

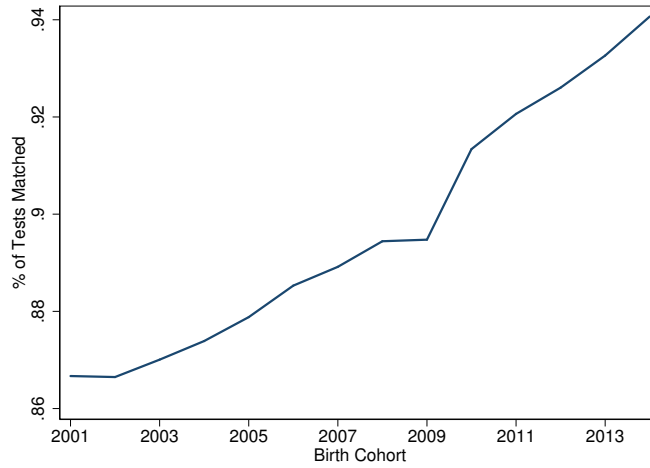
Hassles and Environmental Health Screenings:
Evidence from Lead Tests in Illinois

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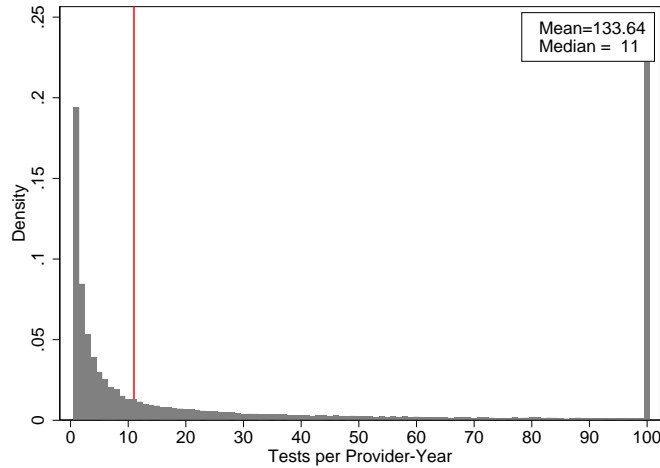
Online Appendix

Figure A.1: Match Rate between Blood Lead Levels and Birth Records



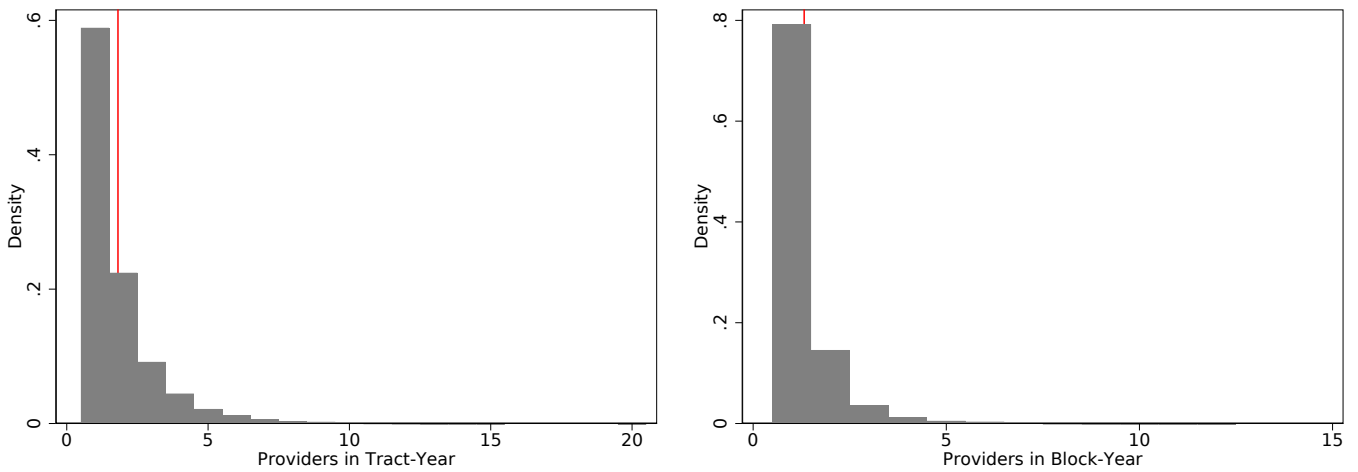
Notes: The figure plots the percent of tests successfully linked to birth records by birth cohort as recorded in the test data.

Figure A.2: Distribution of Tests per Provider-Year



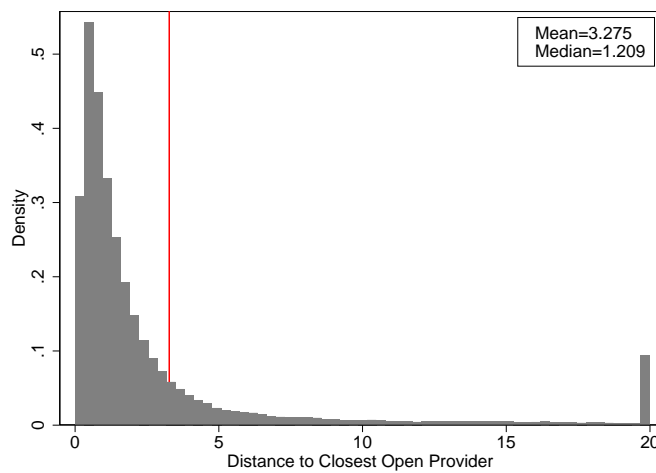
Notes: The figure plots the distribution of number of tests performed by providers in a year. The number of tests is censored at 100 for ease of visualization. The red vertical line indicates the median of the variable in the uncensored data.

