	3,470 (22%)
Q2: $165,200 - $188,100	16,488 (11%)	3,127 (19%)
Q3: $188,100 - $231,300	50,484 (35%)	5,617 (35%)
Q4: ≥ $231,300	70,088 (48%)	3,913 (24%)
% of Residents > 25 years with a Bachelor's degree or more		
Q1: < 20.4%	13,585 (9%)	3,041 (19%)
Q2: 20.4% - 34.1%	36,065 (25%)	5,260 (33%)
Q3: 34.1% - 48.1%	49,772 (34%)	4,773 (30%)
Q4: ≥ 48.1%	47,122 (32%)	3,053 (19%)
Median household income		
Q1: <$35,935	15,391 (11%)	3,148 (20%)
Q2: $35,935 - $47,379	17,380 (12%)	2,780 (17%)
Q3: $47,379 - $62,343	31,372 (21%)	4,231 (26%)
Q4: ≥ $62,343	82,330 (56%)	5,948 (37%)

CKD: chronic kidney disease; Cardiovascular disease includes congestive heart failure, acute myocardial infarction, ischemic heart disease, and peripheral vascular disease

Table S5A. Characteristics of population by insurance status in the Twin Cities metro area (<65 years)

	Other Insurance N= 118,430	**Medicaid** N= 5,259
CKD, n(%)	13,799 (12%)	1,102 (21%)
Individual level characteristics		
Age, mean (SD)	46.2 ± 12.4	42.7 ± 13.9
Male, n(%)	54,241 (46%)	2,239 (43%)
Black, n(%)	11,698 (10%)	1,298 (25%)
Smoker, n(%)	44,885 (38%)	2,537 (48%)
Medical History		
Hypertension, n(%)	38,945 (33%)	1,816 (35%)
Diabetes, n(%)	14,421 (12%)	1,025 (20%)
Obese (BMI≥ 30 kg/m^2), n(%)	45,431 (42%)	1,962 (43%)
Cardiovascular disease, n(%)	7,788 (7%)	634 (12%)
Stroke, n(%)	2,022 (2%)	217 (4%)
Hyperlipidemia, n(%)	37,889 (32%)	1,615 (31%)
Cancer, n(%)	4,842 (4%)	219 (4%)
Median value of owner occupied housing units		
Q1: < $165,200	10,745 (9%)	881 (17%)
Q2: $165,200 - $188,100	14,179 (12%)	966 (18%)
Q3: $188,100 - $231,300	39,606 (33%)	1,956 (37%)
Q4: ≥ $231,300	53,878 (46%)	1,454 (27%)
% of Residents > 25 years with a Bachelor's degree or more		
Q1: < 20.4%	13,052 (11%)	1,013 (19%)
Q2: 20.4% - 34.1%	29,887 (25%)	1,718 (33%)
Q3: 34.1% - 48.1%	38,294 (32%)	1,588 (30%)
Q4: ≥ 48.1%	37,180 (31%)	938 (18%)
Median household income		
Q1: <$35,935	13,822 (12%)	706 (13%)
Q2: $35,935 - $47,379	14,483 (12%)	951 (18%)
Q3: $47,379 - $62,343	25,226 (21%)	1,374 (26%)
Q4: ≥ $62,343	64,810 (55%)	2,219 (42%)

CKD: chronic kidney disease; Cardiovascular disease includes congestive heart failure, acute myocardial infarction, ischemic heart disease, and peripheral vascular disease

Table S5B. Characteristics of population by insurance status in the Twin Cities metro area (≥65 years)

