Table S1. Timing of ACA Medicaid Expansion States

	Early Expansion States	Expansion States (January 2014)	Late Expansion States	Non-Expansion States	No ECLS-K Data
1	California	Arizona	Indiana	Alabama	Alaska
2	Connecticut	Arkansas	Michigan	Florida	Delaware
3	Hawaii	Colorado	Montana	Georgia	Idaho
4	Massachusetts	Illinois	New Hampshire	Kansas	Kentucky
5	Minnesota	Iowa	Pennsylvania	Louisiana**	Maine
6	New Jersey	Maryland		Mississippi	North Dakota
7	New York	Nevada		Missouri	Rhode Island
8	Vermont	New Mexico		Nebraska	South Dakota
9	Washington	Ohio		North Carolina	Washington, D.C.
10		Oregon		Oklahoma	Wyoming
11		West Virginia		South Carolina	
12		Wisconsin*		Tennessee	
13				Texas	
14				Utah	
15				Virginia	

* Although Wisconsin did not technically expand its Medicaid program under the ACA, it covers adults up to 100% FPL.

**Louisiana expanded in July 2016, but this timing is beyond the study period. Therefore, we consider it a non-expansion state in this study.

Table S2. Linear Pre-trends Test Among Children from Low-Income Households (< 138% FPL)

A. Academic Outcomes	Reading Scores	Math Scores	
	(1)	(2)	
Expansion x Wave	0.227	0.672*	
	(0.321)	(0.295)	
Observations (Child-year)	13,840	13,800	
Observations (Child)	3,595	3,595	
B. Socioemotional Outcomes	Externalizing Behaviors	Internalizing Behaviors	Social Skills
	(1)	(2)	(3)
Expansion x Wave	0.010	0.018	-0.019
	(0.013)	(0.011)	(0.014)
Observations (Child-year)	12,450	12,330	12,110
Observations (Child)	3,510	3,510	3,510
C. Family Functioning	Reading Outside School	Parental Help with Homework	Dinner Together
	(1)	(2)	(3)
Expansion x Wave	-0.018	0.024	0.015~
	(0.967)	(0.086)	(0.009)
Observations (Child-year)	6,580	6,600	9,600
Observations (Child)	3,550	3,560	3,590

Notes: Each cell corresponds to a different OLS regression. Expansion x Wave is an interaction between a binary variable representing whether a child resided in a state that expanded its Medicaid program and a linear wave term. The regressions also include wave, child fixed effects, state-level covariates, and are weighted by sampling weights. Sample is restricted to the pre-expansion time period only. Heteroscedasticity-robust standard errors in parentheses, clustered at the state-level.
Sample size rounded to the nearest 10 as per dataset guidelines;
~ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table S3. Heterogenous Effects on Primary Outcomes Among Children from Low-Income Households (< 138% FPL)

	A. Reading Scores			B. Math Scores		
A. By Race/Ethnicity	White	Black	Hispanic	White	Black	Hispanic
	(1)	(2)	(3)	(1)	(2)	(3)
Expansion	-0.103	2.161*	1.070	-1.243	2.972*	-1.110
	(1.020)	(0.956)	(0.758)	(1.117)	(1.185)	(1.066)
Mean of DV	51.77	50.34	48.36	33.43	29.57	28.99
R-Squared	0.934	0.925	0.930	0.943	0.929	0.940
Observations (Child-year)	4,380	2,350	8,410	4,370	2,360	8,420
Observations (Child)	640	350	1,250	640	350	1,250
B. By Marital Status	Not Married	Married		Not Married	Married	
	(1)	(2)		(1)	(2)	
Expansion	1.460	0.738		2.038~	-1.134	
	(0.883)	(0.670)		(1.051)	(1.078)	
Mean of DV	50.68	49.81		31.21	30.87	
R-Squared	0.919	0.928		0.926	0.938	
Observations (Child-year)	4,780	12,290		4,780	12,270	
Observations (Child)	1,110	1,110		1,110	1,110	
C. By Income	Below Median Income	Above Median Income		Below Median Income	Above Median Income	
	(1)	(2)		(1)	(2)	
Expansion	1.801**	0.425		0.825	-1.069	
	(0.628)	(0.802)		(1.250)	(0.987)	
Mean of DV	49.16	50.97		29.70	32.30	
R-Squared	0.925	0.933		0.931	0.944	
Observations (Child-year)	8,610	8,460		8,600	8,450	
Observations (Child)	1,270	1,250		1,270	1,250	