Figure A.3: Distribution of Providers within Neighborhoods



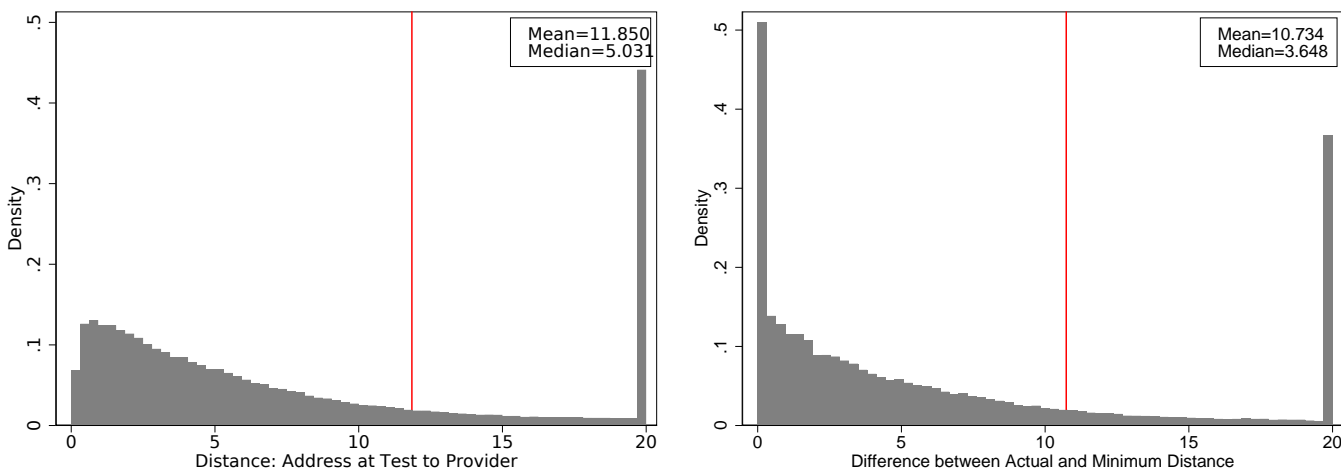
Notes: The figure plots the distribution of open providers at the tract-year (left panel) and block-year (right panel) level in Illinois, conditional on a neighborhood having a provider. The vertical red line indicates the mean number of provider in a neighborhood-year.

Figure A.4: Distance to Closest Providers



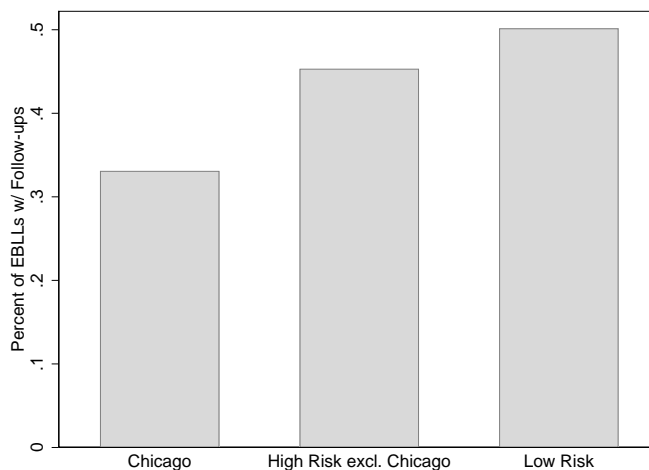
Notes: The figure plots the distribution of distance in kilometers from children's birth address to the closest provider open during the child's birth year. Distance is censored at 20km for ease of visualization. The red vertical line indicates the mean of the variable in the uncensored data.

Figure A.5: Distance to Providers



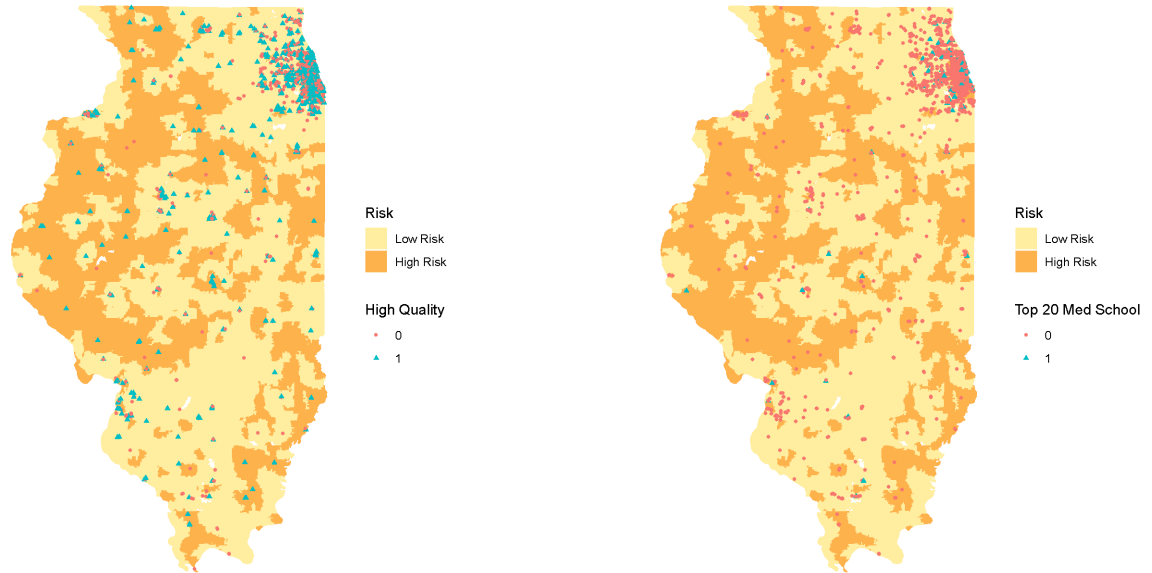
Notes: The left panel plots the distribution of distance in kilometers between children’s address at test and the provider associated with the test. The right panel plots the distribution of the difference in kilometers between distance traveled at test and minimum distance between address at test and the closest active provider during the test’s year. In both graphs, distance is censored at 20km for ease of visualization. The red vertical line indicates the mean of the variable in the uncensored data.

