Medical Debt in New York State

Estimates for Large Cities and Towns, State Legislative Districts, Congressional Districts, and Other Geographic Areas

Jennifer Andre, Michael Karpman, Fredric Blavin, Dulce Gonzalez, and Breno Braga

October 2023

A previous Urban Institute analysis of February 2022 data from a random sample of deidentified consumer credit records in New York State found that an estimated 6 percent of consumers (representing approximately 740,000 adults) had medical debt in collections on their credit reports, and this share varied widely across the state's economic regions, counties, and communities (Karpman et al. 2023). The analysis also found that within each region, communities of color and communities facing greater economic challenges generally had the highest rates of medical debt, and nearly half of consumers with medical debt owed $500 or more.

In this supplemental brief, we provide a series of tables showing the estimated prevalence of medical debt across the following additional areas:

- cities and towns with large populations[1]
- metropolitan and micropolitan statistical areas[2]
- hospital referral regions (HRRs), a set of regional health care markets defined based on where patients are referred for tertiary medical care[3]
- state senate and assembly districts[4]
- congressional districts

Consistent with the results from our previous report, we find that the prevalence of medical debt varies substantially across geographic areas of the state. Selected findings include the following:

- Across the state's 25 largest cities by population, the share of consumers with medical debt ranged from a low of 3.4 percent in White Plains to a high of 34.5 percent in Elmira. Other cities with relatively high rates of medical debt included Syracuse (24.1 percent), Poughkeepsie (17.0 percent), Utica (16.1 percent), Rome (16.0 percent), and Niagara Falls (13.6 percent) (table 1).
- We observed similar variation across HRRs in the state. The share of consumers with medical debt ranged from a low of 3.2 percent in the Manhattan HRR to a high of 15.1 percent in the Elmira HRR. The Syracuse HRR also had a relatively high rate of medical debt, at 14.2 percent (table 4).
- In state senate districts, the share of consumers with medical debt ranged from a low of 1.9 percent in district 17 (select Central and Southern Brooklyn neighborhoods) to a high of 16.1 percent in district 48 (Syracuse, Auburn, and other Central New York municipalities). Other districts with relatively high rates of medical debt included the following:
  - » district 58 (Elmira and select Southern Tier, Finger Lakes, and Western New York municipalities) (16.0 percent)
  - » district 50 (the Syracuse suburbs, Fulton, Oswego, and other Central New York municipalities) (13.1 percent)
  - » district 49 (Watertown and select North Country, Mohawk Valley, and Central New York municipalities) (12.9 percent)
  - » district 63 (Buffalo and the greater Buffalo area) (12.5 percent) (table 5).
- In state assembly districts, the share of consumers with medical debt ranged from a low of 1.8 percent in district 49 (select Southern Brooklyn neighborhoods) to a high of 21.0 percent in district 129 (parts of Syracuse and the greater Syracuse area). Other districts with relatively high rates of medical debt included the following:
  - » district 124 (Elmira and other Southern Tier municipalities) (19.0 percent)
  - » district 120 (Fulton, Oswego, and select Central New York and North Country municipalities) (18.0 percent)
  - » district 128 (parts of Syracuse and the greater Syracuse area) (16.2 percent)
  - » district 116 (Watertown and other North Country municipalities) (14.6 percent)
  - » district 132 (select Southern Tier and Finger Lakes municipalities) (14.6 percent) (table 6).

The tables that follow also include estimates for the state's 25 largest towns by population (table 2), metropolitan and micropolitan statistical areas (table 3), and congressional districts (table 7). All tables show the prevalence of medical debt in each area and estimated ranges that account for potential measurement error resulting from the limited number of geographic identifiers available in our data (where applicable). Further details on our methodology are provided in the appendix.

Largest 25 Cities by Population

TABLE 1

Share of Consumers with Medical Debt in Collections in Cities in New York State, February 2022

City[a]	Population[b]	Share with medical debt[c]	Estimated range[d]	Quartile of medical debt[e]
Albany	96,860	11.4%	9.7%–12.4%	3
Auburn	26,383	13.0%	6.5%–19.4%	3
Binghamton	44,819	5.8%	2.9%–8.7%	2
Buffalo	255,805	12.8%	8.8%–14.1%	3
Elmira	27,236	34.5%	17.3%–47.5%	4
Glen Cove	27,172	3.7%	1.9%–3.9%	1
Ithaca	30,715	7.2%	3.7%–14.1%	2
Long Beach	33,475	3.9%	2.0%–4.4%	1
Mount Vernon	67,623	7.4%	5.1%–7.4%	2
New Rochelle	79,367	4.5%	3.1%–4.6%	1
New York City	8,379,552	3.8%	n/a[f]	1
Newburgh	28,146	12.3%	6.2%–23.9%	3
Niagara Falls	47,978	13.6%	9.8%–16.8%	4
North Tonawanda	30,338	5.3%	2.7%–7.7%	1
Peekskill	24,111	5.3%	5.3%–5.3%	1
Poughkeepsie	30,341	17.0%	8.5%–30.6%	4
Rochester	206,357	5.6%	4.1%–7.0%	2
Rome	32,217	16.0%	8.0%–21.3%	4
Saratoga Springs	28,056	5.7%	2.9%–8.1%	2
Schenectady	65,336	11.2%	7.5%–14.5%	3
Syracuse	142,553	24.1%	14.1%–25.8%	4
Troy	49,253	11.9%	6.0%–16.3%	3
Utica	59,984	16.1%	8.0%–18.5%	4
White Plains	58,171	3.4%	2.6%–4.0%	1
Yonkers	200,183	8.7%	6.6%–8.9%	2

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022 using Missouri Census Data Center Geocorr estimates of correspondence between geographic areas.

Notes: [a] Cities are as of 2020.

[b] Estimates are provided for the 25 largest cities based on the total population according to 2016–2020 American Community Survey 5-year estimates.

[c] Share with medical debt in collections is based on the prevalence of medical debt within zip code tabulation areas (ZCTAs) that overlap wholly or partially with cities, weighted according to the percentage of the ZCTA population in those cities. These estimates assume the share of consumers with medical debt from a given ZCTA who reside in a particular city is equal to the share of that ZCTA's total population who reside in the city.

[d] The estimated range accounts for measurement error, as it is possible that consumers with medical debt do not live in cities at the same rate as their ZCTA's overall population. Lower estimates assume consumers with medical debt live in a city at half the rate of the overall ZCTA population, and upper estimates assume they live in a city at twice the rate of the overall ZCTA population (bounded by the number of consumers with medical debt in the ZCTA). The margin of sampling error (not shown) provides an additional measure of uncertainty related to making statistical inferences for the population based on a representative random sample of consumers with credit records. Margins of error for the estimates in this table range between +/– 0.1 to 2.8 percentage points.

[e] Quartile of medical debt is based on the quartile of medical debt prevalence for large cities across the state.

[f] Estimated range is not applicable to New York City, which is based on aggregated data for the five counties (i.e., boroughs) in the city.

Largest 25 Towns by Population

TABLE 2

Share of Consumers with Medical Debt in Collections in Towns in New York State, February 2022

Town[a]	Population[b]	Share with medical debt[c]	Estimated range[d]	Quartile of medical debt[e]
Amherst	125,799	4.4%	2.9%–4.8%	3
Babylon	211,021	3.1%	2.6%–3.1%	2
Brookhaven	482,671	3.8%	3.2%–4.0%	2
Cheektowaga	86,158	10.3%	6.4%–13.8%	4
Clarkstown	86,353	4.0%	2.4%–4.5%	2
Clay	59,401	11.4%	5.7%–16.3%	4
Colonie	82,648	6.5%	3.8%–9.0%	4
Greece	95,849	4.3%	2.1%–5.2%	3
Greenburgh	91,346	2.6%	2.1%–3.3%	1
Hamburg	58,464	5.1%	2.5%–5.6%	4
Hempstead	766,765	3.0%	2.9%–3.2%	2
Huntington	201,205	2.3%	1.7%–2.5%	1
Irondequoit	50,141	4.6%	2.3%–6.8%	3
Islip	330,584	3.0%	2.3%–3.3%	1
North Hempstead	230,922	2.5%	2.1%–2.8%	1
Orangetown	49,818	3.9%	2.9%–4.5%	2
Oyster Bay	297,349	2.0%	1.6%–2.1%	1
Perinton	46,785	2.7%	1.4%–3.1%	1
Ramapo	136,582	4.2%	2.9%–4.4%	3
Rye	46,498	3.3%	1.6%–3.8%	2
Smithtown	116,428	2.1%	1.5%–2.5%	1
Southampton	58,263	4.4%	3.5%–5.3%	3
Tonawanda	71,910	6.0%	4.0%–7.3%	4
Union	53,357	4.8%	2.4%–5.5%	3
West Seneca	45,272	6.2%	3.1%–7.5%	4

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022 using Missouri Census Data Center Geocorr estimates of correspondence between geographic areas.