Notes: Each column of each panel corresponds to a different OLS regression model. Expansion represents β_1 from equation (1), and measures the average effect of the Medicaid expansions after it took place. The regressions also include wave, child fixed effects, state-level covariates, and are weighted by sampling weights. Heteroscedasticity-robust standard errors, in parentheses, are clustered at the state level. Mean of each dependent variable (DV) provides the within-child average of the DV after controlling for just wave fixed effects. To economize on space, we report these heterogenous effects only for our primary outcomes of interest (math and reading scores). Analogous results for all other outcomes are available from the authors on request. Sample sizes are rounded to the nearest 10 as per dataset guidelines. $\sim p < 0.10$, $* p < 0.05$, $** p < 0.01$, $*** p < 0.001$.

Table S4. Pre-ACA Parental Income Eligibility Thresholds (as of 2011) for Expansion States included in ECLS-K Data, % of FPL

ARIZONA	106	NEW JERSEY	200
ARKANSAS	17	NEW MEXICO	67
CALIFORNIA	106	NEW YORK	150
COLORADO	106	OHIO	90
CONNECTICUT	191	OREGON	40
HAWAII	100	PENNSYLVANIA	46
ILLINOIS	191	VERMONT	191
INDIANA	36	WASHINGTON	74
IOWA	83	WEST VIRGINIA	33
MARYLAND	116	WISCONSIN	200
MASSACHUSETTS	133		
MICHIGAN	64		
MINNESOTA	215		
MONTANA	56		
NEVADA	88		
NEW HAMPSHIRE	49		

Source: Data come from Kaiser Family Foundation, "Medicaid Income Eligibility Limits for Parents, 2002-2020." https://www.kff.org/medicaid/state-indicator/medicaid-income-eligibility-limits-for-parents/

Table S5. Impact of the ACA Medicaid Expansion on Child Development Among Children from Low-Income Households (< 138% FPL) – Additional Sensitivity Checks

A. Early vs. Late Exclusions	Reading Scores		Math Scores	
Exclusion	Early	Late	Early	Late
Expansion	1.272~	0.931	0.752	0.110
	(0.642)	(0.661)	(1.126)	(1.256)
Mean of DV	50.84	50.84	31.38	31.38
Observations (Child-year)	12,260	15,820	12,260	15,810
Observations (Child)	1,810	2,340	1,810	2,340
R-squared	0.928	0.928	0.935	0.936
B. CCS Adoption	Reading Scores		Math Scores	
Expansion	1.106~		0.044	
	(0.582)		(1.121)	
Mean of DV	50.84		31.38	
Observations (Child-year)	17,070		17,060	
Observations (Child)	2,520		2,520	
R-squared	0.929		0.937	
C. No Sampling Weights	Reading Scores		Math Scores	
Expansion	0.753~		-0.414	
	(0.439)		(0.820)	
Mean of DV	50.02		30.94	
Observations (Child-year)	26,300		26,280	
Observations (Child)	4,270		4,270	
R-squared	0.926		0.935	

Notes: Each column of each panel corresponds to a different OLS regression model. Each model includes wave and child fixed effects and sampling weights. Expansion represents β_1 from equation (1), and measures the average effect of the Medicaid expansions after it took place. Panel A adjusts for early and late expansion exclusions; Panel B adjusts for state-year, common core adoption; and Panel C provides unweighted estimates. Mean of each dependent variable (DV) provides the within-child average of the DV after controlling for just wave fixed effects. Heteroscedasticity-robust standard errors, in parentheses, are clustered at the state level. All models include time-varying state-level covariates as well. Sample sizes are rounded to the nearest 10 as per dataset guidelines. ~ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table S6. Impact of the ACA Medicaid Expansion on Family Functioning Among Children from Low-Income Households (< 138% FPL) – Additional Sensitivity Checks