Figure A.6: Follow-up Rates



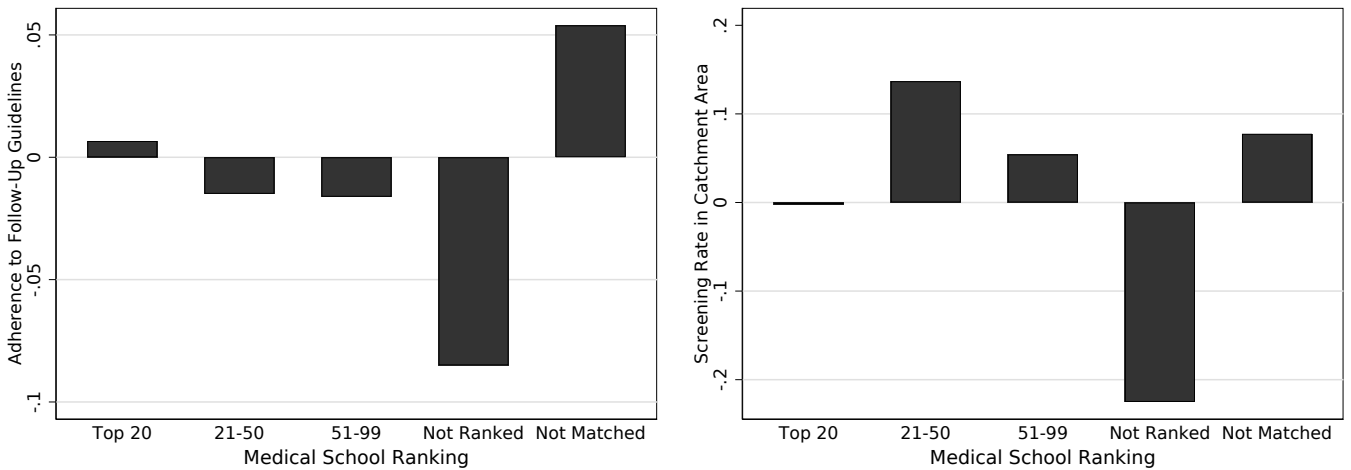
Notes: The figure plots follow-up rates in IL for tests that identify an elevated blood lead level (EBLL) by risk-level in birth zip code.

Figure A.7: Location of Providers, by Quality



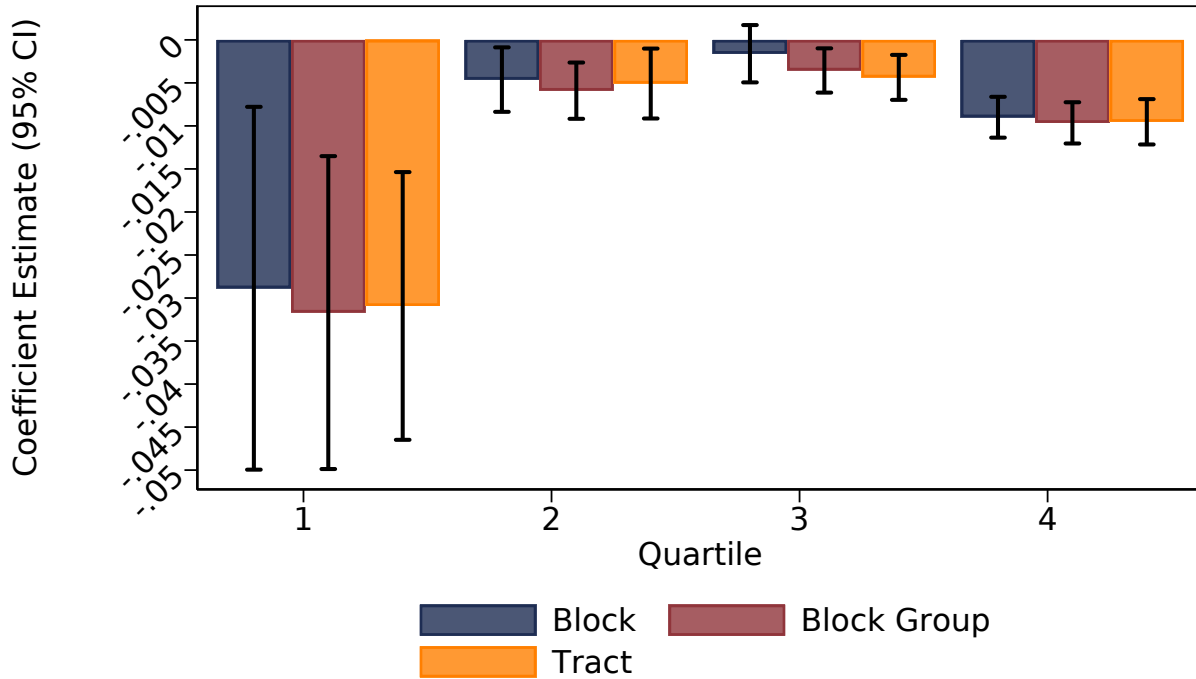
Notes: The figure plots the distribution of open providers by quality (left panel) and ranking of medical school of record (right panel) in high and low risk zip codes over the years 2001-2014. High-quality providers are defined as having a quality index above median.

Figure A.8: Providers: Correlation in Quality Measures



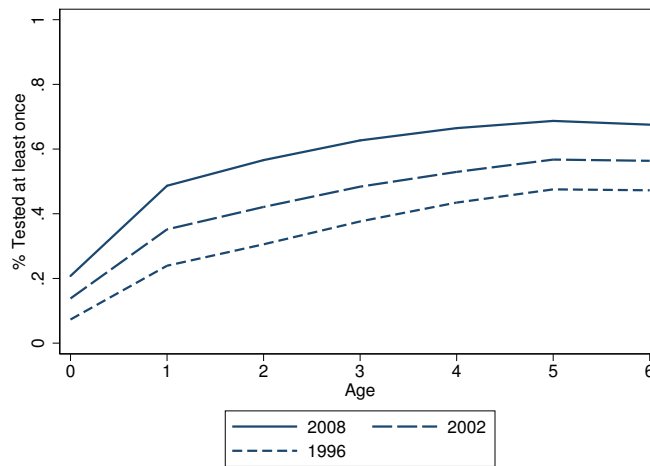
Notes: The figure plots on the y-axis the average z-scores of adherence to follow-up guideline (left panel) and screening rate (right panel) by ranking of the medical school each provider earned their degrees at on the x-axis.