	Supplemental Insurance N= 45,573	**Medicare** N=11,719
CKD, n(%)	17,004 (37%)	4,720 (40%)
Individual level characteristics		
Age, mean (SD)	75.1 ± 7.7	76.7 ± 7.7
Male, n(%)	20,300 (45%)	5,149 (44%)
Black, n(%)	2,095 (5%)	375 (3%)
Smoker, n(%)	22,529 (49%)	6,262 (53%)
Medical History		
Hypertension, n(%)	32,754 (72%)	8,770 (75%)
Diabetes, n(%)	11,250 (25%)	2,816 (24%)
Obese (BMI≥ 30 kg/m^2), n(%)	15,120 (36%)	3,696 (34%)
Cardiovascular disease, n(%)	14,554 (32%)	3,596 (31%)
Stroke, n(%)	4,152 (9%)	1,010 (9%)
Hyperlipidemia, n(%)	31,874 (70%)	8,481 (72%)
Cancer, n(%)	7,579 (17%)	1,903 (16%)
Median value of owner occupied housing units		
Q1: < $165,200	3,385 (7%)	1,091 (9%)
Q2: $165,200 - $188,100	5,121 (11%)	1,596 (14%)
Q3: $188,100 - $231,300	15,836 (37%)	4,289 (37%)
Q4: ≥ $231,300	21,224 (47%)	4,743 (41%)
% of Residents > 25 years with a Bachelor's degree or more		
Q1: < 20.4%	3,917 (9%)	1,271 (11%)
Q2: 20.4% - 34.1%	10,939 (24%)	3,169 (27%)
Q3: 34.1% - 48.1%	15,771 (35%)	3,995 (34%)
Q4: ≥ 48.1%	14,939 (33%)	3,284 (28%)
Median household income		
Q1: <$35,935	5,119 (11%)	1,219 (10%)
Q2: $35,935 - $47,379	5,594 (12%)	1,693 (15%)
Q3: $47,379 - $62,343	10,458 (23%)	2,723 (23%)
Q4: ≥ $62,343	24,373 (54%)	6,076 (52%)

CKD: chronic kidney disease; Cardiovascular disease includes congestive heart failure, acute myocardial infarction, ischemic heart disease, and peripheral vascular disease

Table S6. Multilevel regression model for the association of tract level socioeconomic status and insurance status with CKD prevalence in individuals <65 years and by hypertension status

Hypertension History (n=40,761)						
	Median value of owner-occupied housing units				**Insurance**	
PR, 95%CI	**High SES 4th Q (n=16,703)**	**3rd Q (n=14,367)**	**2nd Q (n=5,478)**	**Low SES 1st Q (n=4,213)**	**Other Insurance (n=38,945)**	**Medicaid (n=1,816)**
Model 1	1.00	1.08 [1.02, 1.13]	1.19 [1.10, 1.27]	1.33 [1.23, 1.43]	1.00	1.65 [1.55, 1.77]
Model 2	1.00	1.08 [1.03, 1.13]	1.18 [1.10, 1.27]	1.32 [1.22, 1.43]	1.00	1.66 [1.56, 1.78]
Model 3	1.00	1.01 [0.97, 1.06]	1.07 [0.99, 1.14]	1.15 [1.09, 1.25]	1.00	1.35 [1.26, 1.44]
	%>25 years with a Bachelor's degree or more				**Insurance**	
PR, 95%CI	**High SES (n=10,657)**	**3rd Q (n=13,125)**	**2nd Q (n=11,408)**	**Low SES (n=5,571)**	**Other Insurance (n=38,945)**	**Medicaid (n=1,816)**
Model 1	1.00	1.06 [1.00, 1.13]	1.15 [1.08, 1.22]	1.18 [1.09, 1.28]	1.00	1.67 [1.57, 1.79]
Model 2	1.00	1.06 [1.00, 1.12]	1.15 [1.08, 1.22]	1.18 [1.08, 1.27]	1.00	1.68 [1.57, 1.80]
Model 3	1.00	1.02 [0.96, 1.07]	1.06 [1.01, 1.12]	1.05 [0.98, 1.13]	1.00	1.36 [1.27, 1.45]

Model 1: tract SES, insurance status; Model 2: model 1, race, sex, age; Model 3: model 2 + obesity, smoking, history of cardiovascular disease, stroke, cancer, hyperlipidemia, and diabetes

SES: socioeconomic status, PR: prevalence ratio of CKD for individual in low SES tract vs. high SES tract; Median value of owner-occupied housing units: high SES (4th quartile[Q]):≥$231,300, 3rd Q: $188,100-$231,300, 2nd Q: $165,200-$188,100, low SES(1st Q): <$165,200; %>25 years with a Bachelor's degree or more: high SES (4th quartile[Q]):≥48.1%, 3rd Q: 34.1%-48.1%, 2nd Q: 20.4%-34.1%, low SES(1st Q): <20.4%; Median household income: high SES (4th quartile[Q]):≥$140,600, 3rd Q: $95,000-$140,600, 2nd Q: $54,200-$95,000, low SES(1st Q): <$54,200

Table S6 (continued)