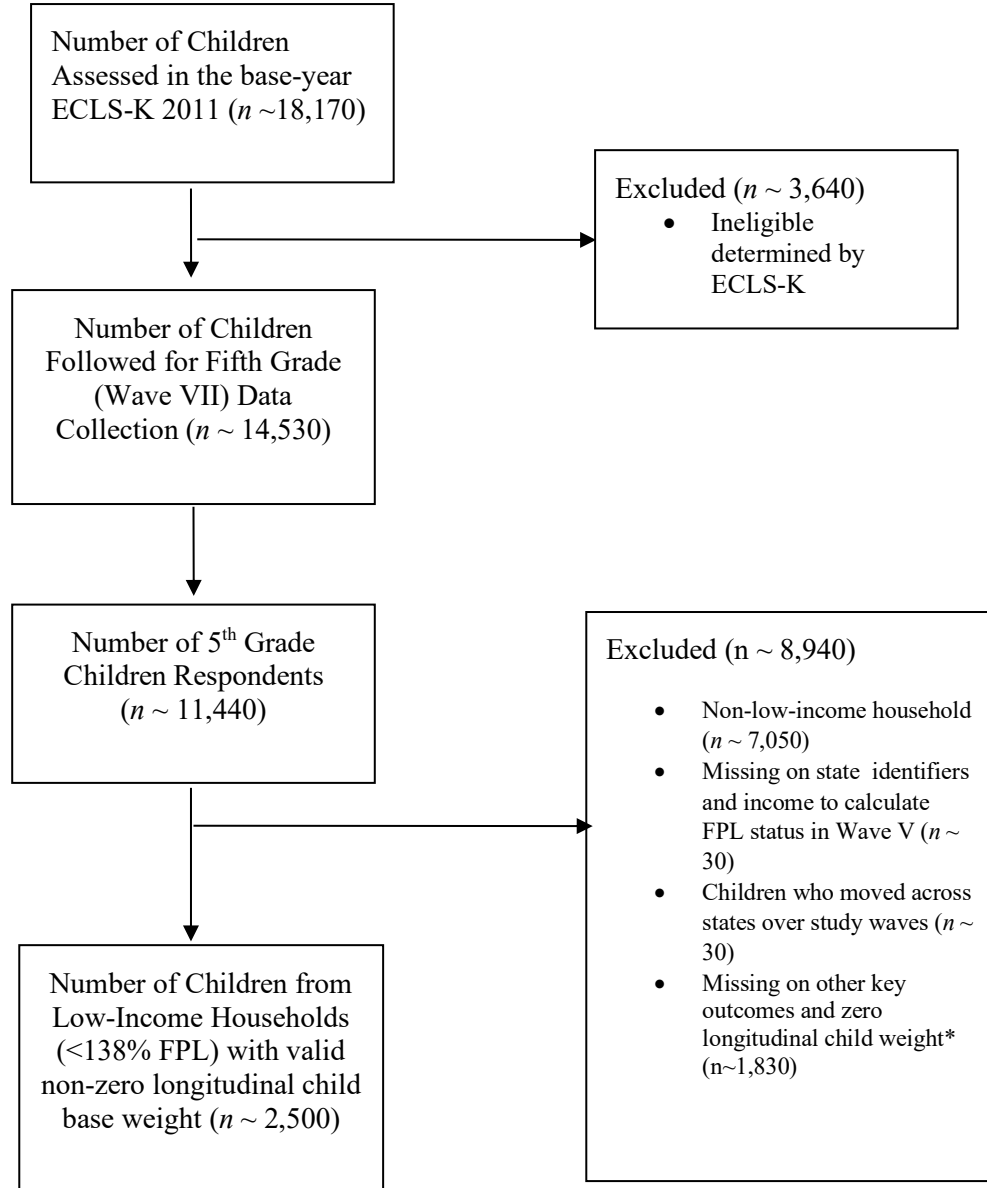| A. Early vs. Late Exclusions	Reading Outside School		Parental Help with Homework		Dinner Together (4 or more days in a week)	
Exclusion	Early	Late	Early	Late	Early	Late
Expansion	2.277*	2.317**	-0.210	-0.375**	0.056**	0.046**
	(1.075)	(0.883)	(0.130)	(0.111)	(0.019)	(0.013)
Mean of DV	17.92	17.92	4.23	4.23	0.897	0.897
Observations (Child-year)	5,170	4,950	4,150	3,970	8,140	10,560
Observations (Child)	1,810	2,340	1,810	2,340	1,820	2,340
B. CCS Adoption	Reading Outside School		Parental Help with Homework		Dinner Together (4 or more days in a week)	
Expansion	2.40**		-0.269*		0.063**	
	(0.835)		(0.106)		(0.019)	
Mean of DV	17.92		4.23		0.897	
Observations (Child-year)	11,580		9,310		11,391	
Observations (Child)	2,520		2,520		2,530	
C. No Sampling Weights	Reading Outside School		Parental Help with Homework		Dinner Together (4 or more days in a week)	
Expansion	0.940~		-0.24**		0.026*	
	(0.489)		(0.079)		(0.012)	
Mean of DV	17.92		3.347		0.897	
Observations (Child-year)	16,320		13,180		16,510	
Observations (Child)	4,170		4,160		4,230	