Figure A.9: Determinants of Screening: Providers Distance, by Car Ownership



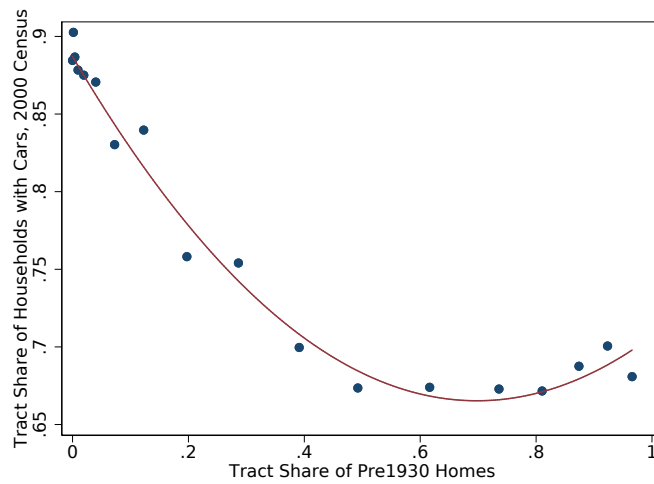
Notes: The figure plots the regression estimates of the effect of distance to closest provider on the likelihood that a child is screened by age two by quartile of car ownership rates in the child's Census tract, controlling for tract, block group, or block fixed effects. Tract-level car ownership in 2000 is measured in Census data. Vertical bars indicate 95% confidence intervals based on standard errors clustered at the zip code level.

Figure A.10: Cumulative Distribution of Age at First Blood Lead Test



Notes: The figure plots the cumulative distribution of age of first test in Illinois over time.

Figure A.11: Correlation between Car Ownership and Housing Age



Notes: The figure plots the average car ownership rates by quantiles of share of pre-1930 homes in Census tract using 2000 Census data, and fits a quadratic line.

Table A.1: Summary Statistics: Children

Sample:	Whole Sample (1)	Screened Children (2)	Children with BLL 10+ (3)	Children Switching Providers (4)	Siblings Switching Providers (5)	Tested at Closest Provider (6)
Home Pre1930	0.348 (0.476)	0.451 (0.498)	0.765 (0.424)	0.539 (0.498)	0.508 (0.500)	0.483 (0.500)
Home 1930-1977	0.399 (0.490)	0.391 (0.488)	0.196 (0.397)	0.362 (0.481)	0.379 (0.485)	0.378 (0.485)
Low Income	0.278 (0.448)	0.366 (0.482)	0.561 (0.496)	0.464 (0.499)	0.436 (0.496)	0.433 (0.496)
Black	0.179 (0.383)	0.226 (0.418)	0.360 (0.480)	0.318 (0.466)	0.307 (0.461)	0.196 (0.397)
Hispanic	0.246 (0.431)	0.319 (0.466)	0.329 (0.470)	0.407 (0.491)	0.366 (0.482)	0.257 (0.437)
Single Mother	0.384 (0.486)	0.490 (0.500)	0.632 (0.482)	0.617 (0.486)	0.585 (0.493)	0.487 (0.500)
Mother 20 or Younger	0.091 (0.287)	0.119 (0.324)	0.184 (0.387)	0.170 (0.376)	0.135 (0.342)	0.122 (0.327)
Mother Less than High School	0.012 (0.109)	0.019 (0.137)	0.012 (0.110)	0.020 (0.139)	0.018 (0.131)	0.023 (0.150)
Mother High School, No Diploma	0.103 (0.304)	0.135 (0.342)	0.212 (0.409)	0.183 (0.386)	0.173 (0.378)	0.144 (0.351)
BLL 10+ within a Year of Birth within 15m	0.054 (0.226)	0.079 (0.269)	0.690 (0.463)	0.118 (0.322)	0.102 (0.302)	0.084 (0.278)
BLL 10+ within a Year of Birth 15-100m	0.104 (0.305)	0.139 (0.346)	0.099 (0.298)	0.193 (0.395)	0.174 (0.379)	0.117 (0.322)
Chicago Born	0.283 (0.450)	0.380 (0.485)	0.487 (0.500)	0.446 (0.497)	0.413 (0.492)	0.242 (0.428)
High Risk Zip excl. Chicago	0.169 (0.375)	0.204 (0.403)	0.282 (0.450)	0.213 (0.409)	0.216 (0.411)	0.307 (0.461)
Screened by Age 2	0.456 (0.498)	1.000 (0.000)	1.000 (0.000)	0.865 (0.341)	0.713 (0.452)	1.000 (0.000)
Highest BLL by Age 2	2.919 (2.596)	2.919 (2.596)	15.335 (7.707)	3.408 (3.279)	3.243 (3.029)	3.001 (2.756)
BLL 10+ by Age 2	0.020 (0.140)	0.020 (0.140)	1.000 (0.000)	0.035 (0.184)	0.030 (0.169)	0.025 (0.155)
Distance to Closest Open Provider	2.279 (3.195)	1.934 (3.004)	1.611 (2.930)	1.627 (2.576)	1.754 (2.757)	2.379 (3.555)
Has Provider w/ Capillary in 1Km	0.308 (0.462)	0.382 (0.486)	0.455 (0.498)	0.424 (0.494)	0.400 (0.490)	0.420 (0.494)
Has High Quality Provider in 1Km	0.295 (0.456)	0.374 (0.484)	0.478 (0.500)	0.424 (0.494)	0.398 (0.489)	0.429 (0.495)
Has Provider w/ Top 20 Degree in 1Km	0.033 (0.178)	0.039 (0.193)	0.047 (0.211)	0.040 (0.197)	0.040 (0.195)	0.020 (0.139)
N	2050536	934099	18779	391985	705976	39725

Notes: The table displays summary statistics for the covariates in the sample. BLL is short for blood lead level. Column 1 includes all geocoded children whose birth address matched a parcel record for birth cohorts 2001-2014. Column 2 limits the sample to screened children while Column 3 limits the sample to children with at least one BLL at or above $10\mu\text{g}/\text{dL}$. Column 4 limits the sample to children with multiple tests who switch providers across tests. Column 5 limits the sample to children in households with multiple siblings who switch providers across siblings. Column 6 limits the sample to children who are tested at their closest provider.