	Median household income				Insurance	
PR, 95%CI	**High SES (n=22,178)**	**3rd Q (n=8,771)**	**2nd Q (n=5,245)**	**Low SES (n=4,567)**	**Other Insurance (n=38,945)**	**Medicaid (n=1,816)**
Model 1	1.00	1.16 [1.09, 1.22]	1.18 [1.11, 1.26]	1.11 [1.02, 1.21]	1.00	1.67 [1.57, 1.79]
Model 2	1.00	1.16 [1.09, 1.22]	1.17 [1.10, 1.25]	1.10 [1.01, 1.20]	1.00	1.69 [1.57, 1.80]
Model 3	1.00	1.09 [1.04, 1.15]	1.09 [1.03, 1.16]	1.07 [0.98, 1.13]	1.00	1.35 [1.27, 1.44]
No Hypertension History (n=82,928)						
	Median value of owner-occupied housing units				**Insurance**	
PR, 95%CI	**High SES 4th Q (n=38,629)**	**3rd Q (n=27,195)**	**2nd Q (n=9,667)**	**Low SES 1st Q (n=7,437)**	**Other Insurance (n=79,485)**	**Medicaid (n=3,443)**
Model 1	1.00	1.10 [1.03, 1.17]	1.11 [1.03, 1.20]	1.21 [1.09, 1.34]	1.00	1.79 [1.62, 1.95]
Model 2	1.00	1.12 [1.07, 1.24]	1.15 [1.07, 1.24]	1.28 [1.16, 1.42]	1.00	1.91 [1.73, 2.09]
Model 3	1.00	1.07 [1.01, 1.15]	1.08 [1.01, 1.15]	1.16 [1.05, 1.29]	1.00	1.81 [1.63, 2.01]

Table S6 (continued)

%>25 years with a Bachelor's degree or more					**Insurance**	
PR, 95%CI	**High SES (n=27,461)**	**3rd Q (n=26,757)**	**2nd Q (n20,197)**	**Low SES (n=8,513)**	**Other Insurance (n=79,485)**	**Medicaid (n=3,443)**
Model 1	1.00	1.17 [1.09, 1.25]	1.17 [1.08, 1.26]	1.26 [1.15, 1.39]	1.00	1.77 [1.61, 1.94]
Model 2	1.00	1.18 [1.11, 1.26]	1.19 [1.11, 1.29]	1.30 [1.18, 1.44]	1.00	1.90 [1.73, 2.09]
Model 3	1.00	1.15 [1.07, 1.22]	1.09 [1.01, 1.17]	1.19 [1.08, 1.32]	1.00	1.81 [1.63, 2.01]
Median household income					**Insurance**	
PR, 95%CI	**High SES (n=44,851)**	**3rd Q (n=17,829)**	**2nd Q (n=10,189)**	**Low SES (n=10,059)**	**Other Insurance (n=79,485)**	**Medicaid (n=3,443)**
Model 1	1.00	1.06 [0.99, 1.13]	1.05 [0.96, 1.15]	0.91 [0.84, 1.00]	1.00	1.81 [1.65, 1.99]
Model 2	1.00	1.08 [1.01, 1.16]	1.08 [0.99, 1.19]	0.94 [0.86, 1.03]	1.00	1.93 [1.76, 2.13]
Model 3	1.00	1.07 [1.00, 1.15]	1.07 [0.98, 1.16]	0.92 [0.84, 1.00]	1.00	1.83 [1.64, 2.03]

Table S7. Multilevel regression model for the association of tract level socioeconomic status and insurance status with CKD prevalence in individuals <65 years and by diabetes status

Diabetes History (n=15,446)						
	Median value of owner-occupied housing units				**Insurance**	
PR, 95%CI	**High SES 4th Q (n=5,389)**	**3rd Q (n=5,624)**	**2nd Q (n=2,366)**	**Low SES 1st Q (n=2,067)**	**Other Insurance (n=14,421)**	**Medicaid (n=1,025)**
Model 1	1.00	1.02 [0.96, 1.09]	1.10 [1.03, 1.19]	1.22 [1.14, 1.31]	1.00	1.32 [1.22, 1.42]
Model 2	1.00	1.02 [0.97, 1.09]	1.11 [1.03, 1.19]	1.26 [1.17, 1.35[	1.00	1.34 [1.24, 1.44]
Model 3	1.00	1.01 [0.96, 1.07]	1.06 [0.99, 1.14]	1.21 [1.13, 1.30]	1.00	1.23 [1.15, 1.33]
	%>25 years with a Bachelor's degree or more				**Insurance**	
PR, 95%CI	**High SES (n=3,584)**	**3rd Q (n=4,809)**	**2nd Q (n=4,563)**	**Low SES (n=2,490)**	**Other Insurance (n=14,421)**	**Medicaid (n=1,025)**
Model 1	1.00	1.09 [1.01, 1.15]	1.14 [1.07, 1.22]	1.18 [1.09, 1.27]	1.00	1.32 [1.23, 1.42]
Model 2	1.00	1.08 [1.00, 1.15]	1.15 [1.07, 1.23]	1.18 [1.09, 1.28]	1.00	1.34 [1.25, 1.45]
Model 3	1.00	1.04 [0.98, 1.12]	1.09 [1.03, 1.18]	1.12 [1.04, 1.21]	1.00	1.23 [1.15, 1.33]