Notes: [a] Towns are as of 2020.

[b] Estimates are provided for the 25 largest towns based on the total population according to 2016–2020 American Community Survey 5-year estimates.

[c] Share with medical debt in collections is based on the prevalence of medical debt within zip code tabulation areas (ZCTAs) that overlap wholly or partially with towns, weighted according to the percentage of the ZCTA population in those towns. These estimates assume the share of consumers with medical debt from a given ZCTA who reside in a particular town is equal to the share of that ZCTA's total population who reside in the town.

[d] The estimated range accounts for measurement error, as it is possible that consumers with medical debt do not live in towns at the same rate as their ZCTA's overall population. Lower estimates assume consumers with medical debt live in a town at half the rate of the overall ZCTA population, and upper estimates assume they live in a town at twice the rate of the overall ZCTA population (bounded by the number of consumers with medical debt in the ZCTA). The margin of sampling error (not shown) provides an additional measure of uncertainty related to making statistical inferences for the population based on a representative random sample of consumers with credit records. Margins of error for the estimates in this table range between +/– 0.3 to 1.2 percentage points.

[e] Quartile of medical debt is based on the quartile of medical debt prevalence for large towns across the state.

Metropolitan and Micropolitan Statistical Areas

TABLE 3

Share of Consumers with Medical Debt in Collections in Metropolitan and Micropolitan Statistical Areas in New York State, February 2022

Metropolitan and micropolitan statistical area[a]	Population[b]	Share with medical debt[c]	Quartile of medical debt[d]
Albany-Schenectady-Troy, NY MSA	880,766	7.8%	1
Amsterdam, NY µSA	49,294	11.7%	3
Auburn, NY µSA	76,958	11.6%	3
Batavia, NY µSA	57,554	5.7%	1
Binghamton, NY MSA	240,473	6.1%	1
Buffalo-Cheektowaga, NY MSA	1,129,018	7.8%	2
Corning, NY µSA	95,843	14.1%	4
Cortland, NY µSA	47,618	12.1%	3
Elmira, NY MSA	84,115	26.7%	4
Glens Falls, NY MSA	125,491	9.9%	2
Gloversville, NY µSA	53,452	13.0%	3
Hudson, NY µSA	60,016	9.7%	2
Ithaca, NY MSA	102,237	8.6%	2
Jamestown-Dunkirk-Fredonia, NY MSA	127,584	11.4%	3
Kingston, NY MSA	178,371	10.0%	2
Malone, NY µSA	50,389	8.8%	2
New York-Newark-Jersey City, NY-NJ-PA MSA	12,609,264	3.7%	1
Ogdensburg-Massena, NY µSA	108,352	14.0%	4
Olean, NY µSA	76,750	12.4%	3
Oneonta, NY µSA	59,593	5.1%	1
Plattsburgh, NY µSA	80,320	7.1%	1
Poughkeepsie-Newburgh-Middletown, NY MSA	675,601	9.3%	2
Rochester, NY MSA	1,071,784	4.7%	1
Seneca Falls, NY µSA	34,295	15.3%	4
Syracuse, NY MSA	650,211	14.9%	4
Utica-Rome, NY MSA	290,812	11.4%	3
Watertown-Fort Drum, NY MSA	111,454	14.0%	4

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022.

Notes: [a] MSA = metropolitan statistical area. µSA = micropolitan statistical area. MSAs and µSAs are based on 2020 geographies.

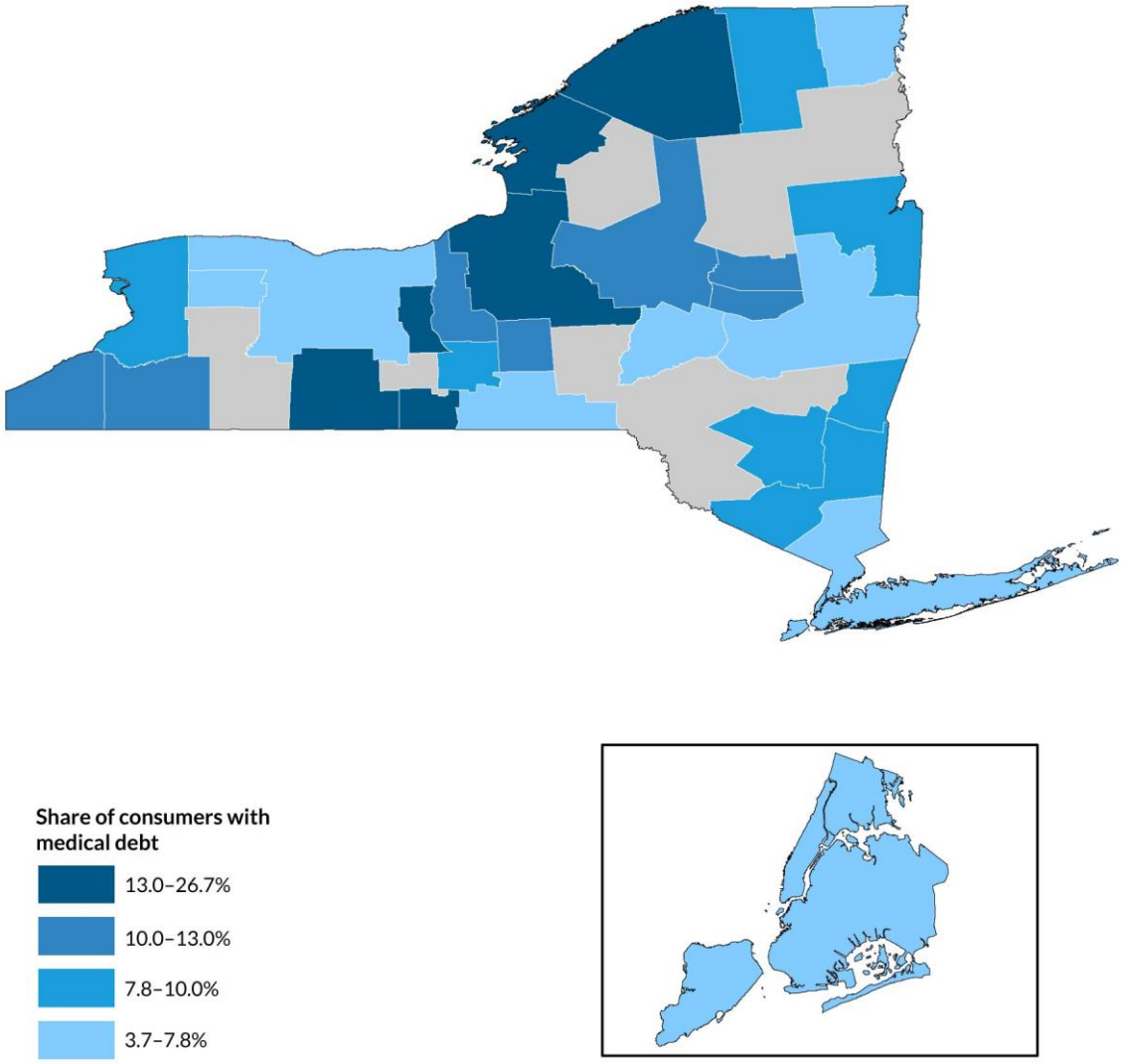
[b] Total population is based on 2016–2020 American Community Survey 5-year estimates.