Table A.2: Summary Statistics: Matched and Unmatched Blood Lead Tests

Sample:	Unmatched		Matched	
	Mean (1)	Standard Deviation (2)	Mean (3)	Standard Deviation (4)
Geocoded	0.729	0.445	0.762	0.426
Home Pre1930	0.540	0.498	0.545	0.498
Home 1930-1977	0.350	0.477	0.349	0.477
Low Income Block Group	0.458	0.498	0.457	0.498
Share Black in Tract	0.262	0.352	0.283	0.372
Share Hispanic in Tract	0.226	0.291	0.243	0.300
Fraction Less than High School	0.561	0.184	0.577	0.176
Chicago Residence	0.428	0.495	0.468	0.499
N	715273		4707326	

Notes: The table displays summary statistics for the unmatched (Columns 1-2) and matched (Columns 3-4) tests in the sample. Housing age and Census characteristics of block group and tracts are based on the child's address at time of test.

Table A.3: Sample Size and Linkages

	Tests Linked to Test Address		Test Linked to Birth Address		Children with Birth Records
	# Tests (1)	# Children (2)	# Tests (3)	# Children (4)	# Children (5)
Total	5,403,722	2,653,402	5,403,722	2,653,402	4,465,487
Matched to Birth Record	4,692,618	2,166,694	4,685,569	2,160,081	4,465,487
Geocoded	3,587,020	1,820,517	4,167,897	1,903,385	3,847,728
Born between 2001-2014	2,664,302	1,392,758	2,935,018	1,281,933	2,123,496
Linked to Parcel Data	1,926,388	1,007,129	2,144,859	890,637	1,466,015
Drop follow-up	1,851,106	1,004,026	2,064,753	890,637	1,466,015
Linkage with Census Block Data	1,850,783	1,003,859	1,722,482	780,980	1,465,336

Notes: The table displays the number of tests and unique children in my original sample (first row) and those remaining after each data cleaning and linkage step.

Table A.4: Screening Rates and Average Blood Lead Levels

	Illinois		Chicago	
	Geocoded	Non-Geocoded	Geocoded	Non-Geocoded
Screening Rate (%)	60%	58%	76%	74%
Avg. Blood Lead Level (ug/dL)	2.55	2.52	2.40	2.39

Notes: The table displays the screening rates and average blood lead levels in Illinois and Chicago, respectively, in the sample of geocoded (Columns 1 and 3) and non-geocoded (Columns 2 and 4) births (for screening rates) and tests (for average blood lead levels).

Table A.5: Sample Size and Extent of Lead Exposure

	Number of Tests, Excl. Follow-Up (1)	Number of Tests, Excl. Follow-Up, Linked to Covariates (2)	Number of Children (3)
<i>Panel A: Any Test Type</i>			
Total	2,557,184	1,594,313	953,749
Elevated (>10ug/dL)	77,919	37,310	27,175
Confirmed Elevated	70,171	32,319	22,579
<i>Panel B: Capillary Tests</i>			
Total	990,734	729,945	512,185
Elevated (>10ug/dL)	25,463	15,384	14,125
Confirmed Elevated	17,715	10,393	11,305
<i>Panel C: Venous Tests</i>			
Total	1,566,449	864,367	538,225
Elevated (>10ug/dL)	52,456	21,926	14,827

Notes: The table displays the number of tests (Column 1), number of tests excluding those that are within 90 days of a previous test (Column 2), and the number of children (Column 3) in my sample (Total) and those that display elevated levels, for any test (Panel A), capillary (Panel B), and venous (Panel C). I show separately the number of confirmed capillary tests, that is capillary tests that are followed up by another elevated level within 90 days, be it venous or capillary.

Table A.6: Estimates of Fraction of Movers in Sample

Sample:	Siblings (1)	Tested Child (2)
Moved	0.356	0.331
Moved to House with Different Risk	0.154	0.150
Moved to Zip Code with Different Risk	0.082	0.069
N	480865	883816

Notes: The table displays the share of households estimated to move within a two year period in my sample. Column 1 identifies movers among households with multiple children as those with a change in birth address between births. Column 2 identifies movers among households with a tested child as those whose residence address at time of test differs from the birth address. Houses are defined as having different risk if one is built before 1930 and one after.

Table A.7: Summary Statistics: Providers

	All Providers (1)	Opening Providers (2)	Closing Providers
Years Open	8.172 (6.051)	4.648 (3.697)	11.274 (6.391)
Individual Provider	0.242 (0.428)	0.220 (0.414)	0.180 (0.384)
Top 20 Degree	0.029 (0.168)	0.028 (0.165)	0.029 (0.169)
Top 21-50 Degree	0.174 (0.379)	0.151 (0.359)	0.190 (0.392)
Unranked Degree	0.685 (0.465)	0.709 (0.454)	0.649 (0.477)
Performs Capillary	0.636 (0.481)	0.541 (0.498)	0.780 (0.414)
Fraction Years Accepting New Patients	0.500 (0.404)	0.408 (0.406)	0.608 (0.369)
High Quality	0.703 (0.457)	0.758 (0.429)	0.667 (0.471)
N	4542	2060	2189

Notes: The table displays summary statistics for the providers in the whole sample (Column 1) and for providers who enter or exit between 2001 and 2014 (Columns 2-3, respectively).