Model 1: tract SES, insurance status; Model 2: model 1, race, sex, age; Model 3: model 2 + obesity, smoking, history of cardiovascular disease, stroke, cancer, hyperlipidemia, and hypertension

SES: socioeconomic status, PR: prevalence ratio of CKD for individual in low SES tract vs. high SES tract; Median value of owner-occupied housing units: high SES (4th quartile[Q]):≥$231,300, 3rd Q: $188,100-$231,300, 2nd Q: $165,200-$188,100, low SES(1st Q): <$165,200; %>25 years with a Bachelor's degree or more: high SES (4th quartile[Q]):≥48.1%, 3rd Q: 34.1%-48.1%, 2nd Q: 20.4%-34.1%, low SES(1st Q): <20.4%; Median household income: high SES (4th quartile[Q]):≥$140,600, 3rd Q: $95,000-$140,600, 2nd Q: $54,200-$95,000, low SES(1st Q): <$54,200

Table S7 (continued)

	Median household income				Insurance	
PR, 95%CI	**High SES (n=7,765)**	**3rd Q (n=3,541)**	**2nd Q (n=2,264)**	**Low SES (n=1,867)**	**Other Insurance (n=14,421)**	**Medicaid (n=1,025)**
Model 1	1.00	1.06 [0.99, 1.12]	1.08 [1.01, 1.15]	0.98 [0.90, 1.06]	1.00	1.33 [1.24, 1.43]
Model 2	1.00	1.07 [1.01, 1.14]	1.09 [1.01, 1.16]	0.99 [0.91, 1.07]	1.00	1.35 [1.26, 1.46]
Model 3	1.00	1.04 [0.98, 1.11]	1.06 [0.99, 1.14]	0.98 [0.91, 1.06]	1.00	1.25 [1.16, 1.35]
No Diabetes History (n=108,243)						
	Median value of owner-occupied housing units				**Insurance**	
PR, 95%CI	**High SES 4th Q (n=49,943)**	**3rd Q (n=35,938)**	**2nd Q (n=12,779)**	**Low SES 1st Q (n=9,560)**	**Other Insurance (n=104,009)**	**Medicaid (n=4,234)**
Model 1	1.00	1.08 [1.03, 1.13]	1.11 [1.04, 1.18]	1.15 [1.06, 1.26]	1.00	1.73 [1.61, 1.86]
Model 2	1.00	1.11 [1.05, 1.16]	1.14 [1.07, 1.21]	1.21 [1.11, 1.32]	1.00	1.88 [1.75, 2.03]
Model 3	1.00	1.05 [1.00, 1.11]	1.08 [1.01, 1.16]	1.13 [1.03, 1.24]	1.00	1.80 [1.66, 1.96]

Table S7 (continued)

%>25 years with a Bachelor's degree or more					**Insurance**	
PR, 95%CI	**High SES (n=34,534)**	**3rd Q (n=35,073)**	**2nd Q (n=27,042)**	**Low SES (n=11,575)**	**Other Insurance (n=104,009)**	**Medicaid (n=4,234)**
Model 1	1.00	1.13 [1.07, 1.19]	1.16 [1.09, 1.23]	1.18 [1.09, 1.29]	1.00	1.72 [1.60, 1.86]
Model 2	1.00	1.13 [1.08, 1.20]	1.17 [1.11, 1.24]	1.20 [1.11, 1.31]	1.00	1.88 [1.75, 2.03]
Model 3	1.00	1.09 [1.03, 1.15]	1.07 [1.01, 1.14]	1.10 [1.01, 1.20]	1.00	1.81 [1.67, 1.96]
Median household income					**Insurance**	
PR, 95%CI	**High SES (n=45,922)**	**3rd Q (n=27,131)**	**2nd Q (n=21,496)**	**Low SES (n=13,694)**	**Other Insurance (n=104,009)**	**Medicaid (n=4,234)**
Model 1	1.00	1.09 [1.04, 1.16]	1.08 [1.00, 1.16]	0.99 [0.92, 1.07]	1.00	1.74 [1.62, 1.88]
Model 2	1.00	1.12 [1.06, 1.18]	1.11 [1.03, 1.19]	1.02 [0.94, 1.09]	1.00	1.90 [1.76, 2.05]
Model 3	1.00	1.12 [1.06, 1.18]	1.11 [1.03, 1.19]	1.01 [0.92, 1.09]	1.00	1.82 [1.68, 1.98]