[c] The margin of sampling error (not shown) provides a measure of uncertainty related to making statistical inferences for the population based on a representative random sample of consumers with credit records. Margins of error for the estimates in this table range between +/– 0.1 to 2.4 percentage points.

[d] Quartile of medical debt is based on the quartile of medical debt prevalence for metropolitan and micropolitan statistical areas across the state.

FIGURE 1

Share of Consumers with Medical Debt in Collections in Metropolitan and Micropolitan Statistical Areas in New York State, February 2022



URBAN INSTITUTE

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022.
Notes: Share with medical debt in collections is defined as the share of consumers with credit bureau records who have medical debt in collections. Metropolitan statistical areas (MSAs) and micropolitan statistical areas (μSAs) are based on 2020 geographies. Color coding reflects quartiles of medical debt, which are based on the quartile of medical debt prevalence for MSAs and μSAs across the state. These quartile ranges differ for each figure in this brief. Gray areas represent areas not in an MSA or μSA.

Hospital Referral Regions

TABLE 4

Share of Consumers with Medical Debt in Collections in Hospital Referral Regions in New York State, February 2022

Hospital referral region[a]	Hospital referral region name[b]	Share with medical debt[c]	Estimated range[d]	Quartile of medical debt[e]
295	Albany, NY	9.0%	8.3%–9.1%	3
296	Binghamton, NY	5.6%	4.7%–5.8%	2
297	Bronx, NY	6.1%	5.3%–6.1%	3
299	Buffalo, NY	8.0%	7.8%–8.1%	3
300	Elmira, NY	15.1%	11.8%–15.6%	4
301	East Long Island, NY	3.3%	3.2%–3.4%	1
303	Manhattan, NY	3.2%	2.9%–3.2%	1
304	Rochester, NY	5.5%	4.8%–5.6%	1
307	Syracuse, NY	14.2%	13.3%–14.3%	4
308	White Plains, NY	5.9%	4.8%–6.1%	2

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022 using Missouri Census Data Center Geocorr estimates of correspondence between geographic areas.

Notes: [a] Hospital referral regions (HRRs) are as of 2019.

[b] HRRs may overlap with multiple states. HRRs are named for the hospital service area with the hospitals used most frequently for tertiary medical care by residents of the region. Estimates in this table are only shown for HRRs in which the hospital service area containing the most frequently used hospital was located in New York State. Estimates are not shown for three HRRs in Connecticut, one HRR in Massachusetts, three HRRs in New Jersey, three HRRs in Pennsylvania, and one HRR in Vermont that include portions of New York State. For more information, see Dartmouth Atlas Project, "Appendix on the Geography of Health Care in the United States."

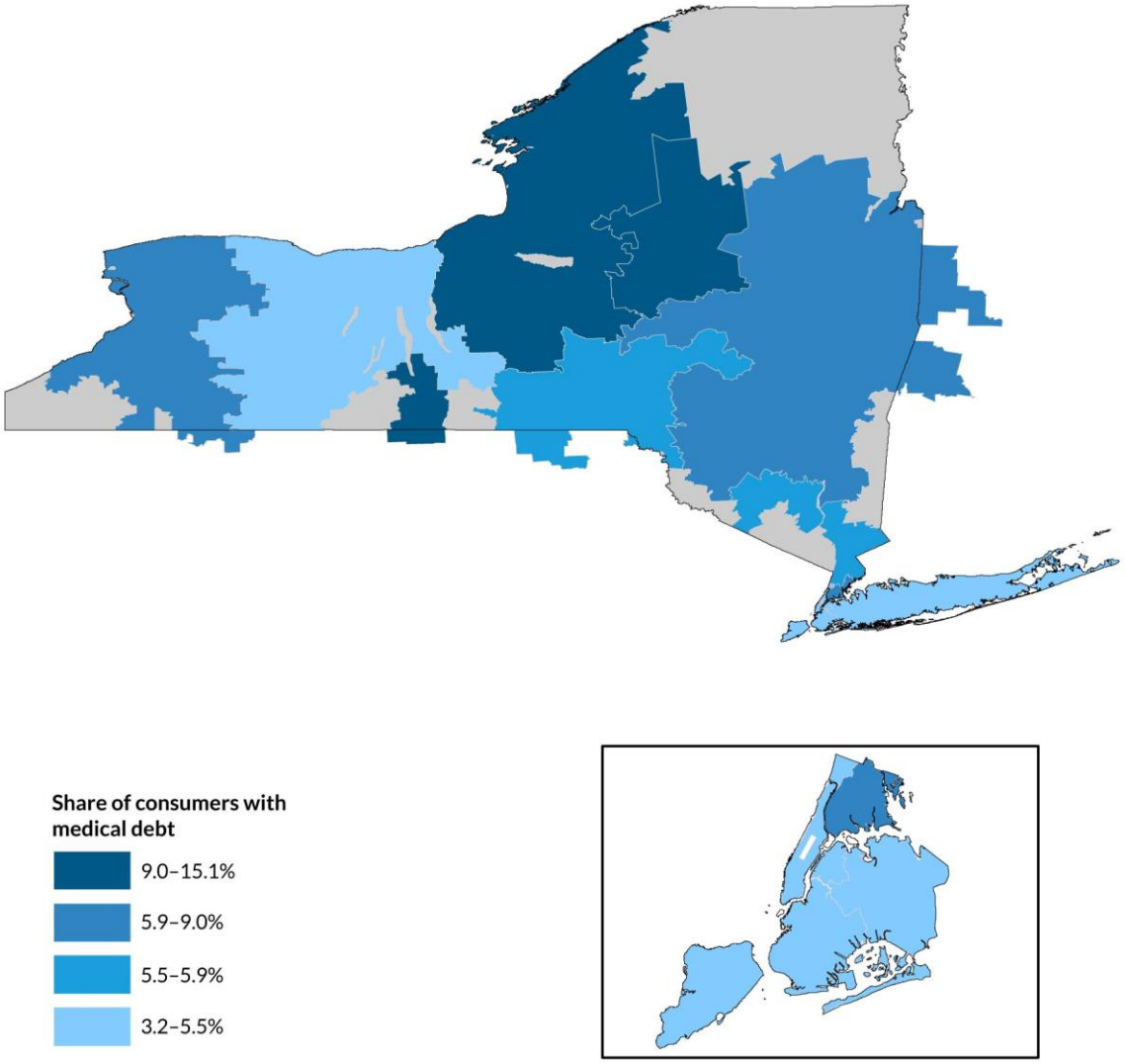
[c] Share with medical debt in collections is based on the prevalence of medical debt within zip code tabulation areas (ZCTAs) that overlap wholly or partially with HRRs, weighted according to the percentage of the ZCTA population in those HRRs. These estimates assume the share of consumers with medical debt from a given ZCTA who reside in a particular HRR is equal to the share of that ZCTA's total population who reside in the HRR.

[d] The estimated range accounts for measurement error, as it is possible that consumers with medical debt do not live in HRRs at the same rate as their ZCTA's overall population. Lower estimates assume consumers with medical debt live in a HRR at half the rate of the overall ZCTA population, and upper estimates assume they live in a HRR at twice the rate of the overall ZCTA population (bounded by the number of consumers with medical debt in the ZCTA). The margin of sampling error (not shown) provides an additional measure of uncertainty related to making statistical inferences for the population based on a representative random sample of consumers with credit records. Margins of error for the estimates in this table range between +/– 0.1 to 0.7 percentage points.

[e] Quartile of medical debt is based on the quartile of medical debt prevalence for HRRs across the state.

FIGURE 2

Share of Consumers with Medical Debt in Collections in Hospital Referral Regions in New York State, February 2022



URBAN INSTITUTE

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022.
Notes: Share with medical debt in collections is defined as the share of consumers with credit bureau records who have medical debt in collections. Hospital Referral Regions (HRR) are as of 2019. Color coding reflects quartiles of medical debt, which are based on the quartile of medical debt prevalence for HRRs across the state. These quartile ranges differ for each figure in this brief. Gray areas represent HRRs in which the hospital service area containing the most frequently used hospital was located in a neighboring state (CT, MA, NJ, PA, or VT).