Table A.8: Lagged Determinants of Providers' Entry and Exit, Neighborhood Level

Dependent Variable:	Entry	Exit	Distance To Closest Provider	Entry	Exit	Distance To Closest Provider
	(1)	Tract (2)	(3)	(4)	Block (5)	(6)
Number of Providers	-0.0445*** (0.009)	0.1794*** (0.012)	-0.1424*** (0.036)	-0.0509** (0.022)	0.2575*** (0.029)	-0.2172*** (0.080)
Number of Births	0.0001 (0.000)	0.0001 (0.000)	-0.0024 (0.002)	0.0000 (0.000)	0.0000 (0.000)	0.0014 (0.001)
Share Screened	0.0158 (0.012)	0.0126 (0.013)	-0.3001 (0.191)	0.0001 (0.000)	-0.0003 (0.000)	-0.0063 (0.012)
Average BLL	0.0005 (0.001)	0.0009 (0.002)	-0.0598** (0.027)	0.0000 (0.000)	0.0000 (0.000)	-0.0017 (0.001)
Share Homes Pre-1930	0.0152 (0.012)	-0.0052 (0.014)	-0.2432 (0.303)	-0.0003 (0.000)	0.0000 (0.000)	0.0135 (0.017)
Share Black	0.0122 (0.025)	0.0732*** (0.028)	0.1365 (0.243)	0.0003 (0.000)	0.0003 (0.000)	0.0024 (0.013)
Share Hispanic	0.0227 (0.021)	0.0087 (0.023)	-0.1596 (0.203)	-0.0001 (0.000)	0.0001 (0.000)	-0.0129 (0.009)
Share Single Mothers	0.0006 (0.015)	0.0150 (0.016)	-0.4121 (0.342)	0.0002* (0.000)	0.0000 (0.000)	-0.0232** (0.011)
Share Mothers 20 or Younger	-0.0486** (0.020)	-0.0159 (0.026)	0.3604 (0.392)	-0.0003** (0.000)	-0.0001 (0.000)	0.0139 (0.013)
Share Mothers High School or Less	0.0368** (0.019)	0.0368** (0.018)	0.0280 (0.247)	0.0000 (0.000)	0.0003 (0.000)	-0.0159 (0.011)
Mean Outcome Variable	0.0398	0.0535	2.8021	0.0005	0.0008	1.6101
N	32019	32019	32019	361900	361900	361830

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The table displays the correlates of the likelihood that a provider opens (Columns 1,4) or closes (Columns 2,5) and average distance to providers (Columns 3,6) in a given year at different neighborhood levels. Observations in Columns 1-3 are at the tract-year level and in Columns 4-6 at the block-year level. Characteristics are lagged by one year, and all reflect births except for blood lead levels (BLLs) and number of providers. Each column includes year fixed effects and the neighborhood fixed effects indicated at the top of each column. Standard errors clustered at the neighborhood level in parentheses.

Table A.9: Determinants of Screening: Distance to Provider

Dependent Variable:	Screened by Age 2				
	(1)	(2)	(3)	(4)	(5)
Distance to Closest Open Provider	-0.008*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.004*** (0.001)	-0.003*** (0.001)
Mean Outcome Variable	0.46	0.46	0.46	0.46	0.47
N	2050535	2050553	2050533	2018383	1463352
Zip Code FE	X				
Tract FE		X			
Block Group FE			X		
Block FE				X	
Home FE					X

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The table displays the impact of the closest provider open during a child's birth year in kilometers on the likelihood of a child being screened by age two. The sample includes all geocoded children born 2001-2014 whose closest provider is within 20 kilometers. Each column includes birth year fixed effects and a set of location fixed effects as indicated at the bottom of each column. Standard errors clustered at the county level are in parentheses.

Table A.10: Determinants of Screening: Provider Access, Robustness Checks

Dependent Variable: Screened by Age 2	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Distance to Closest Open Provider	-0.0005** (0.000)	-0.0028*** (0.001)	-0.002*** (0.001)	-0.001*** (0.000)	-0.004*** (0.001)	-0.003*** (0.001)	-0.005*** (0.001)
Distance to Closest Open Provider X 20+km Away		0.0027*** (0.001)					
20+km Away		-0.0239 (0.015)					
Black						0.047*** (0.004)	0.051*** (0.005)
Hispanic						0.110*** (0.005)	0.110*** (0.005)
Single Mother						0.051*** (0.004)	0.042*** (0.004)
Mother 20 or Younger						0.016*** (0.002)	0.013*** (0.002)
Mother High School or Less						0.005 (0.003)	0.006* (0.003)
Home Pre1930							0.050*** (0.006)
Home 1930-1977							0.050*** (0.004)
BLL 10+ within a Year of Birth within 15m							0.067*** (0.005)
BLL 10+ within a Year of Birth 15-100m							0.014*** (0.003)
Mean Outcome Variable	0.46	0.46	0.46	0.46	0.46	0.46	0.46
N	2076225	2076225	2050533	2018383	2018351	2018383	1434900
Block FE	X	X		X	X	X	X
Block Group FE & Trend			X				
Distance Measure: Avg of 5 Closest Providers				X			
Distance Measure: From Block Centroid					X		

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The table displays the impact of distance to the closest provider open during a child birth year on the likelihood of a child being screened by age two. Columns 4 and 5 use different distance measures per the bottom of those columns. The sample includes all geocoded children born 2001-2014 whose birth address matched a parcel record. Columns 3-7 limit the sample to children within 20km of an open provider. BLL is short for blood lead level. Each column includes birth year fixed effects and location fixed effects per the bottom of each column. Standard errors clustered at the zip code level in parentheses.

Table A.11: Determinants of Screening: Car and Transit Travel Times

Dependent Variable: Sample:	Screened by Age 2					
	Car			Public Transit		
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: Travel Distance</i>						
Distance to Closest Open Provider	-0.004*** (0.001)	-0.004*** (0.001)	-0.005*** (0.002)	-0.013*** (0.003)	-0.013*** (0.003)	-0.010* (0.006)
<i>Panel B: Travel Time</i>						
Travel Time to Closest Open Provider (Minutes)	-0.004*** (0.001)	-0.004*** (0.001)	-0.003** (0.001)			
Travel Time to Closest Open Provider (10 Minutes)				-0.007*** (0.001)	-0.006*** (0.001)	-0.003 (0.002)
Mean Outcome Variable	0.46	0.46	0.46	0.50	0.50	0.51
N	245018	244930	193050	179664	179484	144794
Tract FE	X			X		
Block Group FE		X			X	
Block FE			X			X

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The table examines the relationship between travel times by car (Columns 1-3) and by public transit (Columns 4-6) and screening likelihood in a 12 percent random sample stratified by block group and birth year. For this sample, I used the STATA command georoute (?), based on the HERE API which limits free requests to 250,000 observations, to estimate travel times by car and public transit to the closest open provider. Public transit times are estimated for Wednesday October 16, 2019 at 10am. Panel A estimates the impact of distance to the closest provider open on the likelihood a child is screened in this subsample, for the routes the algorithm was able to find information for. Panel B estimates the effect of travel time in minutes (10 minutes for Columns 4-6) on the likelihood a child is screened. Columns 4-6 limit the sample to households with estimated travel times smaller than two hours. Each column includes year fixed effects and a set of location fixed effects for location indicated at the bottom of each column. Standard errors clustered at the zip code level in parentheses.