Table S8. Quantitative selection bias analysis for association of tract level socioeconomic status and insurance status with CKD prevalence for individuals <65 years

	Crude Poisson regression PR	**Selection bias adjusted crude PR**	**Fully Adjusted Poisson regression PR**	**Selection bias corrected fully adjusted* PR**
Insurance Status				
Other insurance	1.0	1.0	1.0	1.0
Medicaid (A)	1.7	1.7	1.5	1.5
Medicaid (B)		1.2		1.1
Medicaid (C)		1.2		1.1
Median value of owner-occupied housing units is the measure of SES and insurance status				
High SES tract	1.0	1.0	1.0	1.0
Low SES tract (A)	1.4	1.3	1.2	1.1
Low SES tract (B)		0.9		0.8
Low SES tract (C)		0.9		0.8
%>25 years with a Bachelor's degree or more and insurance status				
High SES tract	1.0	1.0	1.0	1.0
Low SES tract (A)	1.4	1.3	1.1	1.0
Low SES tract (B)		0.9		0.7
Low SES tract (C)		0.9		0.7
Median household income and insurance status				
High SES tract	1.0	1.0	1.0	1.0
Low SES tract (A)	1.02	0.9	0.99	0.9
Low SES tract (B)		0.6		0.6
Low SES tract (C)		0.6		0.6

PR: prevalence ratio

Selection probabilities for tract SES used are as follows:
S_1(CKD+ & SES+)= 0.5 (A), 0.4 (B), 0.6 (C)
S_2(CKD+ & SES-)= 0.9 (A), 0.7 (B), 0.6 (C)
S_3(CKD- & SES+)= 0.2 (A), 0.1 (B), 0.3 (C)
S_4(CKD- & SES-)= 0.4 (A), 0.3 (B), 0.5 (C)

Assumptions: $S_1 \leq S_2$, $S_1 > S_3$, $S_2 > S_3$ and $S_3 < S_4$
The main issue is selection into the cohort and getting evaluated for CKD i.e. have eGFR measured.

For example (under scenario A): for S_1=0.5, that means the probability of a patient coming to Fairview clinics (i.e. included in our cohort and have eGFR measured) and having CKD and living in a low SES tract is 50%. For S_2=0.9, that means the probability of a patient coming to Fairview clinics (i.e. included in our cohort and have eGFR measured) and having CKD and living in a high SES tract is 90%. We are assuming that $S_1 \leq S_2$. For S_3 =0.2, that means that the probability of a patient coming to Fairview clinics (i.e. included in our cohort) and not having CKD and living in a low SES tract is 20%. We are assuming that $S_1 > S_3$.

Selection probabilities for insurance used are as follows:
S_1(CKD+ & Medicaid+)= 0.5 (A), 0.4 (B), 0.6 (C)
S_2(CKD+ & Medicaid-)= 0.9 (A), 0.7 (B), 0.6 (C)
S_3(CKD- & Medicaid+)= 0.2 (A), 0.1 (B), 0.3 (C)
S_4(CKD- & Medicaid-)= 0.4 (A), 0.3 (B), 0.5 (C)

Assumptions: $S_1 \leq S_2$, $S_1 > S_3$, $S_2 > S_3$ and $S_3 < S_4$

For example (under scenario A): for S_1=0.5, that means the probability of a patient coming to Fairview clinics (i.e. included in our cohort and have eGFR measured) and having CKD and on Medicaid is 50%. For S_2=0.9, that means the probability of a patient coming to Fairview clinics (i.e. included in our cohort and have eGFR measured) and having CKD and have other insurance is 0.9. We are assuming that $S_1 \leq S_2$. For S_3 =0.2, that means that the probability of a patient coming to Fairview clinics (i.e. included in our cohort) and not having CKD and on Medicaid is 20%. We are assuming that $S_3 < S_4$.

