	Hospita	l Debt Experime	nt	Collecto	or Debt Experime	ent
	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Distress						
Number of accounts past due ⁺	1.20	-0.01	[0.374]	1.02	-0.00	[0.838]
		(0.02)			(0.01)	
Number of accounts in default	1.08	-0.02	[0.290]	0.92	-0.00	[0.946]
		(0.01)	$\{0.553\}$		(0.01)	$\{0.995\}$
Debt past due (\$)	4,908	4	[0.973]	4,815	6	[0.930]
		(117)	$\{0.976\}$		(68)	$\{0.995\}$
Balances in default (\$)	3,741	27	[0.716]	3,705	28	[0.570]
		(75)	$\{0.901\}$		(50)	$\{0.879\}$
Panel B. Debt in Collections						
Number of debts in collections	4.66	-0.02	[0.688]	3.55	-0.02	[0.367]
		(0.04)	{0.674}	0.00	(0.02)	$\{0.557\}$
Debts in collections (\$)	4.119	-32	[0.488]	3.112	-1	[0.963]
	-,	(47)	$\{0.671\}$		(28)	$\{0.962\}$
			()			()
Panel C. Bankruptcy	1.00	0.10	[0.041]	0.45	0.05	[0.000]
Bankruptcy in last 12 months (%)	1.30	-0.12	[0.361]	0.65	-0.05	[0.338]
		(0.13)			(0.05)	
Panel D. Access to Credit						
Has credit score (%)	97.22	0.00	[0.981]	90.73	-0.06	[0.640]
		(0.17)	$\{0.997\}$		(0.13)	$\{0.867\}$
Credit score (excluding missing)	582.29	0.04	[0.930]	577.60	-0.03	[0.908]
		(0.51)	$\{0.997\}$		(0.29)	$\{0.903\}$
Credit card limit (\$)	2,654	40	[0.263]	$2,\!640$	24	[0.231]
		(36)	$\{0.585\}$		(20)	$\{0.532\}$
Panel F. Borrowing						
Number of credit cards	0.81	0.02	[0, 025]	0.78	0.00	[0.551]
Number of credit cards	0.01	(0.01)	[0.020] JO 0881	0.10	(0.01)	[0.001] J0.819]
Credit card balance (\$)	1 481	(0.01)	[0.000]	1 306	24	[0.012]
Credit card balance (\$)	1,401	(22)	[0.914]	1,500	(12)	[0.042] J0.1351
Number of auto loans	0.30	0.01	[0.203]	0.30	-0.00	[0.155]
Number of auto foans	0.00	(0.00)	[0.200] {0.479}	0.00	(0.00)	[0.010] {0.080}
Auto loan balance $(\$)$	8 020	-43	[0.658]	5 /17	-37	[0.367]
	0,020	(98)	{0.899}	0,111	(41)	$\{0, 733\}$
		(00)	[0.099]		(11)	[0.100]
Panel F. Sample Size						
Observations [†]	$55,\!653$	12,998		64,947	65,968	

Table A5. Effects of Debt Relief on Credit Bureau Outcomes (Person Fixed Effects Specification)

Notes: Table presents the effects of medical debt relief on credit bureau outcomes, estimated using the panel specification in Equation 3. Columns (1) and (4) report the control means for the hospital debt and collector debt experiments, respectively. Control means are averaged across post-treatment quarters. Columns (2) and (5) report the treatment effects, with standard errors below in parentheses. Columns (3) and (6) report unadjusted and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the Westfall and Young (1993) method by domain.

+: Main pre-specified outcome.

 \dagger : Sample sizes for control and treatment groups reported in the control mean ((1) and (4)) and treatment effect columns ((2) and (5)), respectively.

	Hospita	d Debt Experime	Collecto	or Debt Experime	\mathbf{ent}	
	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Distress						
Number of accounts past due ⁺	1.20	-0.00 (0.02)	[0.792]	1.02	0.00 (0.01)	[0.831]
Number of accounts in default	1.08	-0.01 (0.01)	[0.697]	0.92	0.00 (0.01)	[0.840]
Debt past due (\$)	4,908	58 (119)	[0.626]	4,815	17 (70)	[0.812]
Balances in default (\$)	3,741	$\begin{pmatrix} 6\\(85)\end{pmatrix}$	[0.943]	3,705	-6 (52)	[0.903]
Panel B. Debt in Collections						
Number of debts in collections	4.66	-0.02 (0.04)	[0.609]	3.55	-0.02 (0.02)	[0.397]
Debts in collections (\$)	4,119	-69 (50)	[0.167]	3,112	$ \begin{array}{c} 19 \\ (28) \end{array} $	[0.506]
Panel C. Bankruptcy						
Bankruptcy in last 12 months (%)	1.30	-0.05 (0.11)	[0.615]	0.65	-0.05 (0.04)	[0.245]
Panel D. Access to Credit						
Has credit score $(\%)$	97.22	-0.10 (0.14)	[0.474]	90.73	-0.12 (0.12)	[0.332]
Credit score (never missing)	582.16	-0.20 (0.46)	[0.662]	577.60	-0.18 (0.28)	[0.506]
Credit card limit (\$)	2,654	58 (58)	[0.316]	2,640	55 (31)	[0.078]
Panel E. Borrowing						
Number of credit cards	0.81	$0.01 \\ (0.01)$	[0.606]	0.78	$0.01 \\ (0.01)$	[0.342]
Credit card balance (\$)	1,481	27 (32)	[0.405]	1,306	27 (16)	[0.087]
Number of auto loans	0.39	0.00 (0.01)	[0.544]	0.30	0.00 (0.00)	[0.479]
Auto loan balance (\$)	8,020	-54 (116)	[0.642]	5,417	-6 (49)	[0.902]
Panel F. Sample Size						
Observations [†]	$55,\!653$	12,998		64,947	65,968	

Table A6. Effects of Debt Relief on Credit Bureau Outcomes (Saturated Specification)

Notes: Table presents the effects of medical debt relief on credit bureau outcomes, estimated using the panel specification outlined in Appendix B. Columns (1) and (4) report the control means for the hospital debt and collector debt experiments, respectively. Control means are averaged across post-treatment quarters. Columns (2) and (5) report treatment effects, with standard errors below in parentheses. Columns (3) and (6) report unadjusted p-values.

+: Main pre-specified outcome.

Table A7. Heterogeneous Effects of Debt Relief on Credit Report Outcomes in the Hospital Debt Experiment, by Medical Debt Eligible for Relief

	Quartile 1				Quartile 2			Quartile 3		Quartile 4			
	Control Mean	Treatment Effect	p-value										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Panel A. Distress													
Number of accounts past due ⁺ $$	1.20	0.01 (0.04)	[0.846]	1.25	-0.03 (0.04)	[0.430]	1.19	-0.00 (0.04)	[0.957]	1.17	0.00 (0.04)	[0.974]	
Number of accounts in default	1.07	0.01 (0.04)	[0.682] $\{0.690\}$	1.12	-0.02 (0.03)	[0.546] $\{0.746\}$	1.08	-0.01 (0.03)	[0.812] $\{0.892\}$	1.06	-0.01 (0.03)	[0.738] $\{0.841\}$	
Debt past due (\$)	4,650	445 (270)	[0.099] $\{0.196\}$	4,976	-285 (249)	[0.252] $\{0.435\}$	5,027	-100 (258)	[0.697] $\{0.892\}$	4,983	154 (261)	[0.554] $\{0.841\}$	
Balances in default (\$)	3,413	265 (188)	[0.159] $\{0.257\}$	3,797	-92 (184)	[0.619] $\{0.746\}$	3,873	-234 (185)	[0.207] $\{0.426\}$	3,883	109 (195)	[0.575] $\{0.841\}$	
Panel B. Debt in Collections													
Number of debts in collections	3.86	-0.07 (0.11)	[0.532] $\{0.527\}$	4.43	0.05 (0.11)	[0.669] $\{0.831\}$	4.67	-0.14 (0.11)	[0.203] $\{0.280\}$	5.68	0.06 (0.14)	[0.637] $\{0.778\}$	
Debts in collections (\$)	2,977	-112 (107)	[0.295] $\{0.439\}$	3,761	7 (119)	[0.954] $\{0.959\}$	4,106	-153 (121)	[0.205] $\{0.280\}$	5,636	-15 (156)	[0.926] $\{0.917\}$	
Panel C. Bankruptcy													
Bankruptcy in last 12 months (%)	1.36	0.06 (0.23)	[0.801]	1.44	-0.03 (0.23)	[0.898]	1.35	-0.18 (0.22)	[0.402]	1.03	-0.04 (0.20)	[0.860]	
Panel D. Access to Credit													
Has credit score (%)	96.64	-0.65 (0.38)	[0.091] $\{0.240\}$	97.58	-0.12 (0.31)	[0.707] $\{0.965\}$	97.35	0.16 (0.31)	[0.590] $\{0.827\}$	97.32	0.17 (0.30)	[0.567] $\{0.923\}$	
Credit score (never missing)	591.38	0.84 (1.58)	[0.596] $\{0.743\}$	580.46	-0.61 (1.51)	[0.689] $\{0.965\}$	580.22	0.32 (1.49)	[0.830] $\{0.835\}$	576.56	-0.72 (1.46)	[0.623] $\{0.923\}$	
Credit card limit (\$)	3,147	102 (162)	[0.529] $\{0.743\}$	2,694	$9 \\ (150)$	[0.954] $\{0.965\}$	2,556	107 (147)	[0.467] $\{0.827\}$	2,218	$33 \\ (141)$	[0.814] $\{0.923\}$	
Panel E. Borrowing													
Number of credit cards	0.90	0.01 (0.03)	[0.702] $\{0.950\}$	0.84	-0.01 (0.03)	[0.700] $\{0.892\}$	0.80	0.02 (0.03)	[0.569] $\{0.803\}$	0.70	0.01 (0.03)	[0.852] $\{0.985\}$	
Credit card balance (\$)	1,673	39 (78)	[0.613] $\{0.950\}$	1,484	-15 (73)	[0.831] $\{0.892\}$	1,454	66 (73)	[0.373] $\{0.734\}$	1,312	20 (71)	[0.779] $\{0.985\}$	
Number of auto loans	0.40	-0.00	[0.880] $\{0.950\}$	0.42	-0.02	[0.136] $\{0.379\}$	0.40	0.02 (0.01)	[0.146] $\{0.391\}$	0.35	0.01 (0.01)	[0.244] $\{0.595\}$	
Auto loan balance (\$)	7,910	-77 (266)	[0.773] $\{0.950\}$	8,479	-290 (283)	[0.305] $\{0.636\}$	8,167	168 (286)	[0.556] $\{0.803\}$	7,529	8 (278)	[0.977] $\{0.985\}$	
Panel F. Sample Size $Observations^{\dagger}$	14,004	3,257		13,829	3,236		13,877	3,297		13,943	3,208		

Notes: Table presents the heterogeneous effects of medical debt relief on credit outcomes by quartile of medical debt eligible for relief (as measured in the first wave an individual is observed). Results are reported for individuals in the hospital debt experiment. The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports unadjusted p-values and multiple-inference-adjusted p-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4. Quartile cutoffs are as follows: Q1: [\$25, \$226], Q2: [\$226, \$600], Q3: [\$600, \$1,440], Q4: [\$1,440, \$60,452].

+: Main pre-specified outcome.

	Quartile 1				Quartile 2			Quartile 3		Quartile 4		
	Control Mean	Treatment Effect	p-value									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Distress										i		
Number of accounts past due^+	1.20	0.03 (0.04)	[0.371]	1.26	-0.06 (0.04)	[0.111]	1.25	-0.02 (0.04)	[0.637]	1.11	0.03 (0.04)	[0.451]
Number of accounts in default	1.08	0.03 (0.03)	[0.419] $\{0.620\}$	1.13	-0.05 (0.03)	[0.167] $\{0.357\}$	1.12	-0.01 (0.04)	[0.705] $\{0.704\}$	1.00	0.01 (0.04)	[0.706] $\{0.967\}$
Debt past due (\$)	4,732	270 (250)	[0.280] $\{0.506\}$	5,246	-339 (253)	[0.181] $\{0.357\}$	5,049	244 (273)	[0.373] $\{0.627\}$	4,607	76 (261)	[0.771] $\{0.967\}$
Balances in default (\$)	3,736	$123 \\ (185)$	[0.507] $\{0.620\}$	3,955	-206 (183)	[0.261] $\{0.357\}$	3,866	$161 \\ (200)$	[0.421] $\{0.627\}$	3,409	-21 (183)	[0.907] $\{0.967\}$
Panel B. Debt in Collections												
Number of debts in collections	5.62	0.04 (0.13)	[0.764] $\{0.889\}$	4.73	-0.13 (0.11)	[0.213] $\{0.322\}$	4.43	0.09 (0.11)	[0.414] $\{0.571\}$	3.87	-0.08 (0.11)	[0.430] $\{0.424\}$
Debts in collections (\$)	5,489	-7 (147)	[0.964] $\{0.961\}$	4,090	-133 (117)	[0.258] $\{0.322\}$	3,711	37 (120)	[0.756] $\{0.736\}$	3,203	-180 (114)	[0.114] $\{0.180\}$
Panel C. Bankruptcy												
Bankruptcy in last 12 months (%)	1.43	-0.24 (0.22)	[0.273]	1.21	0.06 (0.22)	[0.785]	1.20	0.12 (0.23)	[0.589]	1.34	-0.14 (0.22)	[0.527]
Panel D. Access to Credit												
Has credit score (%)	97.90	-0.25 (0.28)	[0.374] $\{0.618\}$	97.85	-0.10 (0.28)	[0.718] $\{0.803\}$	97.08	(0.07) (0.34)	[0.834] $\{0.961\}$	96.07	-0.14 (0.41)	[0.739] $\{0.967\}$
Credit score (never missing)	569.66	-1.41 (1.37)	[0.303] $\{0.618\}$	578.87	0.90 (1.44)	[0.531] $\{0.803\}$	583.24	-0.38 (1.51)	[0.799] $\{0.961\}$	596.95	0.64 (1.67)	[0.703] $\{0.967\}$
Credit card limit (\$)	1,958	-42 (126)	[0.739] $\{0.724\}$	2,492	112 (141)	[0.428] $\{0.803\}$	2,658	114 (155)	[0.464] $\{0.838\}$	3,498	59 (177)	[0.740] $\{0.967\}$
Panel E. Borrowing												
Number of credit cards	0.64	-0.03 (0.03)	[0.301] $\{0.636\}$	0.79	0.04 (0.03)	[0.217] $\{0.534\}$	0.85	-0.01 (0.03)	[0.752] $\{0.950\}$	0.96	0.02 (0.03)	[0.524] $\{0.890\}$
Credit card balance (\$)	1,176	-31 (64)	[0.631] $\{0.823\}$	1,438	80 (72)	[0.267] $\{0.534\}$	1,522	37 (77)	[0.635] $\{0.950\}$	1,784	20 (83)	$[0.810]$ {0.890}
Number of auto loans	0.35	-0.01	[0.577] $\{0.823\}$	0.40	0.00	[0.970] $\{0.967\}$	0.41	0.01	[0.589] $\{0.950\}$	0.41	0.02	[0.263] $\{0.619\}$
Auto loan balance (\$)	7,146	(249)	[0.269] $\{0.636\}$	8,288	-157 (280)	[0.574] $\{0.729\}$	8,199	158 (286)	[0.581] $\{0.950\}$	8,439	151 (297)	[0.611] $\{0.890\}$
Panel F. Sample Size												
Observations [†]	13,816	3,402		13,952	3,443		13,864	3,146		14,021	3,006	

Table A8. Heterogeneous Effects of Debt Relief on Credit Report Outcomes in the Hospital Debt Experiment, by Medical Debt Age

Notes: Table presents the heterogeneous effects of medical debt relief on credit outcomes by quartile of medical debt age (as measured in the first wave an individual is observed). Results are reported for individuals in the hospital debt experiment. The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports unadjusted *p*-values and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4.

Quartile cutoffs in days are as follows: Q1: [130, 428], Q2: [428, 459], Q3: [459, 498], Q4: [498, 2,177].

+: Main pre-specified outcome.