Table A.12: Heterogeneity in Screening and Selection by Zip Code Risk

Dependent Variable:	Screened by Age 2			BLL 10+ by Age 2, Screened			Pre1930 Home, Screened		
Sample:	Chicago (1)	High Risk w/out Chicago (2)	Low Risk (3)	Chicago (4)	High Risk w/out Chicago (5)	Low Risk (6)	Chicago (7)	High Risk w/out Chicago (8)	Low Risk (9)
<i>Panel A: Tract and Year FE</i>									
Distance to Closest Open Provider	-0.011** (0.005)	-0.002* (0.001)	-0.003*** (0.001)	-0.001 (0.002)	0.000 (0.000)	0.000 (0.000)	-0.025** (0.010)	-0.014*** (0.004)	-0.002** (0.001)
<i>Panel B: Block and Year FE</i>									
Distance to Closest Open Provider	-0.008 (0.006)	-0.001 (0.002)	-0.003*** (0.001)	-0.002 (0.002)	0.000 (0.000)	0.000 (0.000)	0.001 (0.003)	-0.002 (0.002)	-0.001 (0.001)
Mean Outcome	0.61	0.55	0.34	0.03	0.03	0.01	0.67	0.53	0.13
N	576731	330241	1100179	350784	174208	356550	315276	102421	223041

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The table displays the impact of distance to the closest provider open during a child birth year on the likelihood of a child being screened by age two (Columns 1-3), and on the probability that a screened child has a BLL 10+ (Columns 4-6), or lives in a pre1930 home (Columns 7-9) for different subsamples indicated in each column. The sample includes all geocoded children born 2001-2014 whose closest provider is within 20 kilometers. Each column includes birth year and tract (Panel A) or block (Panel B) fixed effects. Standard errors clustered at the zip code level in parentheses.

Table A.13: Determinants of Screening: Provider Access, Different Samples

Dependent Variable:	Screened by Age 2				
Sample:	10KM	5KM	2KM	1KM	0.5KM
	(1)	(2)	(3)	(4)	(5)
Distance to Closest Open Provider	-0.006*** (0.001)	-0.009*** (0.002)	-0.018*** (0.004)	-0.027*** (0.008)	-0.030 (0.019)
Mean Outcome Variable	0.46	0.47	0.50	0.54	0.57
N	1933096	1809487	1407149	893976	412857
Block FE	X	X	X	X	X

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The table displays the impact of distance to the closest provider open during a child birth year on the likelihood of a child being screened by age two. The sample includes all geocoded children born 2001-2014 whose birth address matched a parcel record and who are born within the distance indicated at the top of each column from an open provider. Each column includes birth year and block fixed effects. Standard errors clustered at the zip code level in parentheses.

Table A.14: Determinants of Screening: Provider Access and Density

Dependent Variable:	Screened by Age 2		
	(1)	(2)	(3)
Distance to Closest Open Provider	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)
Distance to 5 Closest Open Providers	-0.001*** (0.000)	-0.001*** (0.000)	-0.001*** (0.000)
Mean Outcome Variable	0.46	0.46	0.46
N	2050535	2050515	2018367
Tract FE	X		
Block Group FE		X	
Block FE			X

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The table displays the impact of distance to the closest and the five closest providers open during a child birth year on the likelihood of a child being screened by age two. The sample includes all geocoded children born 2001-2014 whose birth address matched a parcel record within 20km of an open provider. Each column includes birth year fixed effects and location fixed effects per the bottom of each column. Standard errors clustered at the zip code level in parentheses.

Table A.15: Determinants of Screening: Provider Access, Logit Model

Dependent Variable: Specification:	Screened by Age 1		Screened by Age 2		Screened by Age 6	
	OLS	Logit	OLS	Logit	OLS	Logit
	(1)	(2)	(3)	(4)	(5)	(6)
Distance to Closest Open Provider	-0.003*** (0.001)	-0.027*** (0.006)	-0.005*** (0.001)	-0.027*** (0.006)	-0.005*** (0.001)	-0.023*** (0.005)
Home Pre1930	0.037*** (0.004)	0.197*** (0.023)	0.050*** (0.006)	0.225*** (0.026)	0.063*** (0.006)	0.281*** (0.029)
Home 1930-1977	0.037*** (0.003)	0.203*** (0.019)	0.050*** (0.004)	0.226*** (0.021)	0.064*** (0.005)	0.280*** (0.022)
Black	0.024*** (0.004)	0.135*** (0.020)	0.051*** (0.005)	0.219*** (0.021)	0.094*** (0.005)	0.417*** (0.023)
Hispanic	0.089*** (0.005)	0.428*** (0.022)	0.109*** (0.005)	0.477*** (0.023)	0.127*** (0.005)	0.590*** (0.024)
Single Mother	0.029*** (0.003)	0.130*** (0.015)	0.042*** (0.004)	0.184*** (0.016)	0.050*** (0.004)	0.256*** (0.017)
Mother 20 or Younger	0.003 (0.002)	0.017* (0.010)	0.013*** (0.002)	0.060*** (0.009)	0.019*** (0.002)	0.132*** (0.012)
Mother Less High School or Less	0.002 (0.003)	-0.009 (0.014)	0.006* (0.003)	0.024* (0.014)	0.012*** (0.003)	0.091*** (0.017)
BLL 10+ within a Year of Birth within 15m	0.049*** (0.005)	0.252*** (0.020)	0.067*** (0.005)	0.311*** (0.022)	0.043*** (0.003)	0.265*** (0.020)
BLL 10+ within a Year of Birth 15-100m	0.009*** (0.003)	0.069*** (0.013)	0.014*** (0.003)	0.065*** (0.013)	0.013*** (0.002)	0.063*** (0.012)
Marginal Effect of Distance to Closest Open Provider		-0.006*** (0.001)		-0.007*** (0.001)		-0.005*** (0.001)
Mean Outcome Variable	0.32	0.32	0.46	0.46	0.61	0.61
N	1451137	1451137	1451137	1451137	1451137	1451137