* Selection bias corrected fully adjusted PR = crude selection bias adjusted PR * r
Where r = [Fully adjusted Poisson Regression PR/Crude Poisson Regression PR]. I am assuming this is a constant for each model

CKD+: have CKD; CKD-: don't have CKD; SES+: belong to low SES tract; SES-: belong to high SES tract

Table S9. Quantitative selection bias analysis for association of tract level socioeconomic status with CKD prevalence for individuals ≥ 65 years

	Crude Poisson regression PR	**Selection bias adjusted crude PR**	**Fully Adjusted Poisson regression PR**	**Selection bias corrected fully adjusted***
Insurance Status				
Supplemental Insurance	1.0	1.0	1.0	1.0
Medicaid (A)	1.0	1.0	1.0	1.0
Medicaid (B)		0.7		0.7
Medicaid (C)		0.8		0.8
Median value of owner-occupied housing units is the measure of SES				
High SES tract	1.0	1.0	1.0	1.0
Low SES tract (A)	1.2	1.1	1.1	1.0
Low SES tract (B)		0.8		0.7
Low SES tract (C)		0.8		0.7
%>25 years with a Bachelor's degree or more				
High SES tract	1.0	1.0	1.0	1.0
Low SES tract (A)	1.2	1.2	1.1	1.1
Low SES tract (B)		0.8		0.7
Low SES tract (C)		0.9		0.8
Median household income				
High SES tract	1.0	1.0	1.0	1.0
Low SES tract (A)	0.99	0.9	0.96	0.9
Low SES tract (B)		0.6		0.6
Low SES tract (C)		0.7		0.7

PR: prevalence ratio

Selection probabilities for tract SES used are as follows:
S_1(CKD+ & SES+)= 0.5 (A), 0.4 (B), 0.6 (C)

S_2(CKD+ & SES-)= 0.9 (A), 0.7 (B), 0.6 (C)
S_3(CKD- & SES+)= 0.2 (A), 0.1 (B), 0.3 (C)
S_4(CKD- & SES-)= 0.4 (A), 0.3 (B), 0.5 (C)

Assumptions: $S_1 \leq S_2$, $S_1 > S_3$, $S_2 > S_3$ and $S_3 < S_4$
The main issue is selection into the cohort and getting evaluated for CKD i.e. have eGFR measured.

Selection probabilities for insurance used are as follows:
S_1(CKD+ & Medicaid+)= 0.5 (A), 0.4 (B), 0.6 (C)
S_2(CKD+ & Medicaid-)= 0.9 (A), 0.7 (B), 0.6 (C)
S_3(CKD- & Medicaid+)= 0.2 (A), 0.1 (B), 0.3 (C)
S_4(CKD- & Medicaid-)= 0.4 (A), 0.3 (B), 0.5 (C)

Assumptions: $S_1 \leq S_2$, $S_1 > S_3$, $S_2 > S_3$ and $S_3 < S_4$

* Selection bias corrected fully adjusted PR = crude selection bias adjusted PR * r
Where r = [Fully adjusted Poisson Regression PR/Crude Poisson Regression PR]. I am assuming this is a constant for each model

CKD+: have CKD; CKD-: don't have CKD; SES+: belong to low SES tract; SES-: belong to high SES tract

Table S10. Comparison of patients included in analyses vs. excluded from analyses

	Overall N=185,269	**Cohort of excluded adults (1 outpatient clinic visit between 6/1/2017-12/31/2018 & no inpatient/outpatient creatinine & have address available)** N= 104,860
Individual level characteristics		
Age, mean (SD)	55.0 ± 17.8	40.5 ± 17.0
Male, n(%)	84,116(45%)	44,447 (43%)
Black	16,130 (9%)	8,442 (8%)
Ever Smoker, n(%)	80603 (42%)	25173 (24%)
Medicaid (among patients <65 years), n(%)	5,259 (4%)	2,299 (3%)
Medicare (among patients ≥65 years), n(%)	11,719 (20%)	1,591 (14%)
Medical History		
Hypertension, n(%)	83,270 (45%)	2793 (3%)
Diabetes, n(%)	29,913 (16%)	1663 (2%)
Obese (BMI≥ 30 kg/m^2), n(%)	67,467 (40%)	20306 (27%)
Cardiovascular disease, n(%)	26,789 (15%)	557 (0.5%)
Stroke, n(%)	7,447 (4%)	211 (0.2%)
Hyperlipidemia, n(%)	80,636 (44%)	3081 (3%)
Cancer, n(%)	14,609 (8%)	1291 (1%)
Median value of owner occupied housing units		
Q1: < $165,200	16,625 (9%)	10848 (10%)
Q2: $165,200 - $188,100	22,475 (12%)	13999 (13%)
Q3: $188,100 - $231,300	63,198 (34%)	31724 (30%)
Q4: ≥ $231,300	82,940 (45%)	48261 (46%)
% of Residents > 25 years with complete college education		
Q1: < 20.4%	19,825 (11%)	12109 (12%)
Q2: 20.4% - 34.1%	46,939 (25%)	25480 (24%)
Q3: 34.1% - 48.1%	61,027 (33%)	29915 (29%)
Q4: ≥ 48.1%	57,452 (31%)	37337 (36%)
Median household income		
Q1: <$35,935	21,363 (12%)	14,907 (14%)
Q2: $35,935 - $47,379	23,344 (13%)	14,510 (14%)