Notes: Each column of each panel corresponds to a different OLS regression model. Each model includes wave and child fixed effects and sampling weights. Expansion represents β_1 from equation (1), and measures the average effect of the Medicaid expansions after it took place. Panel A adjusts for early and late expansion exclusions; Panel B adjusts for state-year, common core adoption; and Panel C provides unweighted estimates. Mean of each dependent variable (DV) provides the within-child average of the DV after controlling for just wave fixed effects. Heteroscedasticity-robust standard errors, in parentheses, are clustered at the state level. Sample sizes are rounded to the nearest 10 as per dataset guidelines. ~ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table S7. Impact of the ACA Medicaid Expansion on Family Functioning Among Children from Low-Income Households (< 138% FPL) – Wild Bootstrap and Multiple Hypothesis Testing Corrected P-Values

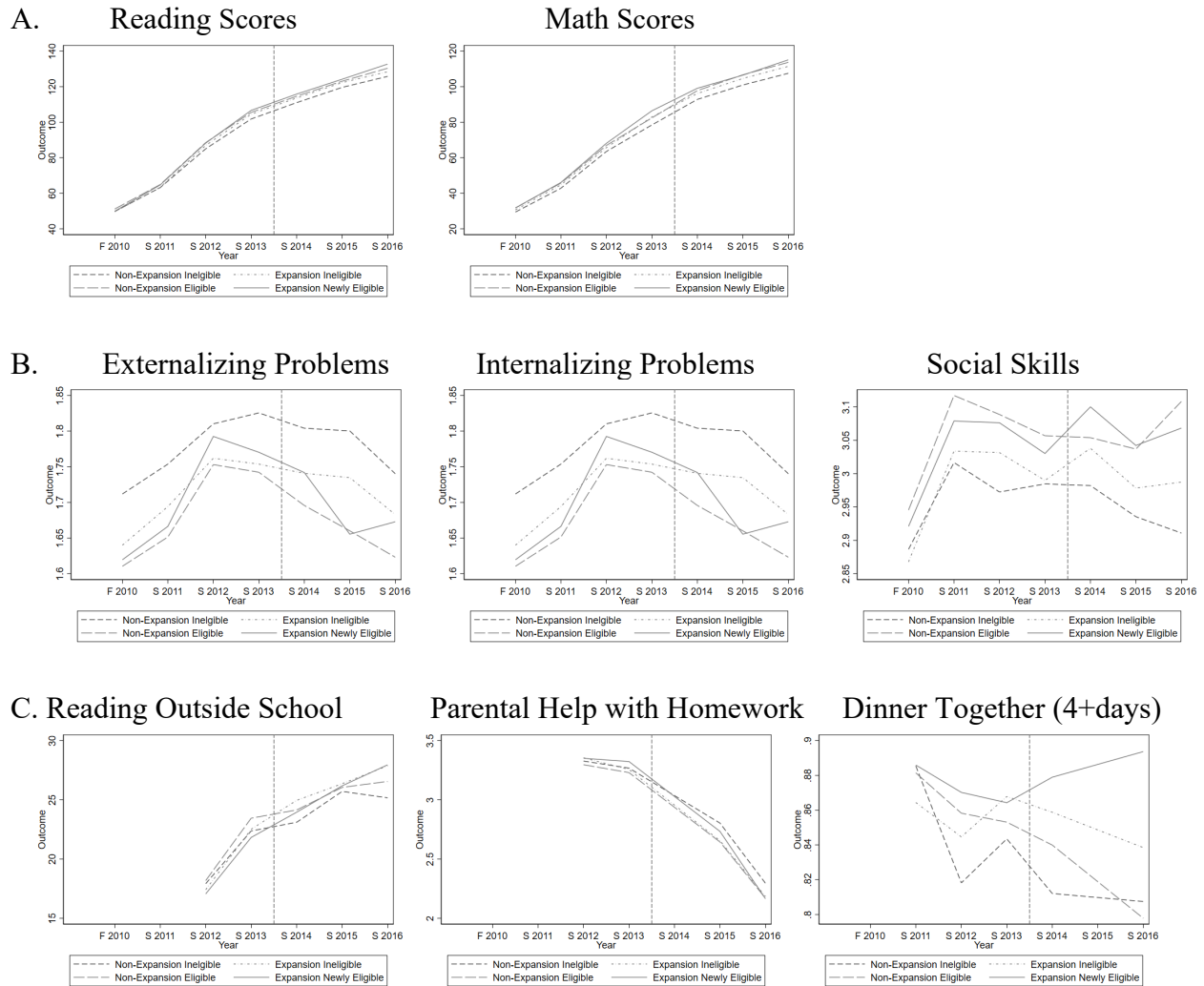| A. Academic Outcomes	Reading Scores	Math Scores	
	(1)	(2)	
Expansion	1.151~	0.111	
Baseline P-Value	0.055	0.919	
Sharpened Q-value	0.074	0.87	
Wild Bootstrap P-Value	0.110	0.616	
B. Socioemotional Outcomes	Externalizing Behaviors	Internalizing Behaviors	Social Skills
	(1)	(2)	(3)
Expansion	0.007	0.023	0.028
Baseline P-Value	0.81	0.93	0.80
Sharpened Q-value	0.87	0.87	0.87
Wild Bootstrap P-Value	0.34	0.95	0.99
C. Family Functioning	Reading Outside School	Parental Help with Homework	Dinner Together (4 or more days in a week)
	(1)	(2)	(3)
Expansion	2.405**	-0.267*	0.048**
Baseline P-Value	0.006	0.017	0.002
Sharpened Q-value	0.022	0.036	0.017
Wild Bootstrap P-Value	0.062	0.035	0.005