State Senate Districts

TABLE 5

Share of Consumers with Medical Debt in Collections in New York State Senate Districts, February 2022

State senate district[a]	Share with medical debt[b]	Estimated range[c]	Quartile of medical debt[d]
1	3.2%	2.9%–3.6%	1
2	2.3%	1.8%–2.3%	1
3	4.4%	3.3%–5.1%	3
4	3.3%	2.3%–4.1%	2
5	2.1%	1.8%–2.3%	1
6	3.6%	3.3%–3.9%	2
7	2.3%	2.1%–2.5%	1
8	2.4%	1.6%–3.5%	1
9	3.2%	2.8%–3.4%	2
10	5.0%	3.8%–6.0%	3
11	3.6%	2.4%–4.5%	2
12	3.0%	1.6%–4.2%	1
13	4.4%	2.5%–5.1%	2
14	4.1%	2.7%–5.7%	2
15	3.1%	1.7%–4.0%	1
16	3.8%	2.9%–4.3%	2
17	1.9%	0.9%–3.1%	1
18	4.1%	2.0%–6.4%	2
19	5.0%	2.7%–6.7%	3
20	4.1%	2.5%–6.3%	2
21	3.3%	1.6%–4.6%	2
22	2.1%	1.1%–3.2%	1
23	3.2%	2.1%–4.0%	2
24	2.6%	1.8%–3.1%	1
25	4.7%	2.4%–7.6%	3
26	2.6%	1.5%–3.6%	1
27	3.1%	2.5%–3.7%	1
28	1.9%	1.5%–2.8%	1
29	5.3%	2.9%–7.2%	3
30	4.1%	3.4%–4.9%	2
31	4.6%	3.0%–6.6%	3
32	7.0%	4.0%–9.1%	3
33	6.3%	4.2%–10.5%	3
34	5.6%	3.3%–7.6%	3
35	6.6%	4.8%–6.9%	3
36	5.5%	4.2%–6.3%	3
37	2.7%	2.2%–3.3%	1
38	4.4%	4.3%–4.4%	2
39	9.8%	7.1%–10.4%	4
40	4.4%	3.5%–4.5%	2
41	9.6%	8.0%–10.2%	4
42	8.3%	6.5%–8.5%	4
43	8.5%	7.6%–9.1%	4
44	7.9%	6.7%–8.7%	4
45	9.2%	8.5%–9.4%	4
46	8.1%	6.3%–9.1%	4

State senate district[a]	Share with medical debt[b]	Estimated range[c]	Quartile of medical debt[d]
47	2.1%	1.2%–3.0%	1
48	16.1%	12.5%–17.4%	4
49	12.9%	11.2%–13.7%	4
50	13.1%	9.7%–14.5%	4
51	8.2%	7.3%–9.1%	4
52	7.3%	5.0%–7.8%	3
53	11.9%	9.1%–12.5%	4
54	6.1%	4.7%–6.5%	3
55	3.7%	2.0%–4.1%	2
56	4.1%	3.5%–4.6%	2
57	9.5%	9.1%–9.7%	4
58	16.0%	15.5%–16.3%	4
59	2.8%	1.7%–3.8%	1
60	5.4%	4.2%–6.2%	3
61	6.1%	4.7%–6.9%	3
62	6.6%	6.4%–6.7%	3
63	12.5%	9.2%–13.7%	4

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022 using Missouri Census Data Center Geocorr estimates of correspondence between geographic areas.

Notes: [a] State senate districts are as of 2022.

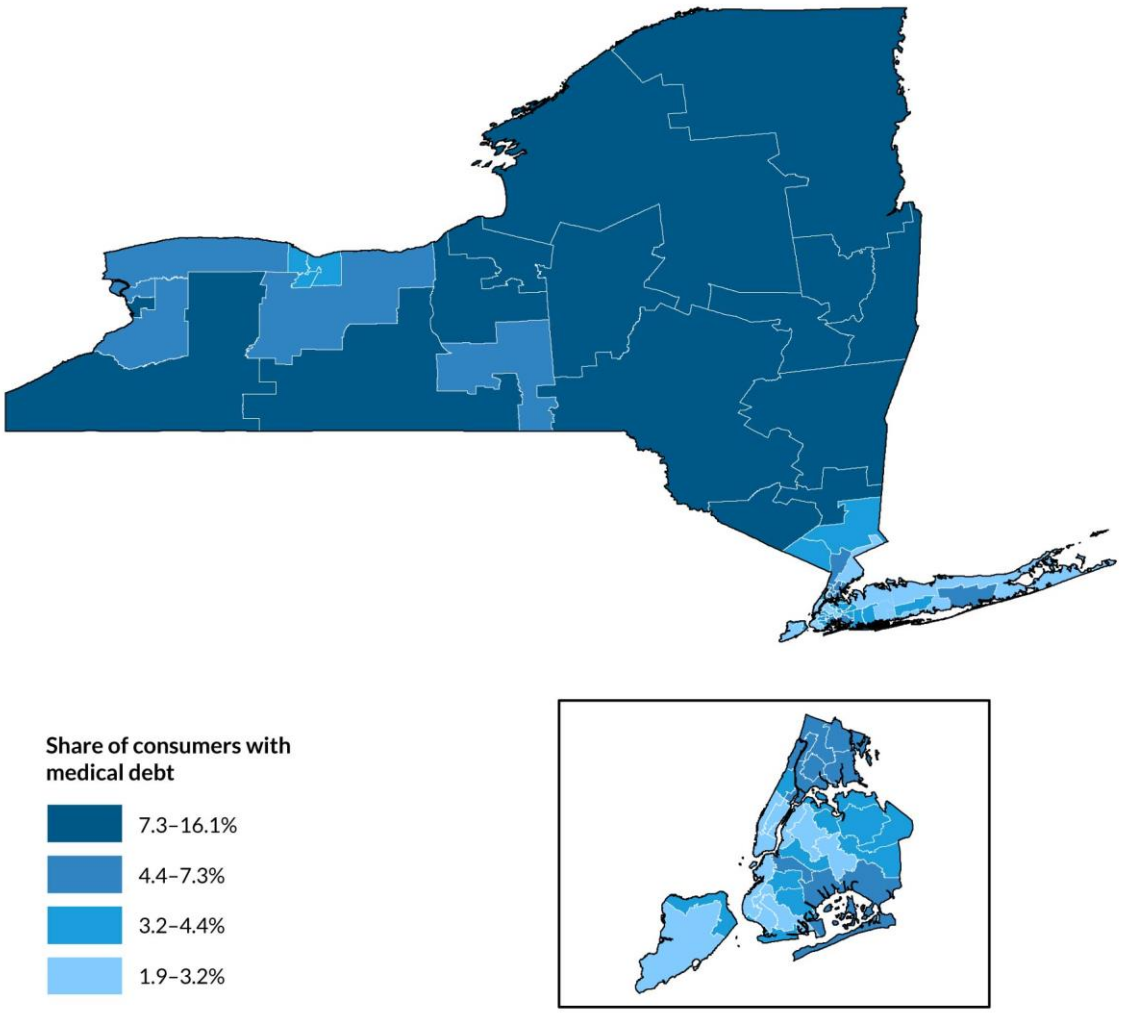
[b] Share with medical debt in collections is based on the prevalence of medical debt within zip code tabulation areas (ZCTAs) that overlap wholly or partially with state senate districts, weighted according to the percentage of the ZCTA population in those districts. These estimates assume the share of consumers with medical debt from a given ZCTA who reside in a particular district is equal to the share of that ZCTA's total population who reside in the district.

