Supplementary Online Content

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eMethods. Sensitivity Analysis Methods, Missing Data, and Multiple Imputation

Sensitivity Analyses Methods

We performed several sensitivity analyses. To evaluate how the multiple imputation procedure impacted results, we performed a complete case analysis. We also removed states expanding Medicaid in 2014 (Michigan, Hawaii, Iowa, New Mexico, Kentucky, Alaska), which were grouped with NEXP states in the main analysis. We removed cases diagnosed in 2014 or later to avoid potential confounding from other ACA policies enacted in 2014 (additional state Medicaid expansions, introduction of marketplace plans, etc.). We evaluated the 2014 expansions using 2011 to 2015 data, redefining EXP and NEXP states based on their 2014 expansion status (i.e. Iowa, Kentucky, and New Mexico were added to the early expanding states to include all states that had expanded by 2014) and using 2011 and 2013 to test the parallel trends assumption.

Missing Data and Multiple Imputation

There were 1,316 observations (6.2%) with missing values. Most of the observations with missing values were due to missing insurance (n=722, 55% of missing observations, 3.4% of total). There were significant associations between insurance missingness and Medicaid expansion status, age, county education and poverty, and cancer type and stage (**eTable 3**). This suggests that the mechanism of missingness is not "missing completely at random," indicating that analyses not based on multiple imputation may lead to biased estimates.[2] However, multiple imputation will lead to unbiased estimates if a fundamental assumption is met—that the data are "missing at random." "Missing at random" indicates that any non-random mechanisms of missingness are explainable by the data that were observed (e.g. data that is missing due to lack of data at the time of coding can be explained by the observed year of diagnosis). Unbiased estimates can be generated through imputation under the missing at random scenario by adjusting for the variable(s) that explains the missing data pattern (year of diagnosis in the above scenario).[2] However, if the nonrandom mechanisms of missingness cannot be explained by observed data, then the data is considered "missing not at random" (MNAR) and more specialized approaches are required. However, there is no way to assess whether data are missing not at random. In the setting of missingness that can be explained by the observed data (such as expansion status and time period), multiple imputation is a superior option compared to complete case analysis, though we cannot exclude the possibility of MNAR and the subsequent risk of bias.

The aregImpute() function of the R Hmisc package was utilized to generate the multiple imputations. The imputation model included the variables period, state early Medicaid expansion status, an interaction between period and expansion status, all covariates, interactions between the covariates, period, and expansion status; insurance, cancer site, and stage at diagnosis. The interaction terms in the model were specified to avoid nullifying the associations with the response variables.[2,3] Seven complete datasets were imputed so that the number of imputations was approximately equal to the percentage of cases with missing values.[3] For reproducibility, the function set.seed() was specified, with seed equal to 1. Results across the imputed datasets were combined according to Rubin' rules using the mi.meld() function of the R Amelia package.[4]

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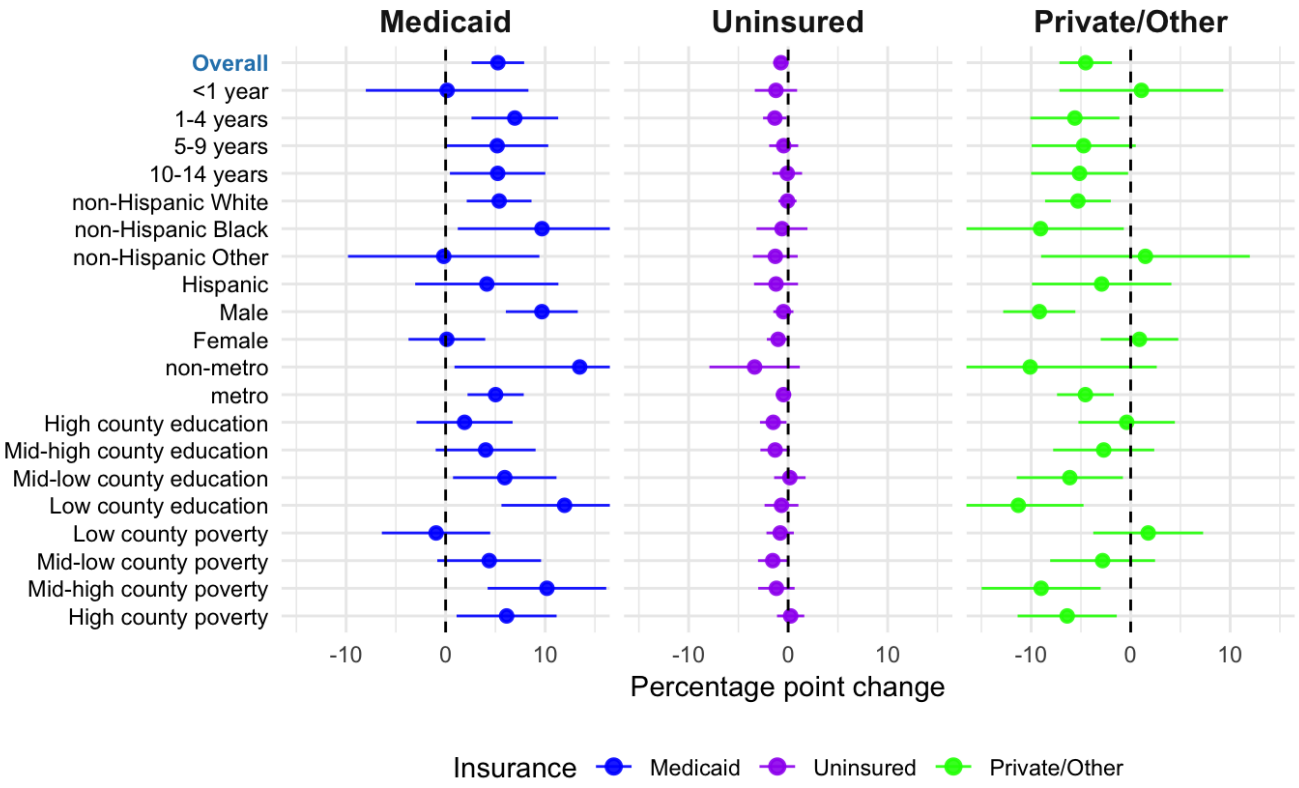
eFigure 1. Adjusted Difference-in-Differences (DID) Estimates of Percentage Point Change in Insurance Type