	Quartile 1				Quartile 2			Quartile 3			Quartile 4	
	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Distress												
Number of accounts past due ⁺ $$	1.12	-0.03 (0.03)	[0.439]	1.38	0.03 (0.04)	[0.521]	1.33	-0.02 (0.04)	[0.549]	0.99	0.01 (0.03)	[0.870]
Number of accounts in default	1.02	-0.02 (0.03)	[0.487] $\{0.468\}$	1.25	0.01 (0.04)	[0.850] $\{0.970\}$	1.19	-0.01 (0.04)	[0.712] $\{0.955\}$	0.89	0.01 (0.03)	[0.857] $\{0.848\}$
Debt past due (\$)	3,710	-235 (177)	[0.183] $\{0.344\}$	6,000	170 (296)	[0.566] $\{0.865\}$	6,295	-96 (314)	[0.761] $\{0.955\}$	3,694	349 (230)	[0.129] $\{0.283\}$
Balances in default (\$)	2,982	(111) -168 (139)	[0.228] $\{0.358\}$	4,683	(200) -20 (216)	[0.925] $\{0.970\}$	4,481	(011) 25 (221)	[0.909] $\{0.955\}$	2,869	(166)	[0.258] $\{0.412\}$
Panel B. Debt in Collections												
Number of debts in collections	4.51	0.02 (0.10)	[0.864] $\{0.868\}$	5.39	-0.13 (0.13)	[0.307] $\{0.376\}$	5.12	0.17 (0.13)	[0.175] $\{0.254\}$	3.65	-0.12 (0.10)	[0.223] $\{0.348\}$
Debts in collections (\$)	4,156	-106 (112)	[0.344] $\{0.468\}$	4,920	-155 (143)	[0.278] $\{0.376\}$	4,549	140 (142)	[0.324] $\{0.341\}$	2,879	-123 (110)	[0.264] $\{0.348\}$
Panel C. Bankruptcy												
Bankruptcy in last 12 months (%)	1.04	-0.21 (0.18)	[0.258]	1.47	0.11 (0.25)	[0.646]	1.80	-0.12 (0.25)	[0.621]	0.89	0.01 (0.19)	[0.961]
Panel D. Access to Credit												
Has credit score (%)	97.88	-0.09 (0.28)	[0.761] $\{0.800\}$	98.41	-0.18 (0.25)	[0.474] $\{0.732\}$	98.17	-0.10 (0.26)	[0.701] $\{0.702\}$	94.63	(0.07)	[0.878] $\{0.980\}$
Credit score (never missing)	568.16	-1.50 (1.36)	[0.269] $\{0.581\}$	574.63	-1.35 (1.51)	[0.372] {0.730}	582.90	2.77 (1.48)	[0.062] $\{0.171\}$	604.13	-0.39 (1.63)	[0.809] {0.980}
Credit card limit (\$)	1,553	-60 (98)	[0.544] $\{0.800\}$	2,627	18 (148)	[0.905] $\{0.907\}$	3,184	308 (171)	[0.072] $\{0.171\}$	3,335	-55 (175)	[0.752] $\{0.980\}$
Panel E. Borrowing												
Number of credit cards	0.60	-0.02 (0.02)	[0.373] $\{0.453\}$	0.85	0.02 (0.03)	[0.432] $\{0.444\}$	0.97	0.05 (0.03)	[0.127] $\{0.365\}$	0.83	-0.04 (0.03)	[0.258] $\{0.622\}$
Credit card balance (\$)	926	-62 (47)	[0.191] $\{0.421\}$	1,538	85 (78)	[0.274] $\{0.444\}$	1,866	45 (84)	[0.591] $\{0.824\}$	1,630	37 (81)	[0.650] {0.868}
Number of auto loans	0.36	-0.01	[0.275]	0.42	0.02	[0.164]	0.47	-0.00	[0.904]	0.33	0.01	[0.385]
Auto loan balance (\$)	7,123	(0.01) -406 (235)	[0.083] $\{0.240\}$	9,028	(0.01) 415 (314)	[0.428] [0.187] $\{0.428\}$	9,666	-222 (305)	$\{0.313\}\$ $\{0.467]\$ $\{0.790\}$	6,331	(0.01) 85 (252)	[0.736] $\{0.868\}$
Panel F. Sample Size												
Observations [†]	14,460	3,366		13,501	3,125		14,172	3,351		13,192	3,082	

Table A9. Heterogeneous Effects of Debt Relief on Credit Report Outcomes in the Hospital Debt Experiment, by Beneficiary Age

Notes: Table presents the heterogeneous effects of medical debt relief on credit outcomes by quartile of debtor age (as measured in the first wave an individual is observed). Results are reported for individuals in the hospital debt experiment. The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. Lastly, the third column reports unadjusted p-values and multiple-inference-adjusted p-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4.

Quartile cutoffs in years are as follows: Q1: [18, 31], Q2: [32, 41], Q3: [42, 55], Q4: [56, 89].

+: Main pre-specified outcome.

	No Debt in Collections			Tercile 1				T 1 0		Tercile 3			
	No D	ebt in Collections			Tercile 1			Tercile 2			Tercile 3		
	Control Mean	Treatment Effect	<i>p</i> -value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	<i>p</i> -value	Control Mean	Treatment Effect	<i>p</i> -value	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Panel A. Distress													
Number of accounts past due^+	0.81	-0.01 (0.03)	[0.692]	1.07	-0.02 (0.03)	[0.577]	1.35	0.01 (0.04)	[0.738]	1.56	-0.01 (0.04)	[0.865]	
Number of accounts in default	0.69	-0.01 (0.03)	[0.670] $\{0.688\}$	0.95	-0.02 (0.03)	[0.458] $\{0.698\}$	1.23	0.01 (0.04)	[0.802] $\{0.957\}$	1.45	-0.00	[0.933] $\{0.924\}$	
Debt past due (\$)	3,481	-174 (233)	[0.455]	4,535	162 (266)	[0.542] {0.698}	5,233	12 (252)	[0.963] {0.965}	6,325	193 (280)	[0.491]	
Balances in default (\$)	2,361	(150) -176 (152)	[0.247] $\{0.484\}$	3,218	(180) (184)	[0.327] $\{0.587\}$	4,098	(102) -93 (185)	[0.616] $\{0.898\}$	5,228	(200) 102 (218)	[0.641] $\{0.847\}$	
Panel B. Debt in Collections													
Number of debts in collections	1.25	-0.04 (0.05)	[0.463] $\{0.493\}$	2.81	-0.07 (0.06)	[0.255] $\{0.402\}$	4.64	0.09 (0.08)	[0.290] $\{0.454\}$	9.78	-0.10 (0.16)	[0.505] $\{0.509\}$	
Debts in collections (\$)	1,157	-129 (57)	[0.025] $\{0.044\}$	1,809	4 (66)	[0.956] $\{0.958\}$	3,392	60 (79)	[0.453] $\{0.454\}$	10,001	-264 (181)	[0.144] $\{0.225\}$	
Panel C. Bankruptcy									. ,				
Bankruptcy in last 12 months (%)	0.99	-0.22 (0.18)	[0.208]	1.02	0.13 (0.20)	[0.520]	1.26	0.12 (0.23)	[0.593]	1.90	-0.22 (0.26)	[0.395]	
Panel D. Access to Credit		()			· · ·			· · /			· · /		
Has credit score (%)	92.60	-0.61 (0.52)	[0.249] $\{0.550\}$	97.98	-0.19 (0.28)	[0.511] $\{0.870\}$	98.72	0.26 (0.21)	[0.210] $\{0.382\}$	99.39	0.00 (0.15)	[0.975] $\{0.974\}$	
Credit score (never missing)	631.89	0.93 (1.79)	[0.602] $\{0.805\}$	587.21	-0.00 (1.39)	[1.000] $\{1.000\}$	564.36	0.21 (1.23)	[0.865] $\{0.854\}$	550.49	-1.48 (1.07)	[0.168] $\{0.429\}$	
Credit card limit (\$)	6,245	100 (230)	[0.665] $\{0.805\}$	2,492	-13 (135)	[0.922] $\{0.987\}$	1,304	144 (94)	[0.125] $\{0.327\}$	730	-37 (63)	[0.555] $\{0.807\}$	
Panel E. Borrowing													
Number of credit cards	1.36	0.03 (0.04)	[0.352]	0.85	-0.02	[0.396]	0.63	0.01	[0.654]	0.43	-0.01	[0.753]	
Credit card balance (\$)	2,737	28 (103)	[0.787] {0.951}	1,527	-68 (70)	[0.337]	946	(0.00) 129 (57)	[0.024]	767	4 (49)	[0.929] {0.997}	
Number of auto loans	0.50	0.01	[0.351] [0.471] [0.777]	0.42	-0.01	[0.667]	0.37	0.01	[0.493]	0.29	0.00	[0.940]	
Auto loan balance (\$)	10,030	(0.01) 8 (329)	$\{0.777\}\$ [0.980] $\{0.979\}$	8,277	(0.01) 7 (283)	$\{0.810\}\$ [0.981] $\{0.978\}$	7,498	(0.01) 19 (262)	$\{0.918\}\$ [0.941] $\{0.935\}$	6,359	-227 (225)	$\{0.997\}\$ $[0.313]\$ $\{0.713\}$	
Panel F. Sample Size		× /	. ,		× /	. ,		× /			× /		
Observations [†]	13,465	3,210		14,041	3,289		14,105	3,217		14,042	3,282		

Table A10. Heterogeneous Effects of Debt Relief on Credit Report Outcomes in the Hospital Debt Experiment, by Debt in Collections

Notes: Table presents the heterogeneous effects of medical debt relief on credit outcomes by (1) individuals who have no debt in collections and (2) tercile of debt in collections in the first quarter pre-treatment. Results are reported for individuals in the hospital debt experiment. The first column of each bin reports the control means for observations in that bin. The second column reports the treatment effects for that bin, with standard errors below in parentheses. The third column reports unadjusted *p*-values and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4.

Tercile cutoffs are as follows: T1: [\$1, \$1,166], T2: [\$1,167, \$3,900], T3: [\$3,901, \$938,774].

+: Main pre-specified outcome.

Table A11. Heterogeneous Effects of Debt Relief on Credit Report Outcomes in the Collector Debt Experiment, by Medical Debt Eligible for Relief

	Quartile 1			Quartile 2			Quartile 3			Quartile 4		
	Control Mean	Treatment Effect	p-value									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Distress												
Number of accounts past due ⁺	1.11	0.01 (0.02)	[0.696]	1.08	-0.00 (0.02)	[0.965]	1.00	0.04 (0.02)	[0.041]	0.91	0.01 (0.02)	[0.603]
Number of accounts in default	0.99	0.01 (0.02)	[0.671] $\{0.925\}$	0.97	0.00 (0.02)	[1.000] $\{1.000\}$	0.91	0.03 (0.02)	[0.074] $\{0.159\}$	0.82	0.01 (0.02)	[0.492] $\{0.546\}$
Debt past due (\$)	5,446	35 (175)	[0.842] $\{0.926\}$	5,115	-31 (159)	[0.844] $\{0.964\}$	4,521	204 (144)	[0.158] $\{0.208\}$	4,167	132 (137)	[0.338] $\{0.546\}$
Balances in default (\$)	3,845	35 (124)	[0.778] $\{0.926\}$	3,912	-82 (118)	[0.486] $\{0.769\}$	3,662	122 (115)	[0.289] $\{0.287\}$	3,386	135 (110)	[0.220] $\{0.431\}$
Panel B. Debt in Collections												
Number of debts in collections	2.60	0.09 (0.04)	[0.032] $\{0.041\}$	3.21	0.03 (0.05)	[0.610] $\{0.776\}$	3.66	-0.04 (0.05)	[0.445] $\{0.613\}$	4.73	-0.06 (0.07)	[0.369] $\{0.505\}$
Debts in collections (\$)	2,036	115 (49)	[0.019] $\{0.036\}$	2,730	22 (60)	[0.719] $\{0.776\}$	3,228	-8 (67)	[0.906] $\{0.906\}$	4,452	21 (87)	[0.808] $\{0.799\}$
Panel C. Bankruptcy												
Bankruptcy in last 12 months (%)	0.80	-0.06 (0.10)	[0.511]	0.71	-0.07 (0.09)	[0.447]	0.58	-0.07 (0.08)	[0.379]	0.51	-0.00 (0.08)	[0.969]
Panel D. Access to Credit												
Has credit score (%)	91.84	0.34 (0.30)	[0.251] $\{0.549\}$	90.67	0.18 (0.32)	[0.573] $\{0.842\}$	90.40	-0.17 (0.32)	[0.600] $\{0.841\}$	90.05	0.04 (0.33)	[0.904] $\{0.934\}$
Credit score (never missing)	595.79	-0.56 (0.94)	[0.554] $\{0.779\}$	578.25	0.28 (0.88)	[0.752] $\{0.842\}$	570.92	-1.55 (0.81)	[0.056] $\{0.155\}$	565.21	0.25 (0.76)	[0.745] $\{0.934\}$
Credit card limit (\$)	4,320	49 (106)	[0.645] $\{0.779\}$	2,807	177 (88)	[0.043] $\{0.116\}$	2,035		[0.797] $\{0.841\}$	1,401	70 (59)	[0.242] $\{0.518\}$
Panel E. Borrowing												
Number of credit cards	1.10	(0.02)	[0.425] $\{0.413\}$	0.82	0.02 (0.02)	[0.308] $\{0.563\}$	0.66	-0.01 (0.02)	[0.561] $\{0.912\}$	0.51	0.02 (0.01)	[0.183] $\{0.469\}$
Credit card balance (\$)	1,991	62 (45)	[0.170] $\{0.394\}$	1,392	86 (39)	[0.026] {0.073}	1,054	12 (33)	[0.720] $\{0.944\}$	789	-20 (28)	[0.486] $\{0.794\}$
Number of auto loans	0.38	0.02	[0.023] $\{0.065\}$	0.32	0.00	[0.596] $\{0.765\}$	0.27	-0.00	[0.695] $\{0.944\}$	0.22	-0.00	[0.968] $\{0.970\}$
Auto loan balance (\$)	6,724	(126)	[0.234] $\{0.394\}$	5,775	-31 (119)	[0.795] {0.779}	5,012	-4 (111)	[0.973] $\{0.978\}$	4,167	22 (104)	[0.831] $\{0.945\}$
Panel F. Sample Size												
Observations [†]	16,210	16,504		16,156	16,537		16,317	16,373		16,205	16,482	

Notes: Table presents the heterogeneous effects of medical debt relief on credit outcomes by quartile of medical debt balance (as measured in the first wave an individual is observed). Results are reported for individuals in the collector debt experiment. The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports unadjusted *p*-values and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4. Quartile cutoffs are as follows: Q1: [\$5, \$305], Q2: [\$305, \$837], Q3: [\$837, \$2,110], Q4: [\$2,110, \$156,988].

+: Main pre-specified outcome.

		Quartile 1			Quartile 2			Quartile 3			Quartile 4	
	Control Mean	Treatment Effect	p-value									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Distress												
Number of accounts past due ⁺ $$	1.15	0.00 (0.02)	[0.851]	1.03	0.02 (0.02)	[0.362]	0.96	0.01 (0.02)	[0.799]	0.95	0.03 (0.02)	[0.163]
Number of accounts in default	1.04	0.00 (0.02)	[0.904] $\{0.995\}$	0.94	0.02 (0.02)	[0.319] $\{0.499\}$	0.86	0.01 (0.02)	[0.735] $\{0.760\}$	0.86	0.02 (0.02)	[0.201] $\{0.264\}$
Debt past due (\$)	5,280	-48 (159)	[0.763] $\{0.980\}$	4,809	129 (151)	[0.392] $\{0.499\}$	4,650	-97 (149)	[0.514] $\{0.760\}$	4,521	385 (160)	[0.016] $\{0.050\}$
Balances in default (\$)	3,983	11 (119)	[0.924] $\{0.995\}$	3,817	153 (118)	[0.196] $\{0.398\}$	3,612	-106 (114)	[0.351] $\{0.609\}$	3,407	167 (118)	[0.156] $\{0.264\}$
Panel B. Debt in Collections												
Number of debts in collections	4.11	-0.03 (0.06)	[0.580] $\{0.778\}$	3.93	0.04 (0.06)	[0.485] $\{0.475\}$	3.59	-0.00 (0.06)	[1.000] $\{1.000\}$	2.57	0.02 (0.05)	[0.666] $\{0.661\}$
Debts in collections (\$)	3,527	-22 (69)	[0.752] $\{0.778\}$	3,478	112 (71)	[0.117] $\{0.163\}$	3,255	18 (72)	[0.803] $\{0.943\}$	2,180	54 (56)	[0.341] $\{0.508\}$
Panel C. Bankruptcy												
Bankruptcy in last 12 months (%)	0.91	-0.08 (0.10)	[0.431] ·	0.54	-0.08 (0.08)	[0.334]	0.64	-0.02 (0.09)	[0.817]	0.50	-0.01 (0.08)	[0.914].
Panel D. Access to Credit												
Has credit score (%)	93.48	0.65 (0.27)	[0.015] $\{0.039\}$	90.87	-0.14 (0.32)	[0.657] $\{0.868\}$	90.32	(0.12) (0.32)	[0.713] $\{0.794\}$	88.24	-0.23 (0.35)	[0.520] $\{0.512\}$
Credit score (never missing)	572.79	0.63 (0.84)	[0.450] $\{0.465\}$	568.24	-0.19 (0.78)	[0.806] $\{0.868\}$	576.78	-0.50 (0.82)	[0.541] $\{0.794\}$	593.17	-1.54 (0.97)	[0.112] $\{0.309\}$
Credit card limit (\$)	2,474	172 (82)	[0.038] $\{0.071\}$	1,658	121 (65)	[0.063] $\{0.164\}$	2,302	124 (76)	[0.100] $\{0.253\}$	4,124	-116 (105)	[0.269] $\{0.489\}$
Panel E. Borrowing												
Number of credit cards	0.72	0.03 (0.02)	[0.058] $\{0.158\}$	0.60	0.03 (0.01)	[0.067] $\{0.198\}$	0.75	0.00 (0.02)	[0.767] $\{0.768\}$	1.02	-0.02 (0.02)	[0.247] $\{0.513\}$
Credit card balance (\$)	1,253	49 (36)	[0.173] $\{0.375\}$	913	29 (30)	[0.333] $\{0.563\}$	1,204	30 (35)	[0.382] $\{0.570\}$	1,854	22 (45)	[0.631] $\{0.855\}$
Number of auto loans	0.31	0.01	[0.264]	0.27	0.01	[0.127] $\{0.283\}$	0.29	0.01	[0.144] {0.356}	0.33	-0.01	[0.157]
Auto loan balance (\$)	5,892	-32 (121)	[0.792] $\{0.796\}$	4,951	32 (110)	[0.774] $\{0.779\}$	5,142	191 (112)	[0.090] $\{0.256\}$	5,677	-40 (118)	[0.736] $\{0.855\}$
Panel F. Sample Size												
Observations [†]	16,224	16,518		16,170	16,513		16,248	16,458		16,246	16,423	

Table A12. Heterogeneous Effects of Debt Relief on Credit Report Outcomes in the Collector Debt Experiment, by Medical Debt Age

Notes: Table presents the heterogeneous effects of medical debt relief on credit outcomes by quartile of medical debt age (as measured in the first wave an individual is observed). Results are reported for individuals in the collector debt experiment. The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports unadjusted *p*-values and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4.