[c] The estimated range accounts for measurement error, as it is possible that consumers with medical debt do not live in districts at the same rate as their ZCTA's overall population. Lower estimates assume consumers with medical debt live in a district at half the rate of the overall ZCTA population, and upper estimates assume they live in a district at twice the rate of the overall ZCTA population (bounded by the number of consumers with medical debt in the ZCTA). The margin of sampling error (not shown) provides an additional measure of uncertainty related to making statistical inferences for the population based on a representative random sample of consumers with credit records. Margins of error for the estimates in this table range between +/– 0.3 to 0.7 percentage points.

[d] Quartile of medical debt is based on the quartile of medical debt prevalence for senate districts across the state.

FIGURE 3

Share of Consumers with Medical Debt in Collections in New York State Senate Districts, February 2022



URBAN INSTITUTE

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022.
Notes: Share with medical debt in collections is defined as the share of consumers with credit bureau records who have medical debt in collections. State senate districts are as of 2022. Color coding reflects quartiles of medical debt, which are based on the quartile of medical debt prevalence for senate districts across the state. These quartile ranges differ for each figure in this brief.

State Assembly Districts

TABLE 6

Share of Consumers with Medical Debt in Collections in New York State Assembly Districts, February 2022

State assembly district[a]	Share with medical debt[b]	Estimated range[c]	Quartile of medical debt[d]
1	3.6%	3.2%–4.1%	2
2	3.4%	2.3%–4.2%	2
3	5.3%	3.5%–6.6%	3
4	2.8%	1.9%–3.9%	1
5	3.3%	1.6%–4.4%	2
6	3.7%	1.8%–4.6%	2
7	2.8%	1.9%–4.2%	1
8	2.2%	1.7%–2.7%	1
9	2.2%	1.1%–3.0%	1
10	2.5%	1.4%–3.1%	1
11	3.2%	2.3%–3.8%	2
12	2.5%	1.3%–3.7%	1
13	2.4%	1.3%–3.7%	1
14	2.1%	1.6%–2.4%	1
15	2.0%	1.0%–3.0%	1
16	2.6%	2.3%–3.0%	1
17	2.1%	1.0%–3.1%	1
18	4.5%	2.6%–5.6%	3
19	2.2%	1.4%–3.4%	1
20	3.4%	3.0%–3.7%	2
21	3.1%	1.8%–4.3%	2
22	3.3%	2.4%–4.1%	2
23	4.5%	3.0%–6.2%	3
24	3.6%	1.8%–6.4%	2
25	3.6%	1.8%–6.5%	2
26	3.1%	2.1%–4.4%	2
27	4.2%	2.7%–5.8%	2
28	2.6%	1.3%–4.3%	1
29	4.7%	2.3%–8.0%	3
30	3.2%	1.6%–5.8%	2
31	4.9%	2.5%–7.8%	3
32	4.6%	2.3%–7.1%	3
33	4.0%	2.4%–5.3%	2
34	3.3%	1.7%–6.0%	2
35	4.9%	2.4%–8.3%	3
36	3.0%	2.0%–3.8%	1
37	2.7%	1.6%–5.0%	1
38	3.3%	2.1%–5.2%	2
39	3.9%	2.0%–7.8%	2
40	4.0%	2.0%–5.8%	2
41	2.6%	1.3%–4.8%	1
42	3.7%	1.9%–5.7%	2
43	4.6%	2.3%–7.4%	3
44	2.5%	1.3%–4.2%	1
45	2.1%	1.1%–4.1%	1
46	2.9%	2.1%–3.9%	1
47	1.8%	0.9%–3.0%	1
48	1.9%	1.0%–3.6%	1

State assembly district[a]	Share with medical debt[b]	Estimated range[c]	Quartile of medical debt[d]
49	1.8%	0.9%–3.5%	1
50	3.0%	1.5%–4.3%	1
51	2.5%	1.6%–4.0%	1
52	2.7%	1.4%–4.1%	1
53	4.1%	2.1%–7.2%	2
54	4.7%	2.3%–8.9%	3
55	5.4%	2.7%–8.3%	3
56	5.0%	2.5%–10.1%	3
57	4.0%	2.0%–6.5%	2
58	4.6%	2.3%–8.5%	3
59	3.7%	1.8%–6.1%	2
60	5.2%	3.1%–8.7%	3
61	3.4%	2.1%–5.1%	2
62	2.4%	1.6%–2.9%	1
63	3.1%	1.5%–4.7%	1
64	2.8%	1.4%–4.4%	1
65	3.5%	1.7%–4.5%	2
66	2.4%	1.5%–3.3%	1
67	1.8%	0.9%–3.1%	1
68	4.4%	3.5%–5.1%	2
69	2.8%	1.4%–3.7%	1
70	4.3%	2.2%–5.8%	2
71	4.0%	2.0%–6.2%	2
72	3.5%	1.7%–5.1%	2
73	1.9%	1.2%–3.2%	1
74	3.3%	1.7%–4.9%	2
75	2.4%	1.6%–3.5%	1
76	1.8%	1.0%–2.7%	1
77	7.2%	3.6%–13.7%	4
78	6.7%	3.3%–10.1%	3
79	6.9%	3.4%–13.5%	3
80	5.7%	2.9%–10.8%	3
81	4.4%	2.6%–6.2%	3
82	4.5%	3.0%–5.5%	3
83	5.1%	2.6%–7.6%	3
84	5.8%	3.7%–9.2%	3
85	6.4%	3.2%–10.0%	3
86	8.0%	4.0%–13.8%	4
87	6.6%	3.3%–12.6%	3
88	2.6%	1.5%–4.0%	1
89	9.0%	5.2%–11.7%	4
90	7.6%	3.8%–11.2%	4
91	3.4%	2.5%–4.1%	2
92	3.1%	2.5%–3.8%	1
93	2.8%	1.8%–3.5%	1
94	5.4%	3.9%–5.6%	3
95	3.9%	3.1%–4.0%	2
96	4.7%	3.4%–5.0%	3
97	4.3%	2.5%–5.1%	2
98	6.5%	4.6%–8.2%	3
99	6.3%	4.9%–7.0%	3
100	13.1%	8.9%–14.2%	4
101	8.4%	5.8%–10.2%	4
102	7.2%	6.5%–7.6%	3
103	8.8%	7.8%–9.3%	4
104	12.4%	6.6%–16.4%	4

State assembly district[a]	Share with medical debt[b]	Estimated range[c]	Quartile of medical debt[d]
105	7.7%	4.9%–9.2%	4
106	10.8%	7.3%–15.4%	4
107	6.7%	4.5%–9.0%	3
108	9.6%	5.5%–12.3%	4
109	9.4%	7.6%–10.0%	4
110	6.7%	3.7%–9.5%	3
111	10.4%	6.3%–13.0%	4
112	6.0%	4.1%–8.0%	3
113	8.9%	5.8%–11.0%	4
114	8.9%	7.9%–9.9%	4
115	7.4%	7.0%–7.6%	4
116	14.6%	9.5%–16.0%	4
117	12.0%	9.0%–14.0%	4
118	10.2%	8.5%–11.3%	4
119	14.2%	7.4%–15.8%	4
120	18.0%	14.8%–18.7%	4
121	6.2%	4.8%–7.5%	3
122	9.9%	7.4%–11.5%	4
123	4.8%	2.4%–6.1%	3
124	19.0%	16.4%–20.2%	4
125	9.5%	7.1%–10.2%	4
126	10.1%	5.6%–13.2%	4
127	10.0%	6.5%–13.0%	4
128	16.2%	9.1%–24.7%	4
129	21.0%	12.1%–28.9%	4
130	5.8%	3.9%–6.2%	3
131	11.3%	6.9%–12.8%	4
132	14.6%	12.0%–15.7%	4
133	4.4%	3.4%–4.8%	2
134	3.8%	1.9%–4.6%	2
135	2.1%	1.3%–2.4%	1
136	4.2%	2.6%–6.8%	2
137	5.7%	4.2%–7.2%	3
138	3.4%	1.8%–4.8%	2
139	5.4%	4.5%–5.6%	3
140	6.4%	4.7%–8.8%	3
141	14.1%	8.6%–17.1%	4
142	9.0%	5.4%–10.8%	4
143	9.5%	5.6%–12.7%	4
144	5.0%	2.8%–6.4%	3
145	8.6%	8.1%–9.7%	4
146	4.4%	2.9%–4.8%	2
147	5.6%	4.2%–6.6%	3
148	10.6%	10.2%–11.2%	4
149	8.0%	5.8%–9.8%	4
150	11.3%	10.9%–11.5%	4

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022 using Missouri Census Data Center Geocorr estimates of correspondence between geographic areas.