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The table displays OLS coefficients and coefficients and marginal effects from logit models of the impact of distance to the closest provider operating during a child birth year on the likelihood of a child being screened by age 1 (Column 1-2), age 2 (Column 3-4), and age 6 (Column 5-6). The sample includes all geocoded children born 2001-2014 whose birth address matched a parcel record, and whose closest provider is within 20 kilometers. BLL is short for blood lead level. Each column includes birth year indicators and block-level averages of all included regressors. Standard errors clustered at the zip code level in parentheses.

Table A.16: Selection into Screening Conditional on Distance: Robustness Checks

Dependent Variable:	BLL 10+ By Age 2 (1)	BLL By Age 2 (2)	Home Pre1930 (3)	Black (4)	Hispanic (5)	Single Mother (6)	Mother 20 or Younger (7)	Mother High School or Less (8)
<i>Panel A: Tract and Year FE</i>								
Distance to Closest Open Provider	-0.0003** (0.000)	-0.0044** (0.002)	-0.0043*** (0.001)	-0.0024*** (0.001)	-0.0026*** (0.001)	-0.0026*** (0.001)	0.0000 (0.000)	-0.0009** (0.000)
<i>Panel B: Block and Year FE</i>								
Distance to Closest Open Provider	-0.0001 (0.000)	-0.0003 (0.001)	0.0000 (0.000)	0.0001 (0.000)	0.0009** (0.000)	0.0010* (0.001)	0.0001 (0.000)	-0.0002 (0.000)
Mean Outcome Variable	0.02	2.99	0.46	0.24	0.38	0.48	0.12	0.16
N	697482	697482	645177	697482	697482	697482	697482	697482

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The table displays the impact of distance to the closest provider open during a child birth year on selection into screening by age two. The sample includes all geocoded children born 2001-2014 whose closest provider is within 20 kilometers and who are screened. Outcome variables are indicated in each column. Panel A reports the effects controlling for the child's birth tract, Panel B controls for child's birth block. Each regression includes birth year fixed effects as well as tract or block level time-varying controls such as average blood lead levels (BLLs) by age 2, share of pre1930 homes, share black, share hispanic, share single mothers, share teen mothers, and share of mothers with high school education or less. Standard errors clustered at the zip code level in parentheses.

Table A.17: Effect of Proximity to Providers on Prevention, Robustness Checks for Rare Events

Specification:	Low Income Block (1)	Block with Remediation (2)	Logit (3)	Penalized Logit (4)
<i>Panel A: Remediation within 3 Years</i>				
Distance to Provider	0.000043 (0.000)	0.000079 (0.002)	-0.009173 (0.031)	-0.008720 (0.031)
Mean Outcome Variable	0.003	0.052	0.001	0.001
N	563938	54134	1636204	1636204
<i>Panel B: Future BLL 10+ Detected</i>				
Distance to Provider	-0.000717** (0.000)	-0.003795** (0.002)	0.008860 (0.011)	0.008919 (0.010)
Mean Outcome Variable	0.073	0.136	0.035	0.035
N	437433	43008	1199562	1199562

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The table displays the impact of distance to the closest provider open during a child birth year on the likelihood of remediation within three years (Panel A) and of future poisoning (Panel B). BLL is short for blood lead level. The sample includes all geocoded children born 2001-2014 whose closest provider is within 20 kilometers, with further constraints indicated in each column. Standard errors clustered at the zip code level in parentheses, except for Column 4 which reports standard errors under the assumption of homoscedasticity.

Table A.18: Determinants of Lead Exposure

Dependent Variable:	Highest BLL by Age 2		BLL 10+ by Age 2	
	(1)	(2)	(3)	(4)
Home Pre1930	0.415*** (0.025)	0.316*** (0.023)	0.010*** (0.001)	0.008*** (0.001)
Home 1930-1977	0.030* (0.016)	0.067*** (0.019)	-0.001* (0.001)	0.000 (0.001)
Low Income	0.003 (0.014)		-0.002*** (0.001)	
Black	0.255*** (0.050)	0.180*** (0.026)	0.003 (0.002)	0.002** (0.001)
Hispanic	-0.161*** (0.024)	-0.115*** (0.017)	-0.007*** (0.001)	-0.004*** (0.001)
Single Mother	0.025** (0.010)	0.026** (0.011)	0.001* (0.000)	0.001*** (0.001)
Mother 20 or Younger	0.038*** (0.014)	0.020 (0.015)	0.000 (0.001)	-0.001* (0.001)
Mother Less than High School	0.039 (0.028)	0.055* (0.031)	0.003*** (0.001)	0.005*** (0.001)
Mother High School, No Diploma	0.154*** (0.017)	0.149*** (0.017)	0.005*** (0.001)	0.005*** (0.001)
BLL 10+ within a Year of Birth within 15m	2.281*** (0.133)	2.078*** (0.135)	0.167*** (0.010)	0.157*** (0.010)
BLL 10+ within a Year of Birth 15-100m	0.231*** (0.024)	0.128*** (0.028)	0.008*** (0.001)	0.004** (0.002)
Mean Outcome Variable	2.97	2.99	0.02	0.02
N	671156	645177	671156	645177
Zip FE	X		X	
Block FE		X		X

Notes: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The table displays estimates of the impact of various variables on a child's maximum blood lead level (Columns 1-2) and likelihood of having an elevated blood lead level (BLL) (Columns 3-4) by age two. The sample includes all geocoded children born 2001-2014 whose birth address matched a parcel record, and whose closest provider is within 20 kilometers. Each column includes birth year and block fixed effects. Standard errors clustered at the zip code level in parentheses.