 $\mbox{Quartile cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,207, 2,520], Q4: [2,520, 8,554]. } \mbox{Classical cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,207, 2,520], Q4: [2,520, 8,554]. } \mbox{Classical cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,207, 2,520], Q4: [2,520, 8,554]. } \mbox{Classical cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,207, 2,520], Q4: [2,520, 8,554]. } \mbox{Classical cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,207, 2,520], Q4: [2,520, 8,554]. } \mbox{Classical cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,207, 2,520], Q4: [2,520, 8,554]. } \mbox{Classical cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,057, 2,520], Q4: [2,520, 8,554]. } \mbox{Classical cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,057, 2,520], Q4: [2,520, 8,554]. } \mbox{Classical cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,057, 2,520], Q4: [2,520, 8,554]. } \mbox{Classical cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,057, 2,520], Q4: [2,520, 8,554]. } \mbox{Classical cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,057, 2,520], Q4: [2,520, 8,554]. } \mbox{Classical cutoffs in days are as follows: Q1: [987, 2,057], Q2: [2,057, 2,207], Q3: [2,057, 2,520], Q4: [2,057, 2,057], Q4: [2,057$

+: Main pre-specified outcome.

		Quartile 1			Quartile 2			Quartile 3			Quartile 4	
	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Distress												
Number of accounts past due ⁺ $$	1.20	-0.01 (0.02)	[0.753]	1.21	0.03 (0.02)	[0.240]	1.01	-0.01 (0.02)	[0.812]	0.68	0.04 (0.02)	[0.034]
Number of accounts in default	1.11	-0.01 (0.02)	[0.692] $\{0.921\}$	1.10	0.03 (0.02)	[0.250] $\{0.441\}$	0.90	0.00 (0.02)	[0.873] $\{0.870\}$	0.60	0.04 (0.02)	[0.038] $\{0.101\}$
Debt past due (\$)	4,597	-13 (132)	[0.919] $\{0.954\}$	6,208	-29 (182)	[0.874] $\{0.966\}$	5,318	86 (178)	[0.629] $\{0.870\}$	3,113	285 (146)	[0.051] $\{0.101\}$
Balances in default (\$)	3,842	-20 (108)	[0.857] $\{0.954\}$	4,988	-16 (145)	[0.915] $\{0.966\}$	3,934	129 (132)	[0.328] $\{0.594\}$	2,205	178 (103)	[0.083] $\{0.101\}$
Panel B. Debt in Collections												
Number of debts in collections	4.04	-0.08 (0.06)	[0.171] $\{0.248\}$	4.11	0.04 (0.06)	[0.536] $\{0.510\}$	3.97	0.01 (0.06)	[0.868] $\{0.867\}$	2.85	0.02 (0.06)	[0.707] $\{0.703\}$
Debts in collections (\$)	3,577	-57 (68)	[0.409] $\{0.390\}$	3,684	99 (79)	[0.209] $\{0.285\}$	3,551	62 (79)	[0.432] $\{0.580\}$	2,376	43 (68)	[0.526] $\{0.690\}$
Panel C. Bankruptcy												
Bankruptcy in last 12 months (%)	0.59	-0.02 (0.09)	[0.853]	0.70	-0.05 (0.10)	[0.601]	0.84	-0.13 (0.10)	[0.190]	0.46	0.07 (0.08)	[0.431]
Panel D. Access to Credit												
Has credit score (%)	93.11	0.51 (0.28)	[0.069] $\{0.148\}$	92.42	$ \begin{array}{c} 0.20 \\ (0.31) \end{array} $	[0.520] $\{0.747\}$	92.03	-0.43 (0.31)	[0.175] $\{0.403\}$	87.45	$ \begin{array}{c} 0.21 \\ (0.40) \end{array} $	[0.596] $\{0.924\}$
Credit score (never missing)	557.75	$ \begin{array}{c} 0.53 \\ (0.78) \end{array} $	[0.497] $\{0.515\}$	566.56	-0.82 (0.85)	[0.333] $\{0.660\}$	576.74	-0.71 (0.86)	[0.409] $\{0.619\}$	598.86	-0.13 (0.99)	[0.892] $\{0.925\}$
Credit card limit (\$)	1,404	144 (59)	[0.014] $\{0.037\}$	2,237	48 (80)	[0.548] $\{0.747\}$	2,623	9 (86)	[0.917] $\{0.920\}$	3,066	32 (99)	[0.745] $\{0.925\}$
Panel E. Borrowing												
Number of credit cards	0.57	0.03 (0.01)	[0.065] $\{0.157\}$	0.75	0.01 (0.02)	[0.719] $\{0.943\}$	0.82	-0.00 (0.02)	[0.787] $\{0.885\}$	0.78	0.00 (0.02)	[0.836] $\{0.810\}$
Credit card balance (\$)	800	53 (27)	[0.053] $\{0.150\}$	1,231	42 (38)	[0.275] $\{0.620\}$	1,410	-55 (40)	[0.168] $\{0.433\}$	1,345	40 (42)	[0.341] $\{0.525\}$
Number of auto loans	0.28	0.01 (0.01)	[0.301] $\{0.367\}$	0.31	-0.00 (0.01)	[0.659] $\{0.943\}$	0.32	-0.00 (0.01)	[0.689] $\{0.885\}$	0.24	0.02 (0.01)	[0.007] $\{0.032\}$
Auto loan balance (\$)	5,189	127 (111)	[0.252] $\{0.367\}$	5,968	-56 (128)	[0.663] $\{0.943\}$	5,972	-161 (127)	[0.206] $\{0.433\}$	4,100	258 (114)	$[0.024]$ {0.069}
Panel F. Sample Size	15 201	15 602	2	14 441	14 601	-	14 800	15 198		12 664	12 722	ŕ
Observations.	10,201	10,050		1,4,4,41	14,031		14,005	10,120		13,004	15,162	

Table A13. Heterogeneous Effects of Debt Relief on Credit Report Outcomes in the Collector Debt Experiment, by Beneficiary Age

Notes: Table presents the heterogeneous effects of medical debt relief on credit outcomes by quartile of debtor age (as measured in the first wave an individual is observed). Results are reported for individuals in the collector debt experiment. The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports unadjusted p-values and multiple-inference-adjusted p-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4.

 $\label{eq:Quartile cutoffs in years are as follows: Q1: [18, 35], Q2: [36, 44], Q3: [45, 56], Q4: [57, 89].$

+: Main pre-specified outcome.

	No Debt in Collections				(T			(T		Tercile 3			
	No D	ebt in Collections	8		Tercile 1			Tercile 2			Tercile 3		
	Control Mean	Treatment Effect	<i>p</i> -value	Control Mean	Treatment Effect	<i>p</i> -value	Control Mean	Treatment Effect	<i>p</i> -value	Control Mean	Treatment Effect	<i>p</i> -value	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Panel A. Distress													
Number of accounts past due^+	0.69	0.00 (0.02)	[0.984]	0.96	0.02 (0.02)	[0.282]	1.14	0.03 (0.02)	[0.213]	1.25	(0.02)	[0.434]	
Number of accounts in default	0.60	-0.00 (0.02)	[0.983] $\{0.981\}$	0.84	0.02 (0.02)	[0.340] $\{0.531\}$	1.04	0.02 (0.02)	[0.351] $\{0.605\}$	1.16	0.02 (0.02)	[0.250] $\{0.443\}$	
Debt past due (\$)	3,326	23 (153)	[0.880] $\{0.981\}$	4,565	198 (154)	[0.197] $\{0.396\}$	5,270	47 (153)	[0.759] $\{0.893\}$	5,841	102 (157)	[0.514] $\{0.524\}$	
Balances in default (\$)	2,172	74 (103)	[0.469] $\{0.757\}$	3,336	13 (110)	[0.905] $\{0.914\}$	4,131	3 (117)	[0.977] $\{0.977\}$	4,909	145 (129)	[0.263] $\{0.443\}$	
Panel B. Debt in Collections													
Number of debts in collections	0.42	0.02 (0.01)	[0.115] $\{0.197\}$	1.78	-0.00 (0.02)	[0.953] $\{0.959\}$	3.37	0.02 (0.03)	[0.560] $\{0.568\}$	8.07	-0.03 (0.08)	[0.687] $\{0.745\}$	
Debts in collections (\$)	374	27 (21)	[0.212] $\{0.215\}$	999	9 (26)	[0.729] $\{0.899\}$	2,286	42 (35)	[0.222] $\{0.355\}$	8,301		[0.562] $\{0.745\}$	
Panel C. Bankruptcy													
Bankruptcy in last 12 months (%)	0.55	-0.04 (0.09)	[0.684]	0.57	-0.03 (0.08)	[0.748]	0.70	-0.18 (0.08)	[0.028]	0.76	0.06 (0.10)	[0.511]	
Panel D. Access to Credit													
Has credit score (%)	75.32	0.02 (0.50)	[0.972] $\{0.999\}$	91.38	0.23 (0.30)	[0.439] $\{0.653\}$	95.56	-0.23 (0.22)	[0.303] $\{0.519\}$	97.98	0.18 (0.15)	[0.223] $\{0.522\}$	
Credit score (never missing)	638.18	-0.06 (1.22)	[0.960] $\{0.999\}$	585.07	-0.56 (0.81)	[0.496] $\{0.653\}$	561.14	-0.66 (0.68)	[0.327] $\{0.519\}$	548.25	-0.03 (0.59)	[0.956] $\{0.960\}$	
Credit card limit (\$)	6,510	$93 \\ (141)$	[0.511] $\{0.853\}$	2,719	138 (79)	[0.081] $\{0.191\}$	1,287	$71 \\ (51)$	[0.165] $\{0.393\}$	716	$ \begin{array}{c} 14 \\ (37) \end{array} $	[0.698] $\{0.894\}$	
Panel E. Borrowing													
Number of credit cards	1.37	0.01 (0.02)	[0.521] $\{0.745\}$	0.87	0.03 (0.02)	[0.118] $\{0.261\}$	0.59	0.01 (0.01)	[0.313] $\{0.645\}$	0.37	-0.01 (0.01)	[0.503] $\{0.757\}$	
Credit card balance (\$)	2,626	25 (58)	[0.664] $\{0.745\}$	1,447	71 (37)	[0.056] $\{0.169\}$	838	24 (26)	[0.366] $\{0.645\}$	544	19 (22)	[0.384] $\{0.757\}$	
Number of auto loans	0.37	0.01 (0.01)	[0.165] $\{0.384\}$	0.33	0.00 (0.01)	[0.862] $\{0.877\}$	0.29	0.01 (0.01)	[0.123] $\{0.366\}$	0.22	-0.00 (0.01)	[0.498] $\{0.757\}$	
Auto loan balance (\$)	6,236	261 (140)	(0.063) (0.185)	5,872	-81 (117)	(0.490)	5,298	97 (110)	(0.378)	4,408	-90 (97)	(0.350)	
Panel F. Sample Size	14 017	14 949		16 038	17 248		16 018	17 237		17.004	17 169		
00001 (000018)	14,011	17,272		10,300	11,240		10,910	11,201		11,004	11,102		

Table A14. Heterogeneous Effects of Debt Relief on Credit Report Outcomes in the Collector Debt Experiment, by Debt in Collections

Notes: Table presents the heterogeneous effects of medical debt relief on credit outcomes by (1) individuals who have no debt in collections and (2) tercile of debt in collections in the first quarter pre-treatment. Results are reported for individuals in the collector debt experiment. The first column of each bin reports the control means for observations in that bin. The second column reports the treatment effects for that bin, with standard errors below in parentheses. The third column reports unadjusted *p*-values and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4.

 $\label{eq:cutoffs} \mbox{ are as follows: T1: [\$1, \$1, 252], T2: [\$1, 253, \$4, 047], T3: [\$4, 048, \$2, 079, 212].$

+: Main pre-specified outcome.

Table A15. Heterogeneous Effects of Debt Relief on Outcomes in Collections Account Data in the Hospital Debt Experiment, by Medical Debt Eligible for Relief

		Quartile 1			Quartile 2		Quartile 3		Quartile 4			
	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Full Sample												
Amount of debt (\$)	141.63	5.66	[0.591]	185.24	2.40	[0.847]	200.62	14.70	[0.275]	267.01	34.29	[0.054]
		(10.52)			(12.44)			(13.46)			(17.79)	
At least some debt (%)	18.23	0.60	[0.406]	15.82	0.48	[0.483]	14.32	1.40	[0.034]	13.71	1.65	[0.013]
		(0.72)			(0.68)			(0.66)			(0.66)	
Panel B. Pre-Relief M	edical Services											
Amount of debt (\$)	124.11	5.23	[0.580]	168.05	-4.06	[0.717]	180.50	14.97	[0.229]	236.68	34.61	[0.034]
		(9.44)			(11.19)	. ,		(12.45)	. ,		(16.31)	
At least some debt (%)	17.04	0.61	[0.381]	14.96	0.56	[0.401]	13.63	1.22	[0.059]	12.84	1.60	[0.013]
		(0.70)			(0.67)			(0.65)			(0.65)	
Panel C. Post-Relief M	Iedical Service	5										
Amount of debt (\$)	7.08	-0.41	[0.677]	6.07	0.36	[0.718]	5.65	0.91	[0.348]	6.79	-0.05	[0.963]
		(0.99)			(0.99)	. ,		(0.97)	. ,		(1.04)	. ,
At least some debt (%)	2.28	0.12	[0.669]	1.71	-0.11	[0.651]	1.40	0.34	[0.142]	1.57	-0.03	[0.888]
		(0.29)			(0.24)			(0.23)			(0.23)	
Panel D. Sample Size												
Observations [†]	15,374	3,595		15,371	3,598		15,300	3,675		15,451	3,509	

Notes: Table presents the heterogeneous effects of medical debt relief on (1) the probability of having future medical debt sent to collections and (2) the balances of future medical debt in collections, by medical debt balance (as measured in the first wave an individual is observed). Results are reported for individuals in the hospital debt experiment. The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports the *p*-value in brackets. Panel A presents effects for any debt purchased in waves after the first wave a person is observed in ("future debt"); Panel B presents effects for future debt that has a service date prior to this wave; Panel C presents effects for future debt whose service date is after this wave. Estimates are computed as outlined in Equation 4. Quartile cutoffs are as follows: Q1: [\$25, \$235], Q2: [\$235, \$620] Q3: [\$620,\$1,475], and Q4: [\$1,475, \$60,452].

Table A16. Heterogeneous Effects of Debt Relief on Outcomes in Collections Account Data in the Hospital Debt Experiment, by Debt Age

	Quartile 1				Quartile 2		Quartile 3		Quartile 4			
	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Full Sample												
Amount of debt (\$)	215.13	27.82	[0.067]	189.03	18.79	[0.145]	234.63	-11.57	[0.402]	155.85	21.17	[0.102]
		(15.18)			(12.88)			(13.79)			(12.95)	
At least some debt $(\%)$	14.28	1.16	[0.077]	15.92	1.21	[0.074]	18.20	1.03	[0.152]	13.67	0.71	[0.285]
		(0.65)			(0.68)			(0.72)			(0.66)	
Panel B. Pre-Relief Me	dical Services											
Amount of debt (\$)	184.26	26.13	[0.056]	163.60	14.79	[0.202]	217.16	-10.72	[0.403]	144.18	20.12	[0.094]
		(13.68)			(11.58)			(12.81)			(12.01)	
At least some debt $(\%)$	12.93	1.11	[0.080]	14.69	1.10	[0.096]	17.69	0.90	[0.204]	13.13	0.88	[0.179]
		(0.63)			(0.66)			(0.71)			(0.65)	
Panel C. Post-Relief M	edical Services	5										
Amount of debt (\$)	9.03	0.44	[0.705]	8.44	0.38	[0.732]	4.60	0.05	[0.951]	3.62	-0.07	[0.928]
		(1.16)	. ,		(1.10)			(0.84)			(0.79)	
At least some debt (%)	2.37	0.13	[0.647]	2.36	0.09	[0.733]	1.23	0.10	[0.646]	1.01	0.01	[0.964]
		(0.28)			(0.28)			(0.21)			(0.20)	
Panel D. Sample Size												
Observations [†]	15,352	3,748		15,078	3,758		15,554	3,572		15,511	3,298	

Notes: Table presents the heterogeneous effects of medical debt relief on (1) the probability of having future medical debt sent to collections and (2) the balances of future medical debt in collections, by medical debt age (as measured in the first wave an individual is observed). Results are reported for individuals in the hospital debt experiment. The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports the *p*-value in brackets. Panel A presents effects for any debt purchased in waves after the first wave a person is observed in ("future debt"); Panel B presents effects for future debt that has a service date prior to this wave; Panel C presents effects for future debt whose service date is after this wave. Estimates are computed as outlined in Equation 4.