Notes: [a] State assembly districts are as of 2022.

[b] Share with medical debt in collections is based on the prevalence of medical debt within zip code tabulation areas (ZCTAs) that overlap wholly or partially with state assembly districts, weighted according to the percentage of the ZCTA population in those districts. These estimates assume the share of consumers with medical debt from a given ZCTA who reside in a particular district is equal to the share of that ZCTA's total population who reside in the district.

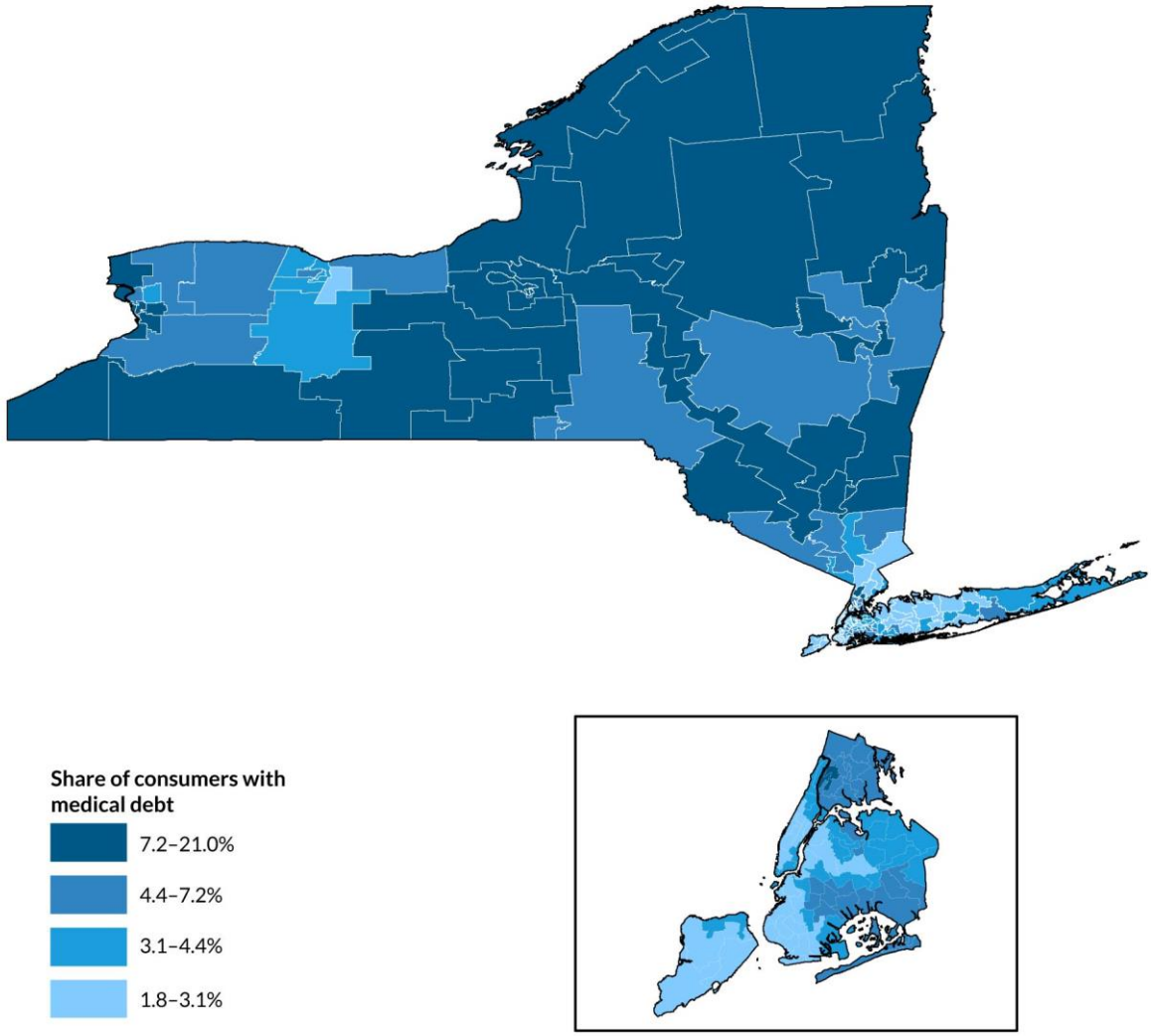
[c] The estimated range accounts for measurement error, as it is possible that consumers with medical debt do not live in districts at the same rate as their ZCTA's overall population. Lower estimates assume consumers with medical debt live in a district at half the

rate of the overall ZCTA population, and upper estimates assume they live in a district at twice the rate of the overall ZCTA population (bounded by the number of consumers with medical debt in the ZCTA). The margin of sampling error (not shown) provides an additional measure of uncertainty related to making statistical inferences for the population based on a representative random sample of consumers with credit records. Margins of error for the estimates in this table range between +/– 0.4 to 1.3 percentage points.

[d] Quartile of medical debt is based on the quartile of medical debt prevalence for assembly districts across the state.

FIGURE 4

Share of Consumers with Medical Debt in Collections in New York State Assembly Districts, February 2022



URBAN INSTITUTE

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022.

Notes: Share with medical debt in collections is defined as the share of consumers with credit bureau records who have medical debt in collections. State assembly districts are as of 2022. Color coding reflects quartiles of medical debt, which are based on the quartile of medical debt prevalence for assembly districts across the state. These quartile ranges differ for each figure in this brief.

Congressional Districts

TABLE 7

Share of Consumers with Medical Debt in Collections in Congressional Districts in New York State, February 2022

Congressional district[a]	Share with medical debt[b]	Estimated range[c]	Quartile of medical debt[d]
1	2.8%	2.5%–3.0%	1
2	3.5%	3.0%–3.8%	2
3	2.5%	2.0%–3.0%	1
4	3.1%	2.9%–3.2%	1
5	4.4%	3.9%–4.7%	3
6	3.4%	2.3%–4.1%	1
7	3.4%	2.2%–5.0%	2
8	4.1%	2.4%–6.1%	2
9	3.5%	2.5%–4.5%	2
10	2.8%	2.1%–3.3%	1
11	2.6%	2.5%–2.8%	1
12	2.2%	1.9%–2.6%	1
13	4.6%	3.8%–5.6%	3
14	5.1%	3.5%–6.4%	3
15	6.3%	4.7%–8.1%	3
16	5.1%	4.8%–5.3%	3
17	4.3%	4.1%–4.5%	2
18	9.5%	8.2%–9.8%	4
19	8.3%	7.4%–8.7%	3
20	7.9%	7.2%–8.4%	3
21	9.5%	8.6%–10.3%	4
22	13.5%	12.2%–13.7%	4
23	10.9%	10.4%–11.3%	4
24	10.0%	8.1%–10.5%	4
25	3.8%	3.5%–3.8%	2
26	8.9%	8.4%–9.3%	4

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022 using Missouri Census Data Center Geocorr estimates of correspondence between geographic areas.

Notes: [a] Congressional districts are for the 118th Congress (2023–2024).