Changes are calculated after Medicaid expansion in early expansion relative to non–early expansion states.

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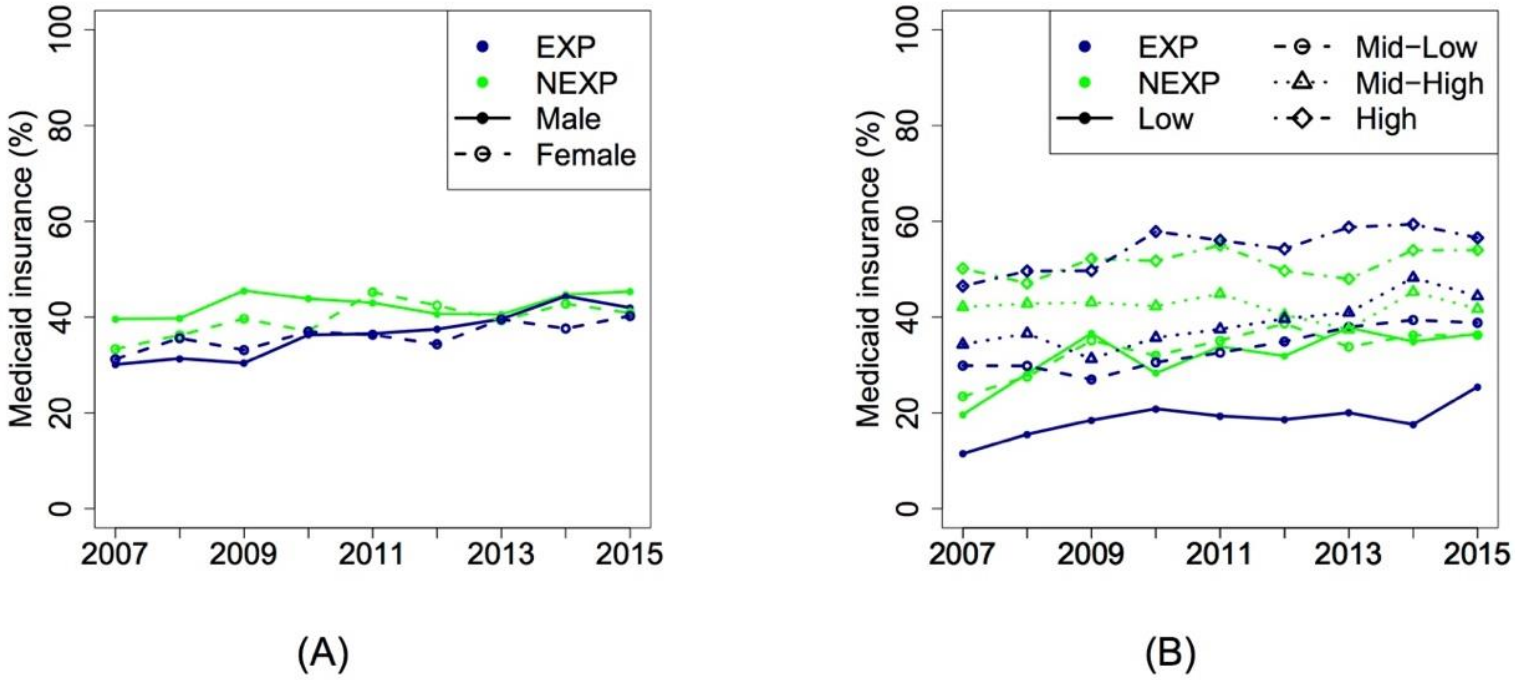
eFigure 2. Trends in Medicaid Coverage in Children With Cancer Over Study Period



Stratified by sex (panel A) and county poverty levels (panel B).

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