Quartile cutoffs in days are as follows: Q1: [130, 426], Q2: [426, 457], Q3: [457, 495], Q4: [495, 2,177].

Table A17.	Heterogeneous	Effects	of Debt	Relief	on	Outcomes	in	Collections	Account	Data	in	the	Hospital	Debt	Experiment,	by
Beneficiary A	Age															

		Quartile 1			Quartile 2			Quartile 3			Quartile 4	
	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Full Sample												
Amount of debt (\$)	186.08	13.16	[0.318]	231.08	14.35	[0.331]	216.07	6.09	[0.678]	160.57	27.35	[0.033]
		(13.19)			(14.75)			(14.67)			(12.81)	
At least some debt (%)	13.63	1.76	[0.007]	16.52	-0.01	[0.989]	15.81	0.79	[0.267]	16.16	1.73	[0.015]
		(0.65)			(0.66)			(0.71)			(0.71)	
Panel B. Pre-Relief Me	edical Services											
Amount of debt (\$)	167.02	8.21	[0.491]	206.42	10.88	[0.418]	189.02	16.11	[0.237]	145.89	20.11	[0.083]
		(11.92)			(13.42)	. ,		(13.62)	. ,		(11.62)	. ,
At least some debt (%)	12.93	1.66	[0.010]	15.49	0.01	[0.983]	14.86	0.90	[0.193]	15.23	1.57	[0.025]
		(0.64)			(0.65)			(0.69)			(0.70)	
Panel C. Post-Relief M	edical Services	5										
Amount of debt (\$)	5.59	0.81	[0.407]	7.59	-0.09	[0.932]	6.96	-0.94	[0.356]	5.43	1.05	[0.273]
		(0.98)			(1.05)	. ,		(1.02)	. ,		(0.96)	. ,
At least some debt (%)	1.35	0.16	[0.470]	1.93	-0.05	[0.848]	1.84	-0.22	[0.378]	1.84	0.47	[0.095]
		(0.23)			(0.25)			(0.25)			(0.28)	
Panel D. Sample Size												
Observations [†]	15,532	3,642		16,395	3,790		14,349	3,376		14,763	3,458	

Notes: Table presents the heterogeneous effects of medical debt relief on (1) the probability of having future medical debt sent to collections and (2) the balances of future medical debt in collections, by debtor age (as measured in the first wave an individual is observed). Results are reported for individuals in the hospital debt experiment. The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports the *p*-value in brackets. Panel A presents effects for any debt purchased in waves after the first wave a person is observed in ("future debt"); Panel B presents effects for future debt that has a service date prior to this wave; Panel C presents effects for future debt whose service date is after this wave. Estimates are computed as outlined in Equation 4. Quartile cutoffs in years are as follows: Q1: [18, 30], Q2: [31, 41], Q3: [42, 54], Q4: [55, 89].

a control circle in years are as browns. git. [10, 90], gz. [91, 41], go. [42, 94], gr. [90, 95].

	No D	ebt in Collections	5		Tercile 1			Tercile 2			Tercile 3	
	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Full Sample												
Amount of debt (\$)	142.33	8.81	[0.468]	174.99	14.68	[0.271]	210.24	50.54	[0.001]	295.90	-9.23	[0.587]
		(12.13)			(13.35)			(15.80)			(17.00)	
At least some debt $(\%)$	12.11	0.64	[0.327]	15.74	1.26	[0.080]	17.52	1.60	[0.033]	19.53	0.89	[0.247]
		(0.65)			(0.72)			(0.75)			(0.77)	
Panel B. Pre-Relief Me	edical Services											
Amount of debt (\$)	129.40	7.44	[0.505]	156.44	12.91	[0.289]	189.15	47.09	[0.001]	258.97	-6.92	[0.651]
		(11.16)	. ,		(12.17)	. ,		(14.64)	. ,		(15.32)	. ,
At least some debt (%)	11.46	0.70	[0.269]	14.84	1.08	[0.125]	16.46	1.72	[0.020]	18.29	0.91	[0.228]
		(0.64)			(0.71)			(0.74)			(0.75)	
Panel C. Post-Relief M	Iedical Services	5										
Amount of debt (\$)	3.98	-0.39	[0.624]	5.88	-0.05	[0.962]	7.60	-0.39	[0.721]	9.64	1.41	[0.289]
		(0.80)	. ,		(0.98)	. ,		(1.10)	. ,		(1.33)	. ,
At least some debt (%)	1.15	-0.20	[0.320]	1.66	0.25	[0.349]	2.08	-0.13	[0.622]	2.52	0.35	[0.278]
		(0.20)			(0.27)			(0.27)			(0.32)	
Panel D. Sample Size												
Observations [†]	13,465	3,210		14,041	3,289		14,105	3,217		14,042	3,282	

Table A18. Heterogeneous Effects of Debt Relief on Outcomes in Collections Account Data in the Hospital Debt Experiment, by Debt in Collections

Notes: Table presents the heterogeneous effects of medical debt relief on (1) the probability of having future medical debt sent to collections and (2) the balances of future medical debt in collections, by (1) individuals who have no debt in collections and (2) tercile of debt in collections in the first quarter pre-treatment. Results are reported for individuals in the hospital debt experiment. The first column of each bin reports the control means for observations in that bin. The second column reports the treatment effects for that bin, with standard errors below in parentheses. The third column reports the *p*-value in brackets. Panel A presents effects for any debt purchased in waves after the first wave a person is observed in ("future debt"); Panel B presents effects for future debt that has a service date prior to this wave; Panel C presents effects for future debt whose service date is after this wave. Estimates are computed as outlined in Equation 4. Tercile cutoffs are as follows: T1: [\$1, \$1,166], T2: [\$1,67, \$3,900], T3: [\$3,901, \$938,774].

Table A19.	Heterogeneous	Effects of Deb	t Relief o	n Survey	Outcomes	in the	Hospital	Debt	Experiment,	by	Medical	Debt	Eligible	for
Relief														

		Quartile 1			Quartile 2			Quartile 3			Quartile 4	
	Control Mean	Treatment Effect	<i>n</i> -value	Control Mean	Treatment Effect	<i>n</i> -value	Control Mean	Treatment Effect	<i>n</i> -value	Control Mean	Treatment Effect	<i>n</i> -value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Mental Health												
At least moderate depression $(\%)^+$	44.54	-0.26 (3.93)	[0.948]	43.14	(3.99)	[0.804]	46.26	1.94 (3.87)	[0.617]	45.92	12.41 (3.98)	[0.002]
At least moderate anxiety $(\%)$	39.42	-3.95 (3.84)	[0.304]	37.69	-3.52	[0.357]	42.99	4.08	[0.296]	40.34	10.62	[0.008]
At least sometimes stressed $(\%)$	78.84	(3.34) -1.16 (3.30)	[0.725] $\{0.715\}$	74.73	(3.53) -1.24 (3.53)	[0.726] $\{0.712\}$	75.00	(3.30) 7.41 (3.21)	[0.021] $\{0.033\}$	77.47	(3.36) 5.75 (3.24)	[0.074] [0.076] $\{0.064\}$
Panel B. Subjective Wellbeing												
At least pretty happy (%)	57.24	-0.53 (3.89)	[0.891]	54.25	-0.28 (3.97)	[0.944]	52.10	-3.43 (3.91)	[0.380]	53.65	-7.90 (3.98)	[0.047]
Panel C. General Health												
At least good health $(\%)$	56.57	-2.18 (3.90)	[0.577]	54.90	0.54 (4.00)	[0.892]	52.57	-3.47 (3.90)	[0.373]	51.29	-7.81 (4.00)	[0.051]
Panel D. Health Care Utilization												
Had all needed healthcare $(\%)$	54.79	3.03 (3.92)	[0.439] $\{0.425\}$	58.82	0.11 (3.97)	[0.978] $\{0.996\}$	57.71	-4.55 (3.83)	[0.235] $\{0.374\}$	55.36	-6.62 (3.95)	[0.094] $\{0.111\}$
Had all needed RX (%)	71.71	-4.35 (3.65)	[0.233] $\{0.399\}$	74.51	0.20 (3.56)	[0.955] $\{0.996\}$	68.46	2.18 (3.51)	[0.533] $\{0.504\}$	72.75	-7.22 (3.66)	[0.049] {0.111}
Panel E. Financial Distress		. ,	. ,		. ,	. ,			. ,		· · /	. ,
Had trouble paying other bills (%)	61.25	1.06 (3.83)	[0.781] $\{0.783\}$	59.48	6.96 (3.90)	[0.075] $\{0.199\}$	61.92	7.35 (3.69)	[0.047] $\{0.123\}$	60.73	0.38 (3.90)	[0.921] $\{0.922\}$
Cut back spending (Z-score)	0.05	-0.10	[0.223] $\{0.444\}$	0.01	-0.08	[0.321] $\{0.516\}$	-0.01	0.05	[0.497] $\{0.506\}$	-0.05	0.10 (0.08)	[0.220] $\{0.463\}$
Increased borrowing (Z-score)	-0.03	0.11 (0.08)	[0.178] $\{0.444\}$	0.05	-0.07 (0.08)	[0.358] $\{0.516\}$	-0.06	0.15 (0.08)	[0.055] $\{0.123\}$	0.03	-0.04 (0.08)	[0.634] $\{0.849\}$
Panel F. Sample Size		. /	. ,		. /	. ,		. /	. ,		. /	```
Observations [†]	449	273		459	263		428	294		466	256	

Notes: Table presents the heterogeneous effects of medical debt relief on survey outcomes by quartile of medical debt balance (as measured in the first wave an individual is observed). The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports unadjusted *p*-values and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4.

Quartile cutoffs are as follows: Q1: [\$500, \$794], Q2: [\$794, \$1,275], Q3: [\$1,276, \$2,275], Q4: [\$2,277, \$33,627].

		Quartile 1			Quartile 2			Quartile 3			Quartile 4	
	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	<i>p</i> -value	Control Mean	Treatment Effect	p-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Mental Health												
At least moderate depression $(\%)^+$	52.14	-1.51	[0.697]	41.46	3.54	[0.372]	43.84	6.65	[0.092]	42.02	2.67	[0.493]
		(3.88)			(3.96)			(3.95)			(3.90)	
At least moderate anxiety (%)	44.87	-1.54	[0.692]	37.47	3.76	[0.343]	38.58	5.06	[0.193]	39.10	-2.26	[0.551]
		(3.89)	$\{0.891\}$		(3.96)	$\{0.356\}$		(3.89)	$\{0.310\}$		(3.79)	$\{0.656\}$
At least sometimes stressed (%)	79.91	0.26	[0.933]	77.38	5.08	[0.113]	76.26	3.73	[0.250]	72.36	2.77	[0.427]
		(3.12)	$\{0.925\}$		(3.20)	$\{0.198\}$		(3.24)	$\{0.310\}$		(3.48)	$\{0.656\}$
Panel B. Subjective Wellbeing												
At least pretty happy (%)	49.79	-1.49	[0.704]	53.22	-5.28	[0.185]	57.53	-2.72	[0.490]	57.08	-1.28	[0.745]
		(3.91)	• •		(3.98)	• • •		(3.94)			(3.93)	
Panel C. General Health												
At least good health (%)	49.15	-1.71	[0.664]	54.10	-3.00	[0.454]	58.45	-4.65	[0.242]	53.93	-0.84	[0.833]
8 (/3)		(3.94)			(4.00)			(3.97)	· · · · · · · · · · · ·		(3.98)	
Panel D. Health Care Utilization												
Had all needed healthcare (%)	47.01	-1.78	[0.651]	57.87	-4.60	[0.237]	60.73	-1 79	[0.648]	61.57	-0.76	[0.840]
find all fielded fieldfielder (70)	11101	(3.92)	$\{0.651\}$	01101	(3.89)	{0.366}	00.10	(3.91)	$\{0, 836\}$	01.01	(3.75)	$\{0, 837\}$
Had all needed \mathbf{BX} (%)	66.03	-4 44	[0.237]	70.07	-3.14	[0.398]	75 57	1.65	[0.618]	76.40	-6.34	[0.066]
	00100	(3.75)	{0.406}	10.01	(3.71)	{0.377}	10.01	(3.32)	{0.836}	10.10	(3.45)	{0.136}
Panel F. Financial Distross		()	()		()	()		()	()		()	()
Had trouble paying other hills $(\%)$	66 88	1.69	[0.660]	63 10	9 53	[0.505]	58.68	9.51	[0.514]	54.16	7 34	[0.050]
that trouble paying other bins (70)	00.00	(2.68)	[0.000]	05.15	(2.70)	[0.505]	56.00	(2.84)	[0.914]	54.10	(2.88)	[0.000]
Cut back sponding (7 score)	0.07	(3.08)	[0.681]	0.04	0.05	[0.475]	0.04	(3.64)	[0.668]	0.01	(3.88)	[0.140]
Cut back spending (Z-score)	0.07	-0.03	[0.001]	-0.04	(0.08)	[0.475]	-0.04	(0.08)	[0.008]	0.01	-0.09	[0.277]
Inground horrowing (7 spore)	0.07	0.06	[0.000]	0.05	(0.08)	[0.530]	0.02	(0.08)	[0.770]	0.05	(0.08)	[0.403]
increased borrowing (Z-score)	0.07	(0.08)	[0.439] {0.831}	-0.05	(0.08)	[0.344] {0.830}	0.05	-0.02	{0.864}	-0.05	(0.08)	$\{0.250\}$
		(0.00)	[0.001]		(0.00)	[0:000]		(0.00)	[0.004]		(0.00)	[0.100]
Panel F. Sample Size												
Observations	468	276		451	257		438	275		445	277	

Table A20. Heterogeneous Effects of Debt Relief on Survey Outcomes in the Hospital Debt Experiment, by Debt Age

Notes: Table presents the heterogeneous effects of medical debt relief on survey outcomes by quartile of medical debt age (as measured in the first wave an individual is observed). The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports unadjusted *p*-values and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4.

Quartile cutoffs in days are as follows: Q1: [198, 429], Q2: [429, 459], Q3: [459, 503], Q4: [503, 1,567].

		Quartile 1			Quartile 2			Quartile 3			Quartile 4	
	Control Mean	Treatment Effect	<i>p</i> -value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value	Control Mean	Treatment Effect	p-value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. Mental Health												
At least moderate depression $(\%)^+$	46.39	4.47	[0.236]	47.15	-2.76	[0.479]	46.32	7.33	[0.068]	39.56	2.75	[0.489]
		(3.77)			(3.90)			(4.01)			(3.97)	
At least moderate anxiety (%)	41.79	6.23	[0.098]	45.18	-5.27	[0.177]	42.53	1.52	[0.702]	29.85	3.79	[0.310]
		(3.77)	$\{0.181\}$		(3.90)	$\{0.183\}$		(3.97)	$\{0.884\}$		(3.73)	$\{0.511\}$
At least sometimes stressed (%)	78.34	2.00	[0.509]	76.54	7.14	[0.024]	80.63	-0.30	[0.925]	70.15	0.41	[0.911]
		(3.03)	$\{0.503\}$		(3.16)	$\{0.062\}$		(3.21)	$\{0.929\}$		(3.69)	$\{0.901\}$
Panel B. Subjective Wellbeing												
At least pretty happy (%)	54.27	-4.00	[0.288]	56.80	-2.75	[0.484]	50.74	-0.29	[0.943]	55.58	-3.31	[0.408]
		(3.77)			(3.93)	· . ·		(4.04)			(4.00)	• • •
Panel C. General Health												
At least good health (%)	62.36	-5.07	[0.170]	56.36	1.91	[0.626]	49.89	-3.86	[0.331]	45.87	-2.86	[0.480]
		(3.69)			(3.92)	• • •		(3.97)			(4.05)	• • •
Panel D. Health Care Utilization												
Had all needed healthcare (%)	54.49	-4.06	[0.287]	54.17	-0.86	[0.826]	51.16	-0.56	[0.890]	67.96	-5.34	[0.162]
× /		(3.81)	$\{0.433\}$		(3.92)	$\{0.923\}$		(4.04)	{0.909}		(3.82)	$\{0.287\}$
Had all needed RX (%)	70.02	-3.87	[0.269]	67.54	1.24	[0.734]	71.37	-4.50	0.227	79.37	-3.77	[0.269]
		(3.50)	$\{0.433\}$		(3.66)	$\{0.923\}$		(3.72)	$\{0.360\}$		(3.41)	$\{0.287\}$
Panel E. Financial Distress												
Had trouble paying other bills (%)	61.49	4.19	[0.245]	61.84	6.17	[0.107]	65.47	-1.50	[0.698]	53.64	7.18	[0.071]
		(3.60)	$\{0.526\}$		(3.82)	$\{0.282\}$		(3.86)	$\{0.908\}$		(3.97)	$\{0.176\}$
Cut back spending (Z-score)	-0.04	-0.04	[0.630]	-0.03	0.05	[0.480]	0.11	-0.01	[0.851]	-0.05	-0.03	[0.684]
, ,		(0.08)	$\{0.854\}$		(0.08)	$\{0.721\}$		(0.08)	$\{0.908\}$		(0.08)	$\{0.683\}$
Increased borrowing (Z-score)	0.07	0.00	[0.957]	0.15	-0.04	[0.654]	-0.05	0.08	[0.308]	-0.18	0.06	[0.439]
		(0.08)	$\{0.955\}$		(0.08)	$\{0.721\}$		(0.08)	$\{0.642\}$		(0.08)	$\{0.669\}$
Panel F. Sample Size												
Observations [†]	457	300		456	275		475	253		412	258	

Table A21. Heterogeneous Effects of Debt Relief on Survey Outcomes in the Hospital Debt Experiment, by Beneficiary Age

Notes: Table presents the heterogeneous effects of medical debt relief on survey outcomes by quartile of debtor age (as measured in the first wave an individual is observed). The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile with standard errors below in parentheses. The third column reports unadjusted *p*-values and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4.