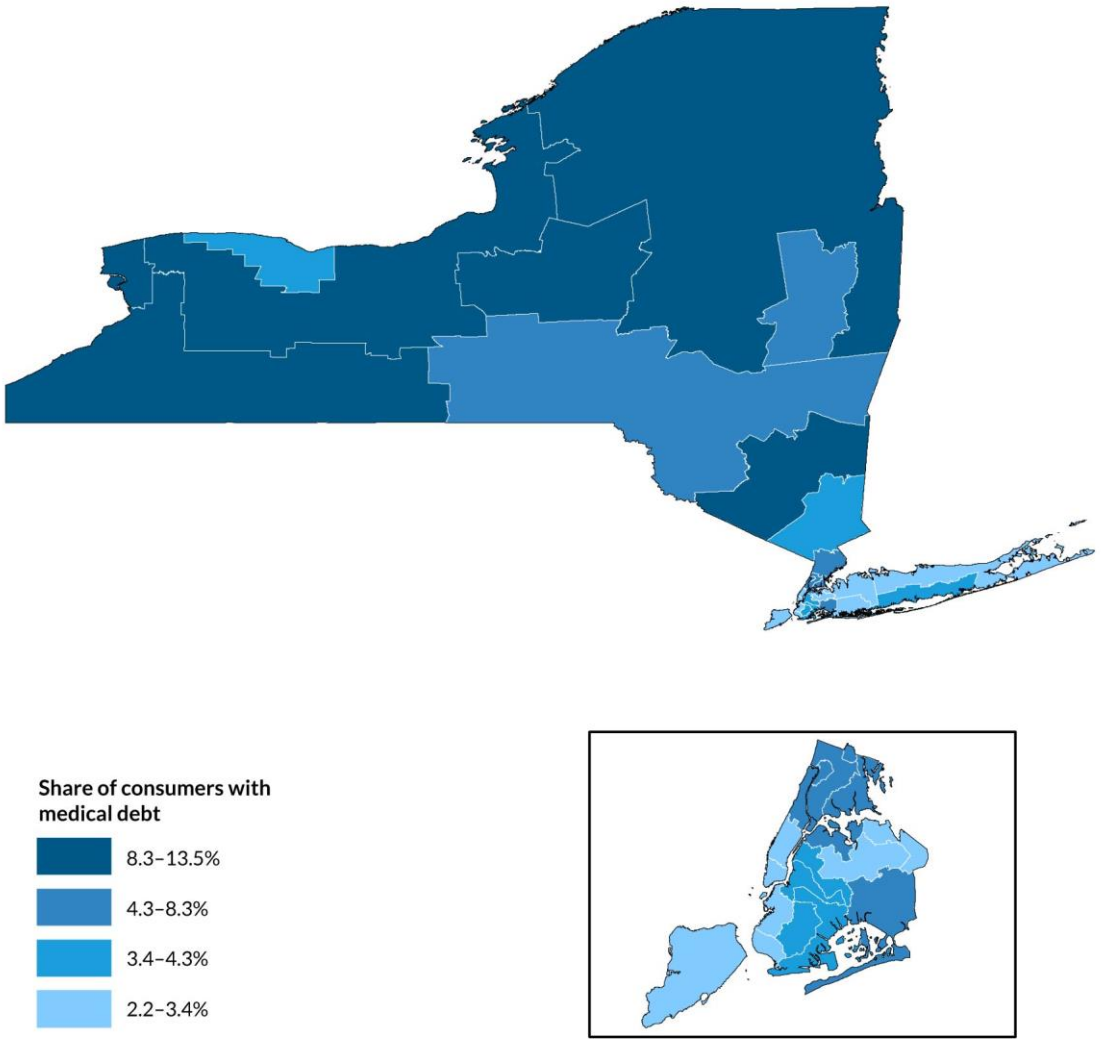
[b] Share with medical debt in collections is based on the prevalence of medical debt within zip code tabulation areas (ZCTAs) that overlap wholly or partially with congressional districts, weighted according to the percentage of the ZCTA population in those districts. These estimates assume the share of consumers with medical debt from a given ZCTA who reside in a particular district is equal to the share of that ZCTA's total population who reside in the district.

[c] The estimated range accounts for measurement error, as it is possible that consumers with medical debt do not live in districts at the same rate as their ZCTA's overall population. Lower estimates assume consumers with medical debt live in a district at half the rate of the overall ZCTA population, and upper estimates assume they live in a district at twice the rate of the overall ZCTA population (bounded by the number of consumers with medical debt in the ZCTA). The margin of sampling error (not shown) provides an additional measure of uncertainty related to making statistical inferences for the population based on a representative random sample of consumers with credit records. Margins of error for the estimates in this table range between +/– 0.2 to 0.4 percentage points.

[d] Quartile of medical debt is based on the quartile of medical debt prevalence for congressional districts across the state.

FIGURE 5

Share of Consumers with Medical Debt in Collections in Congressional Districts in New York State, February 2022



URBAN INSTITUTE

Source: Authors' tabulations of Urban Institute credit bureau data from February 2022.
Notes: Share with medical debt in collections is defined as the share of consumers with credit bureau records who have medical debt in collections. Congressional districts are for the 118th Congress (2023–2024). Color coding reflects quartiles of medical debt, which are based on the quartile of medical debt prevalence for congressional districts across the state. These quartile ranges differ for each figure in this brief.

Appendix

Methods

The national credit bureau data used for this analysis (described below) identifies consumers' counties and zip codes of residence. We match consumer zip codes to zip code tabulation areas (ZCTAs), a set of nonoverlapping geographic units that approximate the zip codes used for mail delivery and come closest to representing the geographic boundaries of communities.[5] Estimates for most of the geographic areas examined in this analysis (cities and towns, hospital referral regions [HRRs], state senate districts, state assembly districts, and congressional districts) are developed based on ZCTA-level data.

However, because ZCTAs may overlap with multiple geographic units, we cannot directly aggregate ZCTA-level data to calculate the prevalence of medical debt for the target geographies. In situations where portions of a ZCTA overlap with two or more areas (e.g., one ZCTA overlaps with two state senate districts), we assume the share of consumers with medical debt from the ZCTA who live in a particular area is equal to the share of the ZCTA's total population in that area and then provide lower and upper estimates in which we relax that assumption.

Our main estimates of medical debt prevalence for cities and towns, HRRs, state legislative districts, and congressional districts are based on the prevalence of medical debt within ZCTAs that overlap wholly or partially with the target geographies and are weighted according to the percentage of the ZCTA population in those areas (using allocation factors from the Missouri Census Data Center's Geocorr 2022 Application described below). For instance, if one-third of a ZCTA's population resides in a given state senate district, we estimate that district's prevalence of medical debt by including one-third of that ZCTA's total number of consumers in the denominator and one-third of that ZCTA's consumers with medical debt in the numerator (with the same approach applied to all other ZCTAs that overlap with the district).

There are two related assumptions underlying this approach. First, this approach assumes that consumers in the credit bureau data (adults with a credit bureau record in February 2022) are geographically distributed in the same way as the overall population (2020 census), as reflected in the allocation factor proportion. Second, this approach assumes that consumers with medical debt are geographically distributed in the same way as the overall population. This assumption is imperfect because consumers with medical debt might be clustered in certain neighborhoods within each ZCTA, which could be correlated with other observable or unobservable characteristics.

To reflect the potential measurement error in these estimates based on this second assumption, the supplemental tables also present a range of medical debt prevalence estimates to account for the possibility that consumers with medical debt do not live in target geographies at the same rate as their ZCTA's overall population. The lower bound of this range reflects the prevalence of medical debt in the given geographic unit if we assume that consumers with medical debt live in the target geography at half the rate of the overall population. The upper bound assumes that consumers with medical debt live in

the target geography at up to twice the rate of the overall population. This allocation is bounded by either the total number of consumers with medical debt in a ZCTA or by the total population of the geographic overlap. These estimates of measurement error consider allocations from ZCTAs to a target geographic area independently of other areas. Though the prevalence of medical debt may fall outside this range, it would require even greater geographic clustering of consumers with medical debt within a ZCTA.

For cities and towns, we present estimates for only the largest 25 areas by population because the level of measurement error tends to increase at levels of geography that have smaller populations and a greater degree of imperfect overlap with ZCTAs.

These measurement issues do not affect our estimates for metropolitan and micropolitan statistical areas, which consist of groups of counties. We can, therefore, aggregate our data by consumers' counties of residence to provide estimates for those areas.

The supplemental table notes also refer to the margin of sampling error (expressed as +/– percentage points) for estimates, providing an additional measure of uncertainty related to making statistical inferences for the population based on a representative random sample of consumers with credit records.