Notes: Each cell of each panel corresponds to a different OLS regression model. Expansion represents β_1 from equation (1), and measures the average effect of the Medicaid expansions after it took place. The regressions also include wave, child fixed effects, state-level covariates, and are weighted by sampling weights. We report the baseline p-value from Table 2 on this coefficient for easy reference here. Sharpened q-value provides False Discovery Rate (FDR) q-values. The FDR is the expected proportion of rejections that are type I errors (false rejections) given 8 outcomes are being tested and adjusted for multiple hypothesis testing. Sharpened q-values are introduced in Benjamini, Krieger, and Yekutieli (2006) [BKY, 2006]. We generate the BKY (2006) sharpened two-stage q-values as described in Anderson (2008). Wild cluster bootstrap p-values are only recommended if there are very few clusters, especially treatment clusters, in the analytical sample. With 25 expansion states (i.e. treatment clusters) and 16 non-expansion states in our sample (i.e. control clusters), cluster robust standard errors are valid for inference. Nevertheless, we also report wild cluster bootstrapped p-values created using "boottest" command in STATA from 1,000 replications which provides more conservative standard errors for inference (Cameron & Miller, 2015). Because this command does not support sampling weights, we exclude weights here making these estimates more conservative.
Sample sizes are rounded to the nearest 10 as per dataset guidelines. ~ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Figure S1. Analytic Sample Construction

```
┌──────────────────────────┐
│ Number of Children       │
│ Assessed in the base-year│
│ ECLS-K 2011 (n ~18,170)  │          ┌────────────────────────┐
└──────────────────────────┘          │ Excluded (n ~ 3,640)   │
            │                    ───▶  │  • Ineligible          │
            │                          │    determined by       │
            ▼                          │    ECLS-K              │
┌──────────────────────────┐          └────────────────────────┘
│ Number of Children       │
│ Followed for Fifth Grade │
│ (Wave VII) Data          │
│ Collection (n ~ 14,530)  │
└──────────────────────────┘
            │
            ▼
┌──────────────────────────┐          ┌───────────────────────────────┐
│ Number of 5th Grade      │          │ Excluded (n ~ 8,940)          │
│ Children Respondents     │          │                               │
│ (n ~ 11,440)             │    ───▶  │  • Non-low-income household   │
└──────────────────────────┘          │    (n ~ 7,050)                │
            │                          │  • Missing on state identifiers│
            │                          │    and income to calculate    │
            ▼                          │    FPL status in Wave V (n ~  │
┌──────────────────────────┐          │    30)                        │
│ Number of Children from  │          │  • Children who moved across  │
│ Low-Income Households    │          │    states over study waves (n ~│
│ (<138% FPL) with valid   │          │    30)                        │
│ non-zero longitudinal    │          │  • Missing on other key       │
│ child base weight        │          │    outcomes and zero          │
│ (n ~ 2,500)              │          │    longitudinal child weight* │
└──────────────────────────┘          │    (n~1,830)                  │
                                       └───────────────────────────────┘
```