Quartile cutoffs in years are as follows: Q1: [19, 30], Q2: [31, 40], Q3: [41, 52], Q4: [53, 89].

	No D	ebt in Collections	5	G - 114	Tercile 1	,	G . 111	Tercile 2	,	G . 111	Tercile 3	,
	Control Mean (1)	(2) Treatment Effect	p-value (3)	Control Mean (4)	Treatment Effect (5)	p-value (6)	Control Mean (7)	(8)	p-value (0)	(10) Control Mean	(11) Treatment Effect	p-value (12)
		(2)	(0)	(4)	(0)	(0)	(1)	(0)	(3)	(10)	(11)	(12)
Panel A. Mental Health												
At least moderate depression $(\%)^+$	43.15	-2.04	[0.607]	40.35	7.97	[0.046]	43.99	4.63	[0.254]	53.44	1.16	[0.768]
		(3.97)			(3.99)			(4.05)			(3.92)	
At least moderate anxiety (%)	37.21	-0.58	[0.884]	33.04	4.71	[0.216]	42.40	2.87	[0.479]	48.46	-1.16	[0.768]
		(3.94)	$\{0.982\}$		(3.81)	$\{0.215\}$		(4.05)	$\{0.477\}$		(3.95)	$\{0.947\}$
At least sometimes stressed (%)	75.57	-0.01	[0.998]	74.28	5.96	[0.082]	77.32	3.82	[0.246]	79.57	0.70	[0.825]
		(3.46)	$\{0.999\}$		(3.43)	$\{0.159\}$		(3.29)	$\{0.392\}$		(3.15)	$\{0.947\}$
Panel B. Subjective Wellbeing												
At least pretty happy (%)	61.64	-0.49	[0.901]	53.44	-1.86	[0.641]	57.82	-11.41	[0.004]	44.89	0.43	[0.913]
		(3.91)			(3.99)			(3.97)			(3.89)	
Panel C. General Health												
At least good health (%)	63.47	-5.21	[0.184]	51.88	-0.71	[0.861]	56.46	-9.46	[0.020]	43.47	5.59	[0.155]
		(3.93)			(4.05)	• • •		(4.08)			(3.93)	
Panel D. Health Care Utilization												
Had all needed healthcare (%)	65.07	-2.83	[0.468]	54.10	5.43	[0.171]	56.01	-8.52	[0.036]	51.07	-3.09	[0.436]
		(3.90)	$\{0.704\}$		(3.97)	$\{0.306\}$		(4.07)	$\{0.040\}$		(3.97)	$\{0.662\}$
Had all needed RX (%)	79.45	-0.90	0.781	74.72	-2.90	[0.419]	72.56	-8.71	[0.022]	61.52	0.80	[0.833]
		(3.25)	$\{0.800\}$		(3.58)	$\{0.420\}$		(3.81)	$\{0.040\}$		(3.81)	$\{0.833\}$
Panel E. Financial Distress												
Had trouble paying other bills (%)	51.83	5.09	[0.206]	58.98	2.56	[0.519]	63.95	6.26	[0.100]	68.17	2.54	[0.488]
		(4.02)	$\{0.436\}$		(3.97)	$\{0.790\}$		(3.81)	$\{0.248\}$		(3.67)	$\{0.856\}$
Cut back spending (Z-score)	-0.12	0.04	[0.662]	0.02	-0.03	0.673	0.06	-0.04	[0.622]	0.05	0.04	[0.576]
		(0.08)	$\{0.691\}$		(0.08)	$\{0.790\}$		(0.08)	$\{0.835\}$		(0.08)	$\{0.856\}$
Increased borrowing (Z-score)	-0.15	0.06	[0.471]	-0.02	0.06	[0.430]	0.05	0.04	[0.624]	0.15	-0.02	[0.780]
0(()		(0.08)	$\{0.691\}$		(0.08)	$\{0.790\}$		(0.08)	$\{0.835\}$		(0.08)	$\{0.856\}$
Panel F. Sample Size												
Observations [†]	438	268		451	249		441	259		421	279	

Table A22. Heterogeneous Effects of Debt Relief on Survey Outcomes in the Hospital Debt Experiment, by Debt in Collections

Notes: Table presents the heterogeneous effects of medical debt relief on survey outcomes by (1) individuals who have no debt in collections and (2) tercile of debt in collections in the first quarter pre-treatment. The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports unadjusted *p*-values and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain. Estimates are computed as outlined in Equation 4.

Tercile cutoffs are as follows: T1: [\$7, \$1,225], T2: [\$1,232, \$4,105], T3: [\$4,109, \$128,503].

	Control	All Treat	ed		Awai	reness Intervention	1	
	Control		ou -	Treated, Not 0	Called	Treated, Ca	lled	Difference
	Control Mean	Treatment Effect	p-value	Treatment Effect	<i>p</i> -value	Treatment Effect	<i>p</i> -value	<i>p</i> -value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A. Awareness								
Had medical debt for given $(\%)$	8.1	16.1	[0.000]	14.1	[0.000]	18.0	[0.000]	[0.225]
		(1.75)	$\{0.000\}$	(2.30)	$\{0.000\}$	(2.41)	$\{0.000\}$	$\{0.393\}$
Amount of medical debt forgiven (\$)	147.1	289.5	[0.000]	241.3	[0.002]	336.7	[0.000]	[0.341]
		(58.03)	$\{0.000\}$	(77.24)	$\{0.007\}$	(76.05)	$\{0.001\}$	$\{0.393\}$
Medical debt for giveness had	5.4	14.6	[0.000]	12.0	[0.000]	17.1	[0.000]	[0.088]
at least some impact $(\%)$		(1.60)	$\{0.000\}$	(2.09)	$\{0.000\}$	(2.27)	$\{0.000\}$	$\{0.206\}$
Panel B. Sample Size								
$Observations^{\dagger}$	1,251	744		363		381		

Table A23. Effect of Medical Debt Forgiveness on Self-Reported Awareness of Medical Debt Forgiveness

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Notes: Table presents the effects of medical debt relief and the awareness subexperiment on self-reported medical debt forgiveness and its perceived impact. Column (2) reports the treatment effects of debt relief on all treated respondents, column (4) reports the treatment effects for those who were not assigned to receive a call in the awareness subexperiment, and column (6) reports the treatment effect for those who were assigned to receive a call. Standard errors are reported below point estimates in parentheses. Corresponding unadjusted and adjusted p-values are reported in columns (3), (5), and (7) in square and curly brackets, respectively. Column (8) reports the p-value of the difference between the treatment effects on treated individuals not called and those who were called. Multiple inference adjustment is performed using the Westfall and Young (1993) method by domain.

	Control Mean	Treatment Effect	<i>p</i> -value
	(1)	(2)	(3)
Panel A. Full Sample			
Amount of debt (\$)	206.53	16.14	[0.028]
		(7.33)	
At least some debt $(\%)$	16.27	1.12	[0.002]
		(0.36)	
Panel B. Pre-Relief Medical Services			
Amount of debt (\$)	184.06	15.02	[0.025]
		(6.71)	
At least some debt (%)	15.30	1.13	[0.001]
		(0.35)	
Panel C. Post-Relief Medical Services			
Amount of debt (\$)	6.81	0.15	[0.777]
		(0.54)	
At least some debt (%)	1.86	0.07	[0.594]
		(0.13)	
Panel D. Sample Size			
$Observations^{\dagger}$	$55,\!653$	$12,\!998$	

Table A24. Effects of Debt Relief on Debt Collector Outcomes (Saturated Specification)

Notes: Table presents the effects of medical debt relief on (1) the probability of having future medical debt sent to collections and (2) the balances of future medical debt in collections for the hospital debt experiment. Column (1) reports the control means. Column (2) reports the treatment effects with standard errors below in parentheses. Column (3) contains the *p*-value in brackets. Panel A presents effects for any debt purchased in waves after the first wave a person is observed in ("future debt"); Panel B presents effects for future debt that has a service date prior to the first wave a person is observed in; Panel C presents effects for future debt whose service date is after the first wave a person is observed in.

†: Sample sizes for control and treatment groups reported in the control mean and treatment effect columns, respectively.

-

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		Con	trol Reporting		Post Control Re	porting
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		Control Mean	Treatment Effect	<i>p</i> -value	Treatment Effect	p-value
Panel A. Full Sample of Matched Persons $(0, 0, 0, 0)$ $(0, 0, 0)$		(1)	(2)	(3)	(4)	(5)
$ \begin{array}{c ccccccccccc} \text{Number of medical debts in collections} & 5.10 & -0.83 & [0.000] & 0.02 & [0.661] \\ & & & & & & & & & & & & & & & & & & $	Panel A. Full Sample of Matched Persons					
$\begin{array}{cccccccc} (0.04) & (0.06) $	Number of medical debts in collections	5.10	-0.83	[0.000]	0.02	[0.661]
Medical debts in collections (\$) 4,806.03 -1,424.60 [0.000] -124.85 [0.151] (63.82) (86.84) Has credit score (%) 99.15 -6.09 [0.000] -0.08 [0.868]		0.00	(0.04)	[0.000]	(0.06)	[0.00-]
Has credit score (%)99.15-6.09 $[0.000]$ -0.08 $[0.868]$	Medical debts in collections (\$)	4.806.03	-1.424.60	[0.000]	-124.85	[0.151]
Has credit score (%) 99.15 -6.09 [0.000] -0.08 [0.868]		,	(63.82)	[]	(86.84)	[]
	Has credit score (%)	99.15	-6.09	[0.000]	-0.08	[0.868]
(0.32) (0.48)			(0.32)		(0.48)	
Credit score (never missing) 557.15 1.60 [0.021] -0.68 [0.387]	Credit score (never missing)	557.15	1.60	[0.021]	-0.68	[0.387]
(0.69) (0.79)			(0.69)		(0.79)	. ,
Credit card limit (\$) $1,159.36$ -5.81 $[0.810]$ -2.34 $[0.949]$	Credit card limit (\$)	1,159.36	-5.81	[0.810]	-2.34	[0.949]
(24.20) (36.67)			(24.20)		(36.67)	. ,
Observations [†] $6,138$ $6,148$	$Observations^{\dagger}$	$6,\!138$	6,148			
Panel B. No Other Debt in Collections	Panel B. No Other Debt in Collections					
Number of medical debts in collections $112 - 0.56$ [0 000] 0.10 [0.050]	Number of medical debts in collections	1.12	-0.56	[0.000]	0.10	[0.050]
			(0.04)	[0.000]	(0.05)	[0.000]
Medical debts in collections (\$) 1.219.61 -824.44 [0.000] 150.74 [0.130]	Medical debts in collections (\$)	1.219.61	-824.44	[0.000]	150.74	[0.130]
(69.84) (99.53)		,	(69.84)	[]	(99.53)	[]
Has credit score (%) 95.97 -27.31 [0.000] -0.19 [0.914]	Has credit score (%)	95.97	-27.31	[0.000]	-0.19	[0.914]
(1.36) (1.75)			(1.36)		(1.75)	
Credit score (never missing) 603.52 5.96 [0.005] -2.50 [0.301]	Credit score (never missing)	603.52	5.96	[0.005]	-2.50	[0.301]
(2.14) (2.42)			(2.14)	[]	(2.42)	[]
Credit card limit (\$) $2.489.91$ -138.76 [0.081] -89.28 [0.394]	Credit card limit (\$)	2,489.91	-138.76	[0.081]	-89.28	[0.394]
(79.50) (104.67)		,	(79.50)	L J	(104.67)	
Observations [†] 1,217 1,242	$Observations^{\dagger}$	1,217	1,242		× ,	
Panel C. Other Debt in Collections	Panel C. Other Debt in Collections					
Final C. other best in collections 6.10 0.80 $[0.000]$ 0.01 $[0.022]$	Number of medical debts in collections	6 10	0.80	[0,000]	0.01	[0 022]
$\begin{array}{cccc} 100 & -0.53 & [0.000] & 0.01 & [0.322] \\ (0.05) & (0.07) & (0.07) \\ \end{array}$	Number of medical debts in conections	0.10	-0.89	[0.000]	(0.07)	[0.922]
$\begin{array}{cccc} (0.07) & (0.07) \\ (0.06) & (0.07) \\ (0.07) & (0.07) \\ (0$	Medical debts in collections $(\$)$	5 704 14	-1 572 35	[0.000]	-189.24	[0, 073]
(105 5) (105 5) (105 52) (105 52)	with the first in concertoins (ϕ)	0,104.14	(78.30)	[0.000]	(105.52)	[0.010]
$\begin{array}{ccc} (15.50) & (100.52) \\ \text{Has credit score } (\%) & 0.006 & -0.85 & [0.000] & 0.03 & [0.026] \\ \end{array}$	Has credit score $(\%)$	99.96	-0.85	[0.000]	0.03	[0 926]
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	mas credit score (70)	55.50	(0.14)	[0.000]	(0.34)	[0.320]
$\begin{array}{ccc} (0.17) & (0.07) \\ \hline \\ Credit score (never missing) & 549.36 & 1.11 & [0.127] & -0.15 & [0.855] \\ \end{array}$	Credit score (never missing)	549.36	1 11	[0, 127]	-0.15	[0.855]
(0.73) (0.83)	create score (never missing)	010.00	(0.73)	[0.121]	(0.83)	[0.000]
Credit card limit (\$) 825.27 24.39 [0.270] 20.29 [0.580]	Credit card limit (\$)	825 27	24.39	[0.270]	20.29	[0.580]
$(22.10) \qquad (36.66)$		020.21	(22.10)	[0.210]	(36.66)	[0.000]
Observations [†] $4,909$ $4,889$	$Observations^{\dagger}$	4,909	4,889		()	

Table A25. Effects of Debt Relief in Credit Reporting Subsample Wave 2

Notes: Table reports the effects of medical debt relief on credit bureau outcomes for the wave 2 credit reporting subsample, before and after medical debt collections ceased being reported to credit bureaus (as estimated with equation 2). Column (1) reports the control means during the control group reporting period. Column (2) reports the treatment effects in this period, with standard errors below in parentheses, and column (3) reports the corresponding *p*-values in brackets. Column (4) reports the treatment effects during the post-reporting period, with standard-errors below in parentheses, and column (5) reports the corresponding *p*-values in brackets. \dagger : Sample size for control and treatment groups reported in control mean and treatment effect columns respectively.