HRRs may overlap with multiple states. Our tables only show estimates for 10 HRRs in which the hospital service area containing the most frequently used hospital was located in New York State. These estimates are limited to consumers living in ZCTAs in New York State and exclude consumers for ZCTAs in neighboring states. Estimates are not shown for three HRRs in Connecticut, one HRR in Massachusetts, three HRRs in New Jersey, three HRRs in Pennsylvania, and one HRR in Vermont that include portions of New York State.

Data

Our primary data source is February 2022 credit bureau data from a representative random sample of over 600,000 consumers ages 18 and older with a credit record in New York State. These deidentified consumer-level records include the amount of medical debt held in collections, county of residence, and zip code of residence, which we match to ZCTAs.

To aggregate ZCTA-level data on medical debt in collections to our target geographies of interest, we use geographic correlation list files from the Missouri Census Data Center's Geocorr 2022 Application.[6] These files map ZCTAs to the target geography of interest, along with an allocation factor indicating the proportion of the total ZCTA population (2020 census) that lives in the target geography.[7] We use these correlation lists to map 2020 ZCTAs to 2022 state senate districts, 2022 state assembly districts, congressional districts for the 118th Congress (2023–2024), 2020 cities and towns, and 2019 HRRs. We also use a correlation list to map 2020 counties to 2020 metropolitan and micropolitan statistical areas.

Notes

[1] There are 62 cities and 933 towns in New York State. All residents live in one of these incorporated areas or on Indian reservations. See "Local Government Entities by Class: Regional Map," Office of the New York State Comptroller, accessed September 26, 2023, https://wwe1.osc.state.ny.us/localgov/web-entity-map/entity-map.cfm, and New York Division of Local Government Services (2018). In this brief, we provide estimates for the 25 largest cities and 25 largest towns by total population.

[2] Metropolitan statistical areas consist of a county or counties associated with at least one urbanized area of 50,000 or more residents, as well as adjacent counties with high levels of social and economic integration with the core based on commuting patterns. Micropolitan areas consist of a county or counties associated with at least one urban cluster of at least 10,000 residents but fewer than 50,000 residents, as well as adjacent counties with high levels of social and economic integration with the core based on commuting patterns. See "Glossary," US Census Bureau, last revised June 23, 2023, accessed August 4, 2023, https://www.census.gov/programs-surveys/metro-micro/about/glossary.html.

[3] HRRs consist of hospital service areas, which are local health care markets for hospital care. Each HRR contains at least one hospital providing major cardiovascular procedures and neurosurgery, and HRRs are defined by assigning hospital service areas to the region where most of these procedures are performed. HRRs are named for the hospital service area containing the referral hospitals used most often by the residents of the region. See "FAQ," Dartmouth Atlas Project, accessed September 26, 2023, https://www.dartmouthatlas.org/faq/, and Dartmouth Atlas of Health Care (1996).

[4] State legislative districts and congressional districts reflect the district boundaries used for the 2022 election cycle. Congressional districts and state senate districts are based on maps that were redrawn by a special master and approved by New York State Supreme Court decisions in May and June 2022. Though a June 2022 state appellate court ruling also required state assembly district maps to be redrawn, these maps were used in the 2022 elections. The state legislature and governor approved new assembly district maps developed by the state's Independent Redistricting Commission in April 2023. Though our estimates do not reflect the new assembly district boundaries that will be used in the 2024 elections, these boundaries are in most cases closely aligned with those used in the 2022 elections.

[5] There are 1,794 ZCTAs in New York State, including 1,754 populated ZCTAs, with populations ranging from 100 to over 108,000, and a median population of about 3,000 residents, based on 2016–2020 American Community Survey 5-year estimates.

[6] "Geocorr Applications," University of Missouri Center for Health Policy, accessed June 22, 2023, https://mcdc.missouri.edu/applications/geocorr.html.

[7] "Geocorr 2022 Help," Missouri Census Data Center, revised April 21, 2022, accessed June 29, 2023, https://mcdc.missouri.edu/applications/docs/geocorr2022-help.html.

References

Dartmouth Atlas of Health Care. 1996. "Appendix on the Geography of Health Care in the United States." *Dartmouth Atlas of Health Care* 1996 ed. 289–307. Lebanon, NH: Dartmouth College.

Karpman, Michael, Fredric Blavin, Dulce Gonzalez, Jennifer Andre, and Breno Braga. 2023. *Medical Debt in New York State and Its Unequal Burden across Communities*. Washington, DC: Urban Institute.

New York Division of Local Government Services. 2018. *Local Government Handbook.* New York: New York Department of State.

About the Authors

Jennifer Andre was a data scientist in the Center on Labor, Human Services, and Population at the Urban Institute. Her research focused primarily on consumer financial well-being and data privacy methods. She led data asset strategy development for the Financial Well-Being Data Hub, an Urban Institute initiative to advance data-driven solutions to improve consumer financial well-being. Andre holds a BA in economics from the University of Notre Dame and an MS in public policy and management–data analytics from Carnegie Mellon University.

Michael Karpman is a principal research associate in the Health Policy Center. His work focuses on quantitative analysis related to health insurance coverage, access to and affordability of health care, use of health care services, and health status. His work includes overseeing and analyzing data from the Urban Institute's Health Reform Monitoring Survey and Well-Being and Basic Needs Survey. Before joining Urban in 2013, Karpman was a senior associate at the National League of Cities Institute for Youth, Education, and Families. He received his MPP from Georgetown University.

Fredric Blavin is a principal research associate in the Health Policy Center with expertise on a wide range of topics, including hospital finances, private health insurance markets, health care reform, health information technology, provider supply, health care affordability and medical debt, child and maternity health, and the Health Insurance Policy Simulation model. His articles have been published in various academic journals including the *Journal of Health Economics*, *JAMA*, *Health Affairs*, *Journal of Public Economics*, and *Health Services Research*. Blavin received his PhD in managerial science and applied economics from the University of Pennsylvania in 2011.

Dulce Gonzalez is a research associate in the Health Policy Center. She forms part of a team working on the Urban Institute's Well-Being and Basic Needs Survey. Gonzalez conducts quantitative and qualitative research focused primarily on the social safety net, immigration, and barriers to health care access. Her work has also focused on the impact of the COVID-19 pandemic on nonelderly adults and their families. Before joining Urban, Gonzalez worked at the Georgetown University Center for Children and Families and at the nonprofit organization Maternal and Child Health Access. Gonzalez holds a BA in economics from California State University, Long Beach, and a master's degree in public policy from Georgetown University.

Breno Braga is a principal research associate in the Center on Labor, Human Services, and Population. His research has covered topics such as the effects of childhood exposure to the earned income tax credit on health outcomes and the impact of access to individual development accounts on asset building. His articles have been published in academic journals including the *Journal of Labor Economics*, *Journal of Public Economics*, and *American Economic Journal: Economic Policy*. His work has been cited in many media outlets, including the *New York Times*, *The Atlantic*, and *Bloomberg*. He received a BA in economics from the Federal University of Rio de Janeiro, an MA in economics from the Pontifical Catholic University of Rio de Janeiro, and a PhD in economics from the University of Michigan. Braga is a research affiliate at IZA in Bonn, Germany.

Acknowledgments

This brief was funded by the New York Health Foundation (NYHealth). We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

The mission of NYHealth is to expand health insurance coverage, increase access to high-quality health care services, and improve public and community health. The views presented here are those of the authors and not necessarily those of the New York Health Foundation or its directors, officers, and staff.

The authors gratefully acknowledge helpful comments on earlier drafts from Ali Foti and careful editing by Sarah LaCorte.

500 L'Enfant Plaza SW
Washington, DC 20024
www.urban.org

ABOUT THE URBAN INSTITUTE

The Urban Institute is a nonprofit research organization that provides data and evidence to help advance upward mobility and equity. We are a trusted source for changemakers who seek to strengthen decisionmaking, create inclusive economic growth, and improve the well-being of families and communities. For more than 50 years, Urban has delivered facts that inspire solutions—and this remains our charge today.