Q3: $47,379 - $62,343	40,829 (22%)	22,143 (21%)
Q4: ≥ $62,343	99,590 (52%)	53,192 (51%)

Cardiovascular disease includes congestive heart failure, acute myocardial infarction, ischemic heart disease, and peripheral vascular disease

Table S11. Multilevel regression model for the association of tract level socioeconomic status and insurance status with CKD prevalence (**defined as having two consecutive eGFR > 3 months apart <60 ml/min/1.73ml/min/1.73m^2**) in individuals <65 years

	Median value of owner-occupied housing units				**Insurance**	
PR, 95%CI	**High SES 4th Q (n=9,380)**	**3rd Q (n=8,170)**	**2nd Q (n=3,187)**	**Low SES 1st Q (n=2,569)**	**Other Insurance (n=21,552)**	**Medicaid (n=1,410)**
Model 1	1.00	1.12 [0.99, 1.27]	1.23 [1.04, 1.46]	1.18 [0.96, 1.45]	1.00	1.34 [1.13, 1.60]
Model 2	1.00	1.15 [1.01, 1.31]	1.26 [1.06, 1.50]	1.27 [1.04, 1.56]	1.00	1.44 [1.22, 1.70]
Model 3	1.00	1.06 [0.94, 1.20]	1.13 [0.96, 1.33]	1.12 [0.93, 1.36]	1.00	1.26 [1.08, 1.48]
	%>25 years with a Bachelor's degree or more				**Insurance**	
PR, 95%CI	**High SES (n=6,218)**	**3rd Q (n=7,359)**	**2nd Q (n=6,597)**	**Low SES (n=3,132)**	**Other Insurance (n=21,552)**	**Medicaid (n=1,410)**
Model 1	1.00	1.05 [0.90, 1.21]	1.16 [1.00, 1.35]	1.23 [1.02, 1.48]	1.00	1.35 [1.13, 1.60]
Model 2	1.00	1.04 [0.90, 1.21]	1.18 [1.01, 1.37]	1.23 [1.03, 1.48]	1.00	1.44 [1.23, 1.72]
Model 3	1.00	0.98 [0.85, 1.13]	1.06 [0.92, 1.22]	1.08 [0.91, 1.28]	1.00	1.26 [0.85, 1.13]

Table S11 (continued)

	Median household income				Insurance	
PR, 95%CI	**High SES (n=12,199)**	**3rd Q (n=5,236)**	**2nd Q (n=3,143)**	**Low SES (n=2,728)**	**Other Insurance (n=21,552)**	**Medicaid (n=1,410)**
Model 1	1.00	1.14 [0.99, 1.31]	1.28 [1.08, 1.53]	1.22 [1.01, 1.45]	1.00	1.35 [1.13, 1.60]
Model 2	1.00	1.17 [1.02, 1.34]	1.29 [1.08, 1.54]	1.25 [1.04, 1.49]	1.00	1.45 [1.22, 1.71]
Model 3	1.00	1.13 [0.99, 1.28]	1.19 [1.02, 1.40]	1.26 [1.07, 1.48]	1.00	1.25 [1.07, 1.47]

CKD: chronic kidney disease; SES: socioeconomic status, PR: prevalence ratio of CKD for individual in low SES tract vs. high SES tract;
Median value of owner-occupied housing units: high SES (4th quartile[Q]):≥$231,300, 3rd Q: $188,100-$231,300, 2nd Q: $165,200-$188,100, low SES(1st Q): <$165,200; %>25 years with a Bachelor's degree or more: high SES (4th quartile[Q]):≥48.1%, 3rd Q: 34.1%-48.1%, 2nd Q: 20.4%-34.1%, low SES(1st Q): <20.4%; Median household income: high SES (4th quartile[Q]):≥$62.343, 3rd Q: $47,379-$62,343, 2nd Q: $35,935-$47,379 low SES(1st Q): <$35,935