Table A26. Effects of Debt Relief in the Credit Reporting Subsample: Full Sample of Matched Persons

	Cor	ntrol Reporting		Post Control Re	eporting
	Control Mean (1)	Treatment Effect (2)	p-value (3)	Treatment Effect (4)	p-value (5)
Panel A. Distress			f		[1]
Number of accounts past due ⁺	0.93	-0.00 (0.04)	[0.964]	$\begin{array}{c} 0.03 \\ (0.06) \end{array}$	[0.564]
Number of accounts in default	0.84	-0.01 (0.04)	[0.865]	0.02 (0.05)	[0.737]
Debt past due (\$)	5,471.11	-299.86	[0.397]	-602.89 (458.06)	[0.188]
Balances in default (\$)	4,132.83	(353.71) -283.71 (271.60)	[0.296]	(438.00) -593.32 (338.99)	[0.080]
Panel B. Debt in Collections					
Number of debts in collections	5.80	-1.01 (0.11)	[0.000]	-0.24 (0.17)	[0.153]
Debts in collections (\$)	5,159.14	(0.11) -1,202.08 (157.90)	[0.000]	(225.10)	[0.585]
Panel C. Bankruptcy					
Bankruptcy in last 12 months (%)	0.25	$0.64 \\ (0.25)$	[0.009]	$0.11 \\ (0.34)$	[0.749]
Panel D. Borrowing					
Number of credit cards	0.66	0.01 (0.02)	[0.680]	0.03 (0.03)	[0.472]
Credit card balance (\$)	1,067.75	58.18 (47.35)	[0.219]	(109.39) (74.36)	[0.141]
Number of auto loans	0.25	0.01	[0.611]	0.01	[0.544]
Auto loan balance (\$)	4,475.91	(0.01) 145.81 (182.45)	[0.424]	(5.62) 15.69 (273.59)	[0.954]
Panel E. Sample Size					
Observations [†]	1,341	$1,\!427$			

Notes: Table reports the effects of medical debt relief on credit bureau outcomes for the full wave 1 credit reporting subsample, before and after medical debt collections ceased being reported to credit bureaus (as estimated with Equation 2). Column (1) reports the control means during the control group reporting period. Column (2) reports the treatment effect in this period, with standard errors below in parentheses, and column (3) reports the corresponding p-values in brackets. Column (4) reports the treatment effects during the post-reporting period, with standard errors below in parentheses, and column (5) reports the corresponding p-value in brackets. †: Sample sizes for control and treatment groups reported in the control mean and treatment effect columns, respectively.

	Cor	ntrol Reporting	Post Control Reporting		
	Control Mean	Treatment Effect	<i>p</i> -value	Treatment Effect	<i>p</i> -value
	(1)	(2)	(3)	(4)	(5)
Number of construction of death	0.00	0.11	[0.944]	0.97	[0,009]
Number of accounts past due	0.00	0.11	[0.244]	0.27	[0.093]
	0 F T	(0.09)	[0,000]	(0.16)	[0,001]
Number of accounts in default	0.57	0.10	[0.229]	0.26	[0.091]
		(0.08)	[0.001]	(0.15)	[0,000]
Debt past due (\$)	4,500.77	-19.26	[0.981]	-133.94	[0.908]
		(810.45)		(1157.33)	
Balances in default (\$)	3,031.51	-278.69	[0.563]	-507.20	[0.505]
		(481.54)		(759.83)	
Panel B. Debt in Collections					
Number of debts in collections	1.32	-0.63	[0.000]	0.03	[0.817]
		(0.10)		(0.13)	
Debts in collections (\$)	1.167.91	-816.97	[0.012]	-176.82	[0.599]
	,	(322.28)	L]	(336.35)	L]
Panel C. Bankruntev					
Bankruptcy in last 12 months $(\%)$	0.00	0.30	[0.350]	-0.81	[0.3/0]
Danki upicy in fast 12 months (70)	0.00	(0.30)	[0.000]	(0.84)	[0.040]
		(0.02)		(0.04)	
Panel D. Borrowing					
Number of credit cards	0.97	0.07	[0.281]	0.06	[0.537]
		(0.06)		(0.10)	
Credit card balance (\$)	$1,\!684.14$	61.85	[0.715]	188.89	[0.458]
		(169.35)		(254.31)	
Number of auto loans	0.30	-0.01	[0.689]	-0.00	[0.923]
		(0.02)		(0.04)	
Auto loan balance (\$)	4,967.63	-477.96	[0.267]	-523.27	[0.406]
		(430.44)		(629.65)	
Panel E. Sample Size					
$Observations^{\dagger}$	232	234			

Table A27. Effects of Debt Relief in the Credit Reporting Subsample: No Other Debt in Collection

Notes: Table reports the effects of medical debt relief on credit bureau outcomes for the subset of the wave 1 credit reporting subsample with no other debt in collections, before and after medical debt collections ceased being reported to credit bureaus (as estimated with Equation 2). Column (1) reports the control means during the control group reporting period. Column (2) reports the treatment effects in this period, with standard errors below in parentheses, and column (3) reports the corresponding p-values in brackets. Column (4) reports the treatment effects during the post-reporting period, with standard errors below in parentheses, and column (5) reports the corresponding p-values in brackets †: Sample sizes for control and treatment groups reported in the control mean and treatment effect columns, respectively.

	Cor	ntrol Reporting		Post Control Reporting		
	Control Mean	Treatment Effect	<i>p</i> -value	Treatment Effect	<i>p</i> -value	
	(1)	(2)	(3)	(4)	(5)	
Panel A. Distress	0.00	0.01		0.01		
Number of accounts past due ⁺	0.99	-0.01	[0.857]	0.01	[0.925]	
	0.01	(0.04)	[0.010]	(0.06)		
Number of accounts in default	0.91	-0.02	[0.618]	-0.01	[0.859]	
		(0.04)		(0.06)	[0.0.4]	
Debt past due (\$)	5,736.84	-233.00	[0.576]	-614.85	[0.247]	
		(416.84)	[0, 0, 00]	(530.64)	[0 1 0 4]	
Balances in default (\$)	4,424.45	-366.40	[0.262]	-652.42	[0.104]	
		(326.86)		(401.07)		
Panel B. Debt in Collections						
Number of debts in collections	6.85	-1.04	[0.000]	-0.23	[0.257]	
		(0.13)		(0.20)		
Debts in collections $(\$)$	$6,\!115.60$	-1,252.23	[0.000]	-58.47	[0.829]	
		(188.08)		(271.36)		
Panol C Bankruptey						
Bankruptcy in last 12 months $(\%)$	0.31	0.69	[0.021]	0.23	[0.557]	
Danki uptey in fast 12 months (70)	0.51	(0.09)	[0.021]	(0.23)	[0.001]	
		(0.30)		(0.39)		
Panel D. Borrowing						
Number of credit cards	0.58	-0.00	[0.891]	0.01	[0.882]	
		(0.02)		(0.04)		
Credit card balance (\$)	911.88	58.29	[0.224]	73.79	[0.320]	
		(47.89)		(74.12)		
Number of auto loans	0.24	0.01	[0.458]	0.01	[0.445]	
		(0.01)		(0.02)		
Auto loan balance (\$)	4,347.86	243.42	[0.224]	184.82	[0.547]	
		(200.13)		(306.94)		
Panel E. Sample Size						
Observations [†]	1.079	1,164				
	,	, -				

Table A28. Effects of Debt Relief in the Credit Reporting Subsample: Has Other Debt in Collections

Notes: Table reports the effects of medical debt relief on credit bureau outcomes for the subset of the wave 1 credit reporting subsample with other debt in collections, before and after medical debt collections ceased being reported to credit bureaus (as estimated with Equation 2). Column (1) reports the control means during the control group reporting period. Column (2) reports the treatment effects in this period, with standard errors below in parentheses, and column (3) reports the corresponding p-values in brackets. Column (4) reports the treatment effects during the post-reporting period, with standard errors below in parentheses, and column (5) reports the corresponding p-value in brackets. †: Sample sizes for control and treatment groups reported in the control mean and treatment effect columns, respectively.

	В	Baseline Model Saturated Model Last Resp		Saturated Model		Last Respondent	s Dropped
	Control Mean	Treatment Effect	p-value	Treatment Effect	p-value	Treatment Effect	<i>p</i> -value
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A. Mental Health							
At least moderate depression $(\%)^+$	44.95	3.23 (1.94)	[0.097]	2.93 (1.98)	[0.139].	2.71 (2.03)	[0.181]
At least moderate anxiety $(\%)$	40.07	1.63 (1.92)	[0.395] $\{0.392\}$	1.88 (1.95)	[0.335]	2.05 (2.00)	[0.305] $\{0.298\}$
At least sometimes stressed $(\%)$	76.53	2.72 (1.62)	$[0.093]$ $\{0.158\}$	2.66(1.64)	[0.105]	3.17 (1.68)	[0.059] $\{0.129\}$
Panel B. Subjective Wellbeing							
At least pretty happy (%)	54.33	-2.72 (1.94)	[0.161]	-3.22 (1.97)	[0.103]	-3.29 (2.03)	[0.104]
Panel C. General Health							
At least good health (%)	53.83	-2.56 (1.94)	[0.188]	-2.45 (1.96)	[0.211]	-2.54 (2.03)	[0.211]
Panel D. Health Care Utilization							
Had all needed healthcare (%)	56.66	-2.37 (1.93)	[0.220] $\{0.310\}$	-2.64 (1.95)	[0.176]	-1.76 (2.01)	[0.381] $\{0.579\}$
Had all needed RX (%)	71.92	-2.42 (1.77)	[0.170] $\{0.310\}$	-2.95 (1.78)	[0.097]	-1.69 (1.83)	$\begin{bmatrix} 0.357 \end{bmatrix}$ $\{0.579\}$
Panel E. Financial Distress							
Had trouble paying other bills $(\%)$	60.82	3.53 (1.88)	[0.061] $\{0.150\}$	3.86 (1.88)	[0.040]	4.23 (1.96)	[0.031] $\{0.073\}$
Cut back spending (Z-score)	0.00	-0.00 (0.04)	[0.993] $\{0.994\}$	-0.00 (0.04)	[0.979]	0.01 (0.04)	[0.724] $\{0.727\}$
Increased borrowing (Z-score)	0.00	0.03 (0.04)	$[0.381]$ {0.558}	0.04 (0.04)	[0.291]	0.04 (0.04)	[0.318] $\{0.502\}$
Panel F. Sample Size				· ·		. ,	
Observations [†]	1802	1086		1055		974	

Table A29. Survey Internal Validity Estimates

Notes: Table shows the effects of medical debt relief on survey outcomes according to three specifications designed to test internal validity, as outlined in Appendix Section B.5. The first specification (columns (1), (2), and (3)) is the baseline model presented in Table 6. The second specification (columns (4) and (5)) saturates the baseline model with controls for observable characteristics measured pre-treatment. The third specification (columns (6) and (7)) estimates the baseline model for a subsample where response rates are equalized across the treatment and control groups by dropping the last treated respondents to respond. Column (1) reports the control means in the baseline model. Columns (2), (4), and (6) report the treatment effects for each corresponding specification. Columns (3), (5), and (7) report unadjusted *p*-values and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain.

		Media	n Propensity Scor	·e		Median Time to Response						
	Below Medi	ian	Above Medi	ian	Difference	Below Median Above 2		Difference Below Median Abov		Above Med	ian	Difference
	Treatment Effect	<i>p</i> -value	Treatment Effect	<i>p</i> -value	(p-value)	Treatment Effect	<i>p</i> -value	Treatment Effect	<i>p</i> -value	(p-value)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
Panel A. Mental Health												
At least moderate depression $(\%)^+$	4.66 (3.30)	[0.158]	2.40 (2.47)	[0.333]	0.58	0.39 (2.66)	[0.884]	6.37 (2.85)	[0.025]	0.13		
At least moderate anxiety $(\%)$	3.29 (3.27)	[0.314] $\{0.502\}$	$ \begin{array}{c} 0.42 \\ (2.43) \end{array} $	[0.864] $\{0.847\}$	0.48	1.66 (2.64)	[0.528] $\{0.550\}$	1.37 (2.79)	[0.624] $\{0.624\}$	0.94		
At least sometimes stressed $(\%)$	(0.2.7) (0.58) (2.78)	[0.835] $\{0.846\}$	(2.10) 3.70 (2.04)	[0.070] $\{0.116\}$	0.36	(2.181) 3.08 (2.18)	[0.158] $\{0.300\}$	(2.10) 2.08 (2.41)	[0.388] $\{0.597\}$	0.76		
Panel B. Subjective Wellbeing												
At least pretty happy (%)	-8.73 (3.24)	[0.007]	$0.95 \\ (2.48)$	[0.702]	0.02	-1.14 (2.66)	[0.667]	-4.46 (2.85)	[0.118]	0.40		
Panel C. General Health												
At least good health (%)	-5.37 (3.26)	[0.100]	-0.70 (2.48)	[0.778]	0.25	0.35 (2.66)	[0.896]	-6.01 (2.84)	[0.035]	0.10		
Panel D. Health Care Utilization												
Had all needed healthcare $(\%)$	-2.17 (3.26)	[0.506] $\{0.519\}$	-2.07 (2.45)	[0.398] $\{0.592\}$	0.98	-2.93 (2.66)	[0.270] $\{0.449\}$	-1.38 (2.81)	[0.623] $\{0.686\}$	0.69		
Had all needed RX (%)	-4.83 (3.16)	[0.126] $\{0.230\}$	-1.89 (2.16)	[0.383] $\{0.592\}$	0.44	-2.74 (2.42)	[0.256] $\{0.449\}$	-2.00 (2.60)	[0.442] $\{0.686\}$	0.83		
Panel E. Financial Distress												
Had trouble paying other bills $(\%)$	5.97 (3.12)	[0.056] $\{0.179\}$	2.92 (2.43)	[0.229] $\{0.496\}$	0.44	5.61 (2.55)	[0.028] $\{0.071\}$	0.99 (2.80)	[0.724] $\{0.917\}$	0.22		
Cut back spending (Z-score)	-0.01 (0.07)	[0.897] $\{0.907\}$	-0.00	[0.989] $\{0.991\}$	0.92	0.05 (0.05)	[0.348] $\{0.325\}$	-0.06 (0.06)	[0.277] $\{0.544\}$	0.15		
Increased borrowing (Z-score)	0.04 (0.07)	[0.518] $\{0.756\}$	(0.03) (0.05)	[0.516] $\{0.739\}$	0.90	(0.07) (0.05)	[0.185] $\{0.320\}$	-0.01 (0.06)	[0.881] $\{0.917\}$	0.32		
Panel F. Sample Size												
Observations [†]	1,038		1,768			1,457		1,431				

Table A30. Survey External Validity Estimates

Notes: Table presents the effects of medical debt relief on survey outcomes, split by above- and below-median (1) propensity score and (2) time between survey invitation and response, as outlined in Appendix Section B.6. Columns (1) and (3) report the treatment effects for individuals with below- and above-median propensity scores, respectively. Columns (2) and (4) report the corresponding unadjusted p-values and multiple-inference-adjusted p-values in square and curly brackets, respectively. Column (5) reports the F-statistic p-value for the null hypothesis that individuals below- and above-median propensity scores have the same treatment effect. Columns (6)-(10) report the equivalent figures for individuals with below- and above-median response times. Multiple inference adjustment is performed using the (Westfall and Young, 1993) method by domain.

	Control Mean (1)	Treatment Effect (2)	p-value (3)
Panel A. PHQ-8 scores			
Little interest or pleasure	1.18	$\begin{array}{c} 0.10 \\ (0.04) \end{array}$	[0.019]
Feeling down, depressed, or hopeless	1.16	$\begin{array}{c} 0.04 \\ (0.04) \end{array}$	[0.356]
Sleep issues	1.51	$0.08 \\ (0.04)$	[0.064]
Fatigue	1.60	$0.05 \\ (0.04)$	[0.212]
Loss of appetite or overeating	1.26	$0.11 \\ (0.04)$	[0.017]
Feeling bad about self, like a failure, or let yourself or family down	1.17	$0.10 \\ (0.05)$	[0.026]
Trouble concentrating	1.03	$\begin{array}{c} 0.08 \\ (0.04) \end{array}$	[0.078]
Moving/speaking slowly or restless	0.70	$0.04 \\ (0.04)$	[0.345]
Panel B. Sample Size			
Observations [†]	$1,\!802$	$1,\!086$	

Table A31. Effects of Debt Relief on PHQ-8 Questions

Notes: Table presents the effects of medical debt relief on PHQ-8 outcomes for the NORC survey sample. Outcomes are measured on a scale of 0 to 3. where 0 corresponds to experiencing the outcome "Not at all" in the past two weeks and 3 corresponds to experiencing it "Nearly every day" over the past two weeks. †: Sample sizes for control and treatment groups reported in the control mean and treatment effect columns, respectively.

		0 (1) 1			0 11 0			0 11 8			0 11 1	
	Control Mean	Quartile 1 Treatment Effect	n-vəluo	Control Mean	Quartile 2 Treatment Effect	n-vəluo	Control Mean	Quartile 3 Treatment Effect	n-vəluo	Control Mean	Quartile 4 Treatment Effect	n-vəluo
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A. PHQ-8 Questions												
Little interest or pleasure	1.16	0.01 (0.08)	[0.900]	1.17	0.08 (0.09)	[0.380]	1.15	0.17 (0.08)	[0.038]	1.21	0.15 (0.09)	[0.105]
Feeling down, depressed, or hopeless	1.12	-0.03 (0.08)	[0.711]	1.13	-0.00 (0.08)	[0.987]	1.17	0.06 (0.09)	[0.507]	1.22	0.14 (0.09)	[0.101]
Sleep issues	1.53	-0.05	[0.596]	1.51	-0.03	[0.747]	1.53	0.20 (0.09)	[0.028]	1.50	0.23 (0.09)	[0.011]
Fatigue	1.60	0.01	[0.950]	1.58	-0.02	[0.836]	1.63	0.01	[0.891]	1.60	0.21	[0.016]
Loss of appetite or overeating	1.27	0.02	[0.800]	1.21	0.09	[0.320]	1.27	0.10	[0.277]	1.30	0.22	[0.019]
Feeling bad about self, like a failure, or let yourself or family down	1.10	(0.00) (0.04) (0.09)	[0.673]	1.10	(0.07) (0.09)	[0.463]	1.28	0.05 (0.10)	[0.626]	1.23	0.28 (0.10)	[0.003]
Trouble concentrating	0.99	0.01	[0.893]	1.02	0.00	[0.980]	1.07	0.04	[0.629]	1.05	0.28	[0.003]
Moving/speaking slowly or restless	0.67	(0.09) 0.01 (0.08)	[0.873]	0.63	(0.09) 0.04 (0.08)	[0.627]	0.74	(0.09) 0.00 (0.08)	[0.975]	0.76	(0.09) 0.13 (0.09)	[0.130]
Panel B. Sample Size Observations [†]	449	273		459	263		428	294		466	256	

Table A32. Effects of Debt Relief on PHQ-8 Questions, by Medical Debt Eligible for Relief

Notes: Table presents the heterogeneous effects of medical debt relief on PHQ-8 survey outcomes by quartile of medical debt balance (as measured in the first wave an individual is observed). Outcomes are measured on a scale of 0 to 3, where 0 corresponds to experiencing the outcome "Not at all" in the past two weeks and 3 corresponds to experiencing it "Nearly every day" over the past two weeks. The first column of each quartile reports the control means for observations in that quartile. The second column reports the treatment effects for that quartile, with standard errors below in parentheses. The third column reports unadjusted *p*-values and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the Westfall and Young (1993) method by domain. Estimates are computed as outlined in Equation 4.