Notes: Sample sizes are approximate (varies across model specifications); and rounded to the nearest 10 based on dataset guidelines. * The ECLS-K data manual recommends the use of sampling weights as appropriate to balance the trade-off between non-response bias and sample size considerations; therefore we chose the longitudinal weight - w9c29p_9a0 for our analyses that provides appropriate adjustments for attrition and non-response bias in the survey waves we use in our sample.

Figure S2. Raw trends in Outcomes of Interest by Pre-ACA Parental Eligibility Status

A.

Reading Scores

Math Scores

B.

Externalizing Problems

Internalizing Problems

Social Skills

C. Reading Outside School

Parental Help with Homework

Dinner Together (4+days)

Notes: Data from ECLS:K 2011. Expansion states are the treatment states, and non-expansion states are the control states. The x-axis (Year) represents the survey wave, F=fall and S=spring. The vertical line represents January 2014, when the ACA Medicaid expansions were largely implemented. Sample is limited to children in households with incomes below 138% FPL.

Figure S3. Common Core Adoption by States over Time
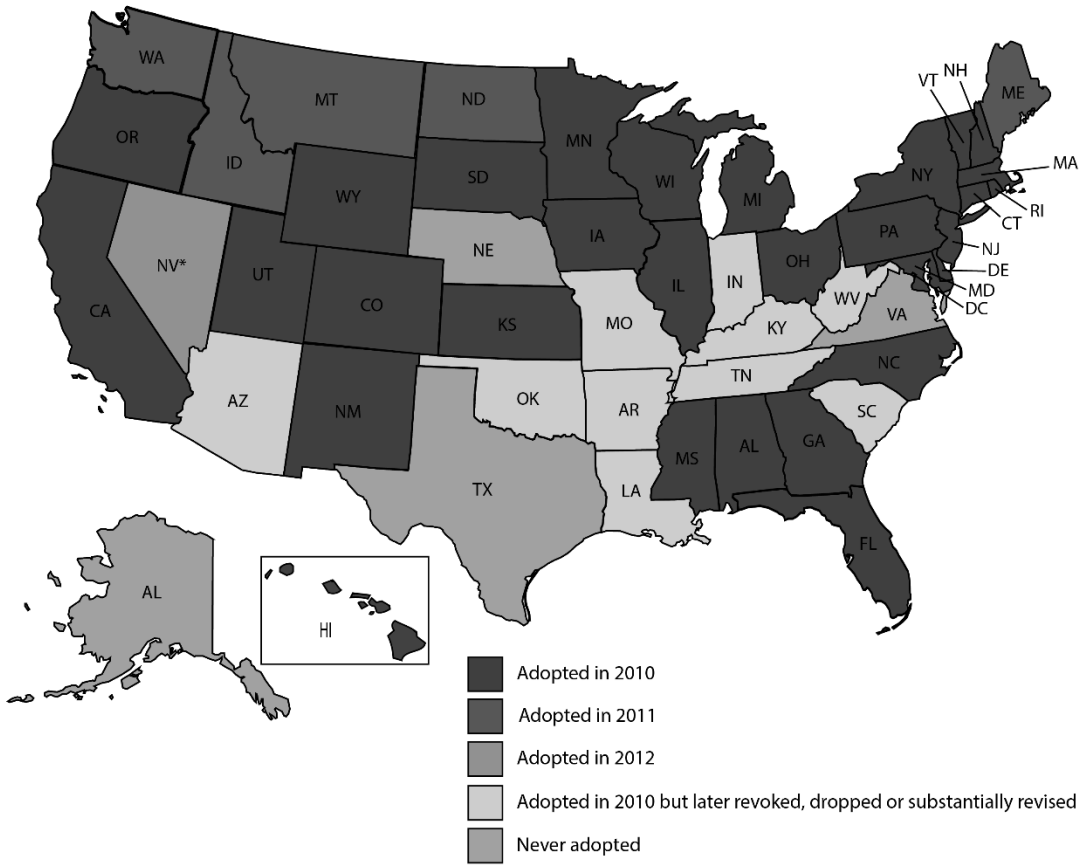
Source: National Conference of State Legislatures, 2014