Model 1: tract SES, insurance status
Model 2: model 1, race, sex, age
Model 3: model 2 + obesity, smoking, history of cardiovascular disease, stroke, cancer, hyperlipidemia, hypertension, and diabetes

Table S12. Multilevel regression model for the association of tract level socioeconomic status and insurance status with CKD prevalence (**defined as having two consecutive eGFR > 3 months apart <60 ml/min/1.73ml/min/1.73m^2**) in individuals ≥ 65 years

	Median value of owner-occupied housing units				**Insurance**	
PR, 95%CI	**High SES 4th Q (n=8,468)**	**3rd Q (n=7,261)**	**2nd Q (n=2,347)**	**Low SES 1st Q (n=1,614)**	**Supplemental Insurance Plan (n=15,916)**	**Medicare (n=3,747)**
Model 1	1.00	1.04 [0.98, 1.11]	1.04 [0.95, 1.14]	1.11 [1.01, 1.21]	1.00	1.04 [1.01, 1.06]
Model 2	1.00	1.03 [0.97, 1.09]	1.04 [0.96, 1.14]	1.12 [1.01, 1.24]	1.00	1.00 [0.98, 1.03]
Model 3	1.00	0.98 [0.93, 1.04]	1.00 [0.92, 1.10]	1.07 [0.97, 1.17]	1.00	1.00 [0.98, 1.03]
	%>25 years with a Bachelor's degree or more				**Insurance**	
PR, 95%CI	**High SES (n=5,876)**	**3rd Q (n=6,857)**	**2nd Q (n=5,070)**	**Low SES (n=1,887)**	**Supplemental Insurance Plan (n=15,916)**	**Medicare (n=3,747)**
Model 1	1.00	1.04[0.97, 1.11]	1.08 [1.00, 1.15]	1.13 [1.03, 1.24]	1.00	1.04 [1.01, 1.06]
Model 2	1.00	1.03 [0.96, 1.09]	1.07 [1.00, 1.14]	1.16 [1.05, 1.27]	1.00	1.00 [0.97, 1.03]
Model 3	1.00	0.98 [0.92, 1.04]	1.00 [0.94, 1.08]	1.09 [0.99, 1.19]	1.00	1.00 [0.98, 1.03]

Table S12 (continued)

	Median household income				Insurance	
PR, 95%CI	**High SES (n=10,417)**	**3rd Q (n=4,481)**	**2nd Q (n=2,527)**	**Low SES (n=2,265)**	**Supplemental Insurance Plan (n=15,916)**	**Medicare (n=3,747)**
Model 1	1.00	1.09 [1.01, 1.16]	1.10 [0.01, 1.20]	0.99 [0.92, 1.08]	1.00	1.04 [1.01, 1.06]
Model 2	1.00	1.06 [0.99, 1.13]	1.06 [0.98, 1.16]	0.99 [0.91, 1.08]	1.00	1.00 [0.98, 1.03]
Model 3	1.00	1.05 [0.98, 1.12]	1.05 [0.96, 1.14]	0.99 [0.92, 1.09]	1.00	1.00 [0.98, 1.03]

CKD: chronic kidney disease; SES: socioeconomic status, PR: prevalence ratio of CKD for individual in low SES tract vs. high SES tract
Median value of owner-occupied housing units: high SES (4th quartile[Q]):≥$231,300, 3rd Q: $188,100-$231,300, 2nd Q: $165,200-$188,100, low SES(1st Q): <$165,200; %>25 years with a Bachelor's degree or more: high SES (4th quartile[Q]):≥48.1%, 3rd Q: 34.1%-48.1%, 2nd Q: 20.4%-34.1%, low SES(1st Q): <20.4%; Median household income: high SES (4th quartile[Q]):≥$62.343, 3rd Q: $47,379-$62,343, 2nd Q: $35,935-$47,379 low SES(1st Q): <$35,935

Model 1: tract SES, insurance status
Model 2: model 1, race, sex, age
Model 3: model 2 + obesity, smoking, history of cardiovascular disease, stroke, cancer, hyperlipidemia, hypertension, and diabetes