Quartile cutoffs are as follows: Q1: [\$500, \$794], Q2: [\$794, \$1,275], Q3: [\$1,276, \$2,275], Q4: [\$2,277, \$33,627].

	Control	Awareness Intervention						
	Control	Treated, Not C	Called	Treated, Cal	Difference			
	Control Mean	Treatment Effect	p-value	Treatment Effect	p-value	p-value		
	(1)	(2)	(3)	(4)	(5)	(6)		
Panel A. PHQ-8 Questions								
Little interest or pleasure	1.2	0.1	[0.392]	0.1	[0.096]	[0.500]		
-		(0.06)		(0.07)				
Feeling down, depressed, or hopeless	1.2	0.0	[0.669]	0.1	[0.281]	[0.589]		
		(0.06)	•	(0.07)				
Sleep issues	1.5	0.0	[0.757]	0.1	[0.190]	[0.415]		
		(0.07)		(0.07)				
Fatigue	1.6	0.0	[0.910]	0.1	[0.305]	[0.449]		
-		(0.06)		(0.06)				
Loss of appetite or overeating	1.3	0.1	[0.102]	0.2	[0.013]	[0.503]		
		(0.07)	•	(0.07)				
Feeling bad about self, like a failure,	1.2	0.1	[0.095]	0.2	[0.018]	[0.543]		
or let yourself or family down		(0.07)	•	(0.07)	•	•		
Trouble concentrating	1.0	-0.0	[0.948]	0.2	[0.024]	[0.053]		
0		(0.07)		(0.07)	•			
Moving/speaking slowly or restless	0.7	0.0	[0.940]	0.1	[0.030]	[0.085]		
,		(0.06)	•	(0.06)	•	•		
Panel B. Sample Size								
$Observations^{\dagger}$	$1,\!251$	363		381				

Table A33. Effects of Debt Relief on PHQ-8 Questions, by Call Assigned

Notes: Table presents the effects of medical debt relief on PHQ-8 outcomes for waves 6-14 of the hospital debt sample surveyed. We adapt the specification from Equation 1 by adding an additional interaction term between debt relief treatment and call attempted. Outcomes are measured on a scale of 0 to 3, where 0 corresponds to experiencing the outcome "Not at all" in the past two weeks and 3 corresponds to experiencing it "Nearly every day" over the past two weeks. Column (1) reports the control means. Column (2) reports the treatment effects for treated respondents who were not assigned to receive a call in the awareness subexperiment, and column (4) reports the treatment effects for those who were assigned to receive a call. Standard errors are reported below the point estimates in parentheses. Columns (3) and (5) report the corresponding unadjusted and multiple-inference-adjusted *p*-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the Westfall and Young (1993) method by domain.

†: Sample sizes for control and treatment groups reported in the control mean and treatment effect columns, respectively. For the treatment group, the sample size is split across columns (2) and (3) by if the treated individual was not called (column (2)) or called (column (3)), respectively.

	Control Mean	Treatment Effect	<i>p</i> -value
	(1)	(2)	(3)
Panel A. Medical Debt Payment			
Amount of debt (\$)	$7,\!316.90$	499.01	[0.247]
		(431.01)	$\{0.859\}$
Expected to pay (\$)	$3,\!253.52$	-38.91	[0.895]
		(294.15)	$\{0.859\}$
Fair to pay (\$)	$2,\!186.88$	94.67	[0.692]
		(238.95)	$\{0.859\}$
Panel B. Sample Size			
$Observations^{\dagger}$	$1,\!197$	773	

Table A34. Effects of Debt Relief on Debt Repayment Expectations

Notes: Table presents the effects of medical debt relief on self-reported medical debt, expectations of repayment, and perceived fairness of repayment within the NORC survey sample (a subset of the hospital debt sample). Column (1) reports the means for control group respondents. Column (2) reports the treatment effects, with standard errors below in parentheses. Column (3) reports unadjusted and multiple-inference-adjusted p-values in square and curly brackets, respectively. Multiple inference adjustment is performed using the Westfall and Young (1993) method by domain. Estimates are computed as outlined in Equation 1.

D Appendix Figures

RIP MEDICAL DEBT
THE CURE FOR MEDICAL DEBT
Name & address block
Date
Re: Balance Abolished Old Balance: \$xx.xx
Balance Now: \$0 Gift ID: 13288269
Hospital: Account Number:
Date of service:
Dear XYZ,
We are pleased to inform you that you no longer owe the balance on the debt referenced above to the above provider. RIP Medical Debt is a not-for-profit 501(c)(3) corporation that acquires and then cancels unpaid and unpayable medical debt.
Our forgiveness of the amount you owe is a no-strings-attached gift. You no longer have any obligation to pay this debt to anyone, at any future time. Because this debt has been cancelled as a gift by a $501(c)(3)$ charity, you do not owe any taxes on the "cancellation of debt" income.
This forgiveness is for this outstanding bill only. We have not forgiven any other medical debt you might owe.
Your privacy is protected. Medical records remain with the physician or hospital.
Regards,
The Staff of RIP Medical Debt
RIP Medical Debt 80 Theodore Fremd Ave. Rye NY 10580-2981 www.ripmedicaldebt.org

Figure A1. Sample Letter Sent to Treated Individual

Notes: This figure presents an example of a letter sent to a recipient of debt relief. A Spanish translation was included on the reverse side.



Figure A2. Predicted Effect of Medical Debt Relief from Expert Survey

Notes: This figure shows box plots of expert predictions for the impact on medical debt relief on access to medical care (Panel A2a), borrowing to cover medical bills (Panel A2b), and cutting back on spending to cover medical bills (Panel A2c). The sides of the box represent the interquartile range and the line inside the box represents the median. The whiskers extend up to $1.5 \times$ the interquartile range, unless the most outlying observation is less extreme, in which case the whisker is truncated at this point.



Figure A3. Expert Survey: Value of Medical Debt Relief

Notes: This figure shows expert survey respondents' belief of the value of medical debt relief by occupation.

Figure A4. Survey Invitation Letter (Front)

[ptel] Barcodel (P_ANDE] P_ADD1[P_ADD2] P_CTY1, (P_STATE] (P_ZPE) Dear (P_NAME). Researchers at Stanford University and NORC at the University of Chicago have selected you to be of a study to learn more about the health, health care services, and financial issues affecting indu- ing uro community. Sure perfuction is voluntary, but the accuracy of the results depends on getting answers from your or community. Sure participation is voluntary, but the accuracy of the results depends on getting answers from your one community. Sure participation is voluntary, but the accuracy of the results depends on getting answers from your or community. Sure participation is voluntary, but the accuracy of the results depends on getting answers from your one community. Sure participation is voluntary, but the accuracy of the results depends on getting answers from your one community. Sure participation is voluntary, but the accuracy of the results depends on getting answers from your one community. Sure participation is voluntary, but the accuracy of the results depends on getting answers from your or computer, visit our security. Thery our personal is ubsecurity. Itags://fifws.norc.org/ Itags://fifws.norc.org/ Itags://fifws.norc.org/ Itags://fifws.norc.org/ Itags://fifws.fag oncr.org/ Itags://fifws.fag oncr.org/ Itags://fifws.fag	ersity of ago Stanfor University	S5 East Monroe Street 30th Floor Chi office (312) 759-4000 fax (312) 759-40
Barcode [P_NAME] [P_ADD1] [P_ADD2] [P_CITY], [P_STATE] [P_ZIP] Dear [P_NAME], Researchers at Stanford University and NORC at the University of Chicago have selected you to be of a study to learn more about the health, health care services, and financial issues affecting indivi- in your community. Your participation is voluntary, but the accuracy of the results depends on getting answers from yor others selected for this survey – you cannot be replaced. Step 2 Step 1 Step 2 Step 3 Step 3 Step 3 Step 3 Step 4 Step 3 Step 3 Step 3 Step 4 Step 3 Step 3 Step 3 Step 4 Step 3 Step 3 Step 3 Step 3 Step 4 Step 3 Step 4 Step 3 Step 4 Step 3 Step 4 Step 4 Step 4 Step 4 Step 5 Step 4 Step 5 Step 5		[Date]
Dear [P_NAME], Researchers at Stanford University and NORC at the University of Chicago have selected you to be of a study to learn more about the health, health care services, and financial issues affecting indiviny your community. Store participation is voluntary, but the accuracy of the results depends on getting answers from the study. Store		[Barcode] [P_NAME] [P_ADD1] [P_ADD2] [P_CITY], [P_STATE] [P_ZIP]
Researchers at Stanford University and NORC at the University of Chicago have selected you to be of a study to learn more about the health, health care services, and financial issues affecting indivi- in your community. Your participation is voluntary, but the accuracy of the results depends on getting answers from your others selected for this survey – you cannot be replaced.		Dear [P_NAME],
Surp participation is voluntary, but the accuracy of the results depends on getting answers from you cannot be replaced. Fullow these Step 1 Step 2 Step 3 Steps to complete the structure of the results depends on getting answers from you cannot be replaced. Step 2 Step 3 Using a smart phone, tablet, or computer, visit our secure survey website: Enter your personal identification number, which is listed below. If you complete the survey are enter your contact information, we will send you contact information in the study, see a list of frequently asked questions (FAQs) on the back of this or visit our FAQs at http://hfws-faq.norc.org . If you have questions or do not wish to receive remain to participate in the study, please call NORC at 1-877-267-9862 or email https://study.see al ist of frequently asked questions or do not wish to receive remain to participate in the study, please call NORC at 1-877-267-9862 or email https://study.see al ist of frequently asked questions or do not wish to receive remain to participate in the study, please call NORC at 1-877-267-9862 or email http://study.see al ist of frequently asked questions or do not wish to receive remain to participate in the study, please call NORC at 1-877-267-9862 or email http://study.see al ist of study.	versity and NORC at the University of Chicago have selected you to be part ut the health, health care services, and financial issues affecting individuals	Researchers at Stanford Universi of a study to learn more about th in your community.
Step 1 Step 2 Step 3 Steps to swhelete the whelete the swhelete the business to survey website: https://hfws.norc.org/ Image: Compute co	ry, but the accuracy of the results depends on getting answers from you and $y - you$ cannot be replaced.	Your participation is voluntary, b others selected for this survey –
Step 1 Step 2 Step 3 Steps to complete the servery Step 1 Step 2 Step 3 Using a smart phone, tablet, or computer, visit our secure survey website: Enter your personal identification number, which is listed below. If you complete the survey and the study, see a list of frequently asked questions (FAQs) on the back of this or visit our FAQs at http://hfws-faq.norc.org . If you have questions or do not wish to receive remit to participate in the study, please call NORC at 1-877-267-9862 or email https://mission.org .		
Some size Some size Survey Survey Using a smart phone, tablet, or computer, visit our secure survey website: Enter your personal identification number, which is listed below. https://hfws.norc.org/ Image: size size size size size size size size	Step 2 Step 3	Step 1
Using a smart phone, tablet, or computer, visit our secure survey website: Enter your personal identification number, which is listed below. If you complete the survey is enter your contact information, we will send y \$50. https://hfws.norc.org/ [P_PIN] If you complete the survey is provided below. To learn more about the study, see a list of frequently asked questions or do not wish to receive remit to participate in the study, please call NORC at 1-877-267-9862 or email hfws@norc.org. Sincerely,		Plete the
https://hfws.norc.org/ [P_PIN] To learn more about the study, see a list of frequently asked questions (FAQs) on the back of this or visit our FAQs at http://hfws-faq.norc.org . If you have questions or do not wish to receive remit to participate in the study, please call NORC at 1-877-267-9862 or email https://hfws@norc.org . Sincerely,	let, ure identification number, which is listed below. If you complete the survey and enter your contact information, we will send you \$50.	Using a smart phone, tablet, or computer, visit our secure survey website:
To learn more about the study, see a list of frequently asked questions (FAQs) on the back of this or visit our FAQs at <u>http://hfws-faq.norc.org</u> . If you have questions or do not wish to receive remi to participate in the study, please call NORC at 1-877-267-9862 or email <u>hfws@norc.org</u> . Sincerely,	[P_PIN]	https://hfws.norc.org/
Neale Malery-	dy, see a list of frequently asked questions (FAQs) on the back of this letter, <u>ws-faq.norc.org</u> . If you have questions or do not wish to receive reminders lease call NORC at 1-877-267-9862 or email <u>hfws@norc.org</u> .	To learn more about the study, s or visit our FAQs at <u>http://hfws-f</u> to participate in the study, please Sincerely, Jule Malay
Neale Mahoney Professor of Economics Stanford University		Neale Mahoney Professor of Economics Stanford University
Research You Can Trust"	🗡 Research You Can Trust"	

Notes: This figure presents an example of the initial letter sent to a prospective respondent.



Figure A5. Survey Invitation Letter (Reverse)

Notes: This figure presents an example of the initial letter sent to a prospective respondent.





(a) Wave 1

Notes: Figures show the percent of collections account debt with matches in the credit report data based on the dollar amount of medical debt separately for wave 1 and wave 2 of the collector experiment. See Appendix Section B.3 for more details.



Figure A7. Effects of Debt Relief in Credit Reporting Sample: Full Sample of Matched Persons

(a) Has credit score (%)

Notes: Figure reports event study estimates for the credit access outcomes in Table A26. Dashed red lines denote the start and end of control group reporting.

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 $^{\mathrm{p}}_{\mathrm{p}}$

 $\begin{array}{ccc} p & p \\ p & p \\ p & p \end{array}$



Figure A8. Effects of Debt Relief in Credit Reporting Sample: No Other Debt in Collections

(a) Has credit score (%)

(b) Number of medical debts in collections

Notes: Figure reports event study estimates for the credit access outcomes in Table A27. As such, the sample is restricted to individuals who have no debts in collections with TransUnion besides medical debts. Dashed red lines denote the start and end of control group reporting.



Figure A9. Effects of Debt Relief in Credit Reporting Sample: Other Debt in Collections

Notes: Figure reports event study estimates for the credit access outcomes in Table A28. As such, the sample is restricted to individuals who have debts in collections with TransUnion beyond their medical debts. Dashed red lines denote the start and end of control group reporting.



Figure A10. Heterogeneous Effects of Debt Relief on Survey Health Outcomes, by Beneficiary Age(a) Amount of Future Medical Debt(b) Probability of Having Future Medical Debt

(c) Survey Health Outcomes



Notes: Figure presents the heterogeneous effects of medical debt relief on health survey outcomes and future medical debt in collections by age of debtor. Panel (A) presents effect of medical debt relief on the amount of medical debt observed in future waves. Panel (B) presents the effect of medical debt relief on the probability of having medical debt observed in future waves. Panel (C) shows the effect of medical debt relief on health outcomes as measured in the survey experiment.

Quartiles are created with the age of individuals. Quartiles are computed separately within the survey experiment (Panel (C)) and the hospital debt experiment (Panel (A) and Panel (B)). In Panel (A) and Panel (B), the quartile cutoffs are as follows: Q1: [18, 30], Q2: [31, 41], Q3: [42, 54], Q4: [55, 89]. In Panel (C), the age quartiles are Q1: [19, 30], Q2 [31, 40], Q3 [41, 52], Q4 [53, 89]. For each outcome, the effects are pictured from lightest (Quartile 1) to darkest (Quartile 4) in descending order. See Appendix Table A21 and Appendix Table A17 for corresponding numerical values.



Figure A11. Heterogeneous Effects of Debt Relief on Survey Health Outcomes, by Debt Age(a) Amount of Future Medical Debt(b) Probability of Having Future Medical Debt

Notes: Figure presents the heterogeneous effects of medical debt relief on health survey outcomes and future medical debt in collections by age of first wave medical debt. Panel (A) presents effect of medical debt relief on the amount of medical debt observed in future waves. Panel (B) presents the effect of medical debt relief on the probability of having medical debt observed in future waves. Panel (C) shows the effect of medical debt relief on health outcomes as measured in the survey experiment.

Quartiles are created using the medical debt balance in the first wave individuals are observed in. Quartiles are computed separately within the survey experiment (Panel (C)) and the hospital debt experiment (Panel (A) and Panel (B)). In Panel (A) and Panel (B), the quartile cutoffs in days are as follows: Q1: [130, 426]; Q2: [426, 457]; Q3: [457], 495]; Q4: [495, 2,177]. In Panel (C), the day quartiles are Q1: [198, 429]; Q2: [429, 459]; Q3: [459, 503]; Q4: [503, 1,567]. For each outcome, the effects are pictured from lightest (Quartile 1) to darkest (Quartile 4) in descending order. See Appendix Table A20 and Appendix Table A16 for corresponding numerical values.

Figure A12. Heterogeneous Effects of Debt Relief on Survey Health Outcomes, by Debt in Collections



Notes: Figure presents the heterogeneous effects of medical debt relief on health survey outcomes and future medical debt in collections by debt in collections. Panel (A) presents effect of medical debt relief on the amount of medical debt observed in future waves. Panel (B) presents the effect of medical debt relief on the probability of having medical debt observed in future waves. Panel (C) shows the effect of medical debt relief on health outcomes as measured in the survey experiment.

Terciles are created using the debt in collections observed by TransUnion in the first quarter pre-treatment. Terciles are computed separately within the survey experiment (Panel (C)) and the hospital debt experiment (Panel (A) and Panel (B)). In Panel (A) and Panel (B), the tercile cutoffs in dollars are as follows: T1:[1, 1,166]; T2: [1,167, 3,900]; T3: [3,901, 938,774]. In Panel (C), the terciles are T1: [7, 1,225]; T2: [1,232, 4,105]; T3: [4,109, 128,503]. For each outcome, the effects are pictured from lightest (No debt in collections) to darkest (Tercile 3) in descending order. See Appendix Table A22 and Appendix Table A18 for corresponding numerical values.

E Expert Survey Instrument



Start of Block: Introduction

Introduction [Consent language is displayed here, see "Expert_Survey_Info_Sheet"]

Consent Given the information above, do you wish to participate in the survey?

O Yes (1)

O No (2)

End of Block: Introduction

Start of Block: Main Survey

Demo_education What is the highest degree that you have completed?

PhD (1)
Masters or Professional Degree (2)
Bachelor's or 4-year college (3)
Other (4)

Demo	employer	Which of the	following options	best describes	your primary	<pre>/ employer?</pre>
_	_ / /		51		, , ,	

◯ Federal Government, Executive Branch (1)
--

- O Federal Government, Congress (2)
- O State Government (3)
- O Private company: Debt collection industry (4)
- O Private company: Other industry (Please specify) (5)

 \bigcirc Non-profit or advocacy organization (6)

- \bigcirc University or other academic institution (7)
- O Think-tank (8)
- Other (9)_____

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	\sim					\sim	n.
	\sim	\sim	\sim		\sim	\sim	

context1 Description of our experiment

We studied patients at a large hospital system with unpaid bills that would typically be sent to collections. This medical debt amounted to **\$1,500 on average**. We partnered with a non-profit called RIP Medical Debt to conduct a randomized controlled trial in which patients were randomly assigned to either:

Treatment group: Had this medical debt forgiven. **Control group**: Had this medical debt collected on as normal by a debt collection company.

The treatment group's debt was forgiven 15 months after the initiating medical event on average, at a cost of \$0.06 per dollar of debt. The treatment group was informed of debt forgiveness in two letters sent in the mail.

Next: Your predictions of our findings

Page Break -

context2 **Description of this survey**

Around one year after debt forgiveness, we surveyed patients in both the treatment group and the control group to measure the impacts of medical debt forgiveness on health, healthcare utilization, and financial well-being.

Your predictions

We would like to ask you about **your predictions** of the impacts of debt forgiveness on these outcomes.

Page Break -----



phq8_op Question 1/5

Our primary outcome is whether the subject screened positive for depression. To measure depression, we used the Personal Health Questionnaire for Depression Scale, or PHQ8.

In our study, 47% of the **control group** screened positive for depression. By how much do you think the average \$1,500 in medical debt forgiveness reduced depression in the **treatment group** (compared to the **control group**)?

If you think the debt forgiveness had a similar impact as gaining health insurance coverage through Medicaid, your answer would be around a 9 percentage point decrease (the finding from the Oregon Health Insurance Experiment). If you think the debt forgiveness had little effect, your answer would be closer to 0.

0

2

4

6

8

10

12

	U	-	•	Ū	U	
Your answer (in percentage points) ()						
phq8_op_conf How certain are you of your answ	/er?					

O Not certain at all (1)	
O Slightly certain (2)	
O Moderately certain (3)	
◯ Very certain (4)	
O Extremely certain (5)	
je Break	



We also asked subjects, "In the last 12 months, did you get all the medical care you needed?"

In our study, 57% of the **control group** reported getting all the medical care they needed. By how much do you think the average \$1,500 in medical debt forgiveness increased the percentage of patients receiving all needed medical care in the treatment group?

If you think the debt forgiveness had a similar impact as gaining insurance through Medicaid, your answer would be around a 24 percentage point increase. If you think debt forgiveness had little effect, your answer would be closer to 0.



allneed op conf How certain are you of your answer?

Not certain at all (1)

Slightly certain (2)

O Moderately certain (3)

O Very certain (4)

Extremely certain (5)

Page Break -



bills_op Question 3/5

To assess financial wellbeing, we asked study subjects "Due to medical bills, have you cut back on spending in the past 12 months on basic necessities?"

In our study, 44% of the **control group** reported cutting back on spending on basic necessities. By how much do you think the average \$1,500 in medical debt forgiveness reduced this percentage?

If you think the debt forgiveness had a similar impact as gaining insurance through Medicaid, your answer would be around a 15 percentage point decrease. If debt forgiveness had little effect, your answer would be closer to 0.

	0	4	0	12	10	20	
Your answer (in percentage points) ()				-			-

~

^

40

40

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bills_op_conf How certain are you of your answer?

O Not certain at all (1)	
O Slightly certain (2)	
O Moderately certain (3)	
O Very certain (4)	
O Extremely certain (5)	
Page Break	



JS



To further assess whether medical debt forgiveness improved financial well-being, we asked subjects whether they had increased formal borrowing (i.e. credit cards, payday loans, or other lines of credit) in the past 12 months due to medical bills.

In our study, 87% of the **control group** reported they had increased formal borrowing due to medical bills. By how much do you think the average \$1,500 in medical debt forgiveness lowered the percentage of patients needing to borrow more because of medical debt?

If you think the debt forgiveness had a similar impact as gaining insurance through Medicaid, your answer would be around a 15 percentage point decrease. If you think debt forgiveness had little effect, your answer would be closer to 0.

	0	4	8	12	16	20
Your answer (in percentage points) ()						
health_op_conf How certain are you of your answ	wer?					
\bigcirc Not certain at all (1)						

O Slightly certain (2)

O Moderately certain (3)

O Very certain (4)

 \bigcirc Extremely certain (5)

Page Break -

JS

value_op Question 5/5

Do you think that medical debt forgiveness is a valuable use of charity resources?

Not valuable at all (1)
Slightly valuable (2)
Moderately valuable (3)
Very valuable (4)
Extremely valuable (5)

value_text Please use this final question to explain your response to the prior question, and to expound on the predictions you made about the effects of medical debt forgiveness.



contact_giftcard Thank you for your response!

In order to deliver your \$25 gift card, we need you to enter to enter an email address where you wish to receive payment in. We will issue your payment within 14 days.

contact_email IMPORTANT: Enter a personal email address here. We cannot process your payment if you do not provide one below.

End of Block: Main Survey

F Survey Instrument



Health and Financial Wellness Study

The purpose of this survey is to learn more about the health, health care services, and financial issues affecting individuals in your community. It is your choice to take part in the survey, and you can decide not to answer one or more questions. We cannot and do not guarantee or promise that you will receive any benefits from this study. All answers will remain confidential. The results of the study will be reported for large groups of people and will not contain names or other information that identifies you. We will remove any information that identifies you from the study results and information. Another investigator could use this information for future research studies once you agree to participate in this survey now.

Completing the survey should take no more than 15 minutes. To thank you for your participation, we will send you \$50 for completing the survey.

If you have any questions about your rights as a participant in this research, feel you have been harmed, or wish to discuss other study-related concerns with someone who is not part of the research team, you can contact the Stanford Institutional Review Board (IRB):

phone: 1-866-680-2906 email: irb2-manager@lists.stanford.edu IRB protocol #: IRB57138

INSTRUCTIONS FOR COMPLETING THE SURVEY

Please answer the questions in this survey using a pen with <u>blue</u> or <u>black</u> ink.

This survey contains several types of questions:

For some questions, you answer the question by marking a box, like this:

¹ 🛛 Yes ² 🗌 No

2 You are sometimes told to skip over questions in this survey. When this happens, you will see an arrow with a note that tells you what question to answer next, like this:

¹ Yes \rightarrow Go to question 4 ² No

1 Thinking about everyone in your <i>household</i> , including you, how much does your household owe in <i>combined</i> medical bills, including to healthcare providers, credit card companies, family and friends, or anyone else? Your best estimate is fine.	 In the past 12 months, did you have problems paying or an inability to pay any medical bills, such as bills for doctors, dentists, medication, or home care? 1 ☐ Yes 2 ☐ No → Go to question 9
	 6 What were the reasons you had trouble paying your medical bills? Mark all that apply. 1 Didn't have health insurance 2 Had health insurance, but copay or deductible was too high 3 Submitted a claim to insurance company but all or part of the claim was denied 4 Other, please specify:
2 Now, thinking only about the medical care you've received, how much do you owe in total medical bills, including to healthcare providers, credit card companies, family and friends, or anyone else? Your best estimate is fine. 1□ \$0 → Go to question 5	 Which of the following comes closer to describing the medical bills you've had problems paying? ¹ Bills for a one-time or short-term medical expense, such as a single hospital stay or treatment for an accident
 2 \$1 to \$500 3 \$501 to \$1,000 4 \$1,001 to \$2,500 5 \$2,501 to \$5,000 6 \$5,001 to \$10,000 7 \$10,001 to \$20,000 8 \$20,001 to \$30,000 9 \$30,001 or more 77 \$1 don't know 	 Bills that have built up over time, such as treatment for a chronic illness like diabetes or cancer I don't know In the past 12 months, how often have you been contacted by a debt collector about paying your past medical bills? Never Once a month or less A few times a month
3 How much of your medical bills do you expect to pay? Your best estimate is fine.	⁴ ☐ A few times a week ⁵ ☐ Daily or more
$ \begin{array}{c} 1 & 0 \\ 2 & 1 & 1 & 5500 \\ 3 & 5501 & 1 & 51,000 \\ 4 & 51,001 & 52,500 \\ 5 & 52,501 & 55,000 \\ 6 & 55,001 & 510,000 \\ \end{array} $	 9 Besides medical bills, have you had problems paying other types of bills in the past 12 months? 1 Yes 2 No → Go to question 11 77 I don't know
 ⁷ □ \$10,001 to \$20,000 ⁸ □ \$20,001 to \$30,000 ⁹ □ \$30,001 or more ⁷⁷ □ I don't know 	 What reasons caused you to have problems paying other types of bills? Mark all that apply. 1 Had to pay medical bills 2 Lost job
 How much of your medical bills do you feel it would be fair for you to pay? Your best estimate is fine. 1□\$0 2□\$1 to \$500 3□\$501 to \$1,000 4□\$1,001 to \$2,500 5□\$2,501 to \$5,000 6□\$5,001 to \$10,000 7□\$10,001 to \$20,000 8□\$20,001 to \$30,000 9□\$30,001 or more 77□ I don't know 	 ³ Couldn't work as much as I'd like ⁴ Got divorced or separated ⁵ Spent too much money ⁶ Had to make interest payments ⁷ Other, <i>please specify:</i>

11	For the last 12 months, how many months did you have	16	As a result of medical bills have you cu	t back o	on spe	nding
T	some kind of health insurance? Your best estimate is fine.		in the past 12 months on		-	
	¹			Yes	No	l don't know
	 ³ 6 to 11 months ⁴ The whole time (all 12 months) ⁷⁷ I don't know 		 Basic necessities like food, heat or housing, or other basic household items? 	1	2	77
12	How has the COVID-19 (Coronavirus) pandemic affected		b. Big-ticket items like cars, furniture, or appliances?	1	2	77
	your health insurance coverage?		c. Business investments?	1	2	//
	 ¹ Lost insurance coverage and have not regained coverage ² Lost insurance coverage but have regained coverage ³ NA - Health insurance has not been affected 	Ø	As a result of medical bills, in the past 7 you?	12 mont	hs ha	ve
						I don't
13	In the past 18 months, has any of your medical debt been forgiven by a charity or non-profit organization?		a. Increased your credit card	Yes	2	77
	¹ Yes ² No \rightarrow Go to question 16		b. Borrowed money from a pavday lender?	1	2	77
	⁷⁷ 🗌 I don't know		c. Borrowed from friends and family?	1	2	77
			d. Used up all or most of your savings?	1	2	77
	How much of your medical debt was forgiven in the past 18 months? Your best estimate is fine.		e. Increased debt on other lines of credit?	1	2	77
	² ↓ \$501 to \$1,000 ³ ↓ \$1,001 to \$2,500 ⁴ ↓ \$2,501 to \$5,000 ⁵ ↓ \$5,001 to \$10,000 ⁶ ↓ \$10,001 or more ⁷⁷ ↓ I don't know		 days – would you say that you are? 1 Very happy 2 Pretty happy 3 Not too happy 	nings a	re the	se
15	Overall, how much of an impact has this debt forgiveness had on you and your family?	Ÿ	¹ Excellent			
	$1 \square A major impact$		² Very good			
	2 A minor impact		° Good 4 Fair			
	³ □ No real impact ⁷⁷ □ I don't know		⁵ Poor			
		20	How has your health changed in the las	t 12 mo	nths?	
			2 Is about the same			
			³ Has gotten worse			

		Not at all	Several days	More than half the days	Nearly every day	Do you feel this kind of stress these days?
а.	Little interest or pleasure in doing things	1	2	3	4	² Rarely ³ Sometimes ⁴ Often
).	Feeling down, depressed, or hopeless	1	2	3	4	⁵ ⊟ Always
;.	Trouble falling or staying asleep, or sleeping too much	1	2	3	4	 If you needed medical care in the last 12 months, did y get ALL the medical care you needed? 1 ∨ Ves → Go to question 26
1.	Feeling tired or	1	2	3	4	² No
) .	Poor appetite or overeating	1	2	3	4	12 months \rightarrow Go to question 26
-	Feeling bad about yourself or that you are a failure or have let yourself or	1	2	3	4	 25 The most recent time you went without needed medica care, what were the main reasons? Mark all that apply. ¹ It cost too much
J.	your family down Trouble concentrating on things, such as reading the newspaper or watching television	1	2	3	4	 ² Didn't have insurance ⁴ Owed money to the care provider ⁸ Reasons related to the COVID-19 pandemic (e.g., the off was closed or was worried about getting COVID-19) ⁷ Some other reason please specify:
1.	Moving or speaking so slowly that other people have noticed. Or the opposite— being so fidgety or restless that you have been moving around		2	3	4	26 If you needed prescription medications in the last 12 months, did you get all the prescription medications yo needed?
)v y	rer the <u>last 2 weeks,</u> how any of the following pro	/ often h oblems?	ave you	been bot More	hered Nearly	 ² □ No ³ □ NA - Did not need prescription medications in the past 12 months → Go to question 28
4	Feeling pervous	Not at all	Several days	than half the days	every day	27 The most recent time you went without prescription medications you needed, what were the main reasons?
).	anxious, or on edge	1	2	3	4	¹ They cost too much
	or control worrying Worrying too much	1	2	3	4	 ² Didn't have insurance ⁴ Couldn't get a prescription
••	about different things	1	2□	3 🗆	4	⁵ Reasons related to the COVID-19 pandemic (e.g., the pharmacy was closed or was
4	Being so restless that	1	2	3	4	worried about getting COVID-19) ⁶ □ Some other reason, <i>please specify:</i>
۱. ۶.	Becoming easily	1	2	3	4	
. ;.	Feeling afraid as	1	2	3	4	 ⁷⁷ I don't know 28 Would you describe yourself as Spanish, Hispanic,
J. ≥.	if something awful might happen					

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THANK YOU FOR YOUR PARTICIPATION.

Your responses will provide valuable information about the health, health care services, and financial issues affecting individuals in your community.

Please provide your name, email, and address so we can send you a token of appreciation for completing this survey.

Name:

Email address:

Street address 1:

Street address 2:

City:

State:

Zip code:

Date:

Please place your completed survey in the pre-paid return envelope and mail back to:

NORC at the University of Chicago 55 East Monroe Street Suite 1900 Chicago, IL 60603

If you have misplaced the pre-paid return envelope or have any further questions or feedback about this study, please contact the study team at <u>1-877-267-9862</u> or email <u>hfws@norc.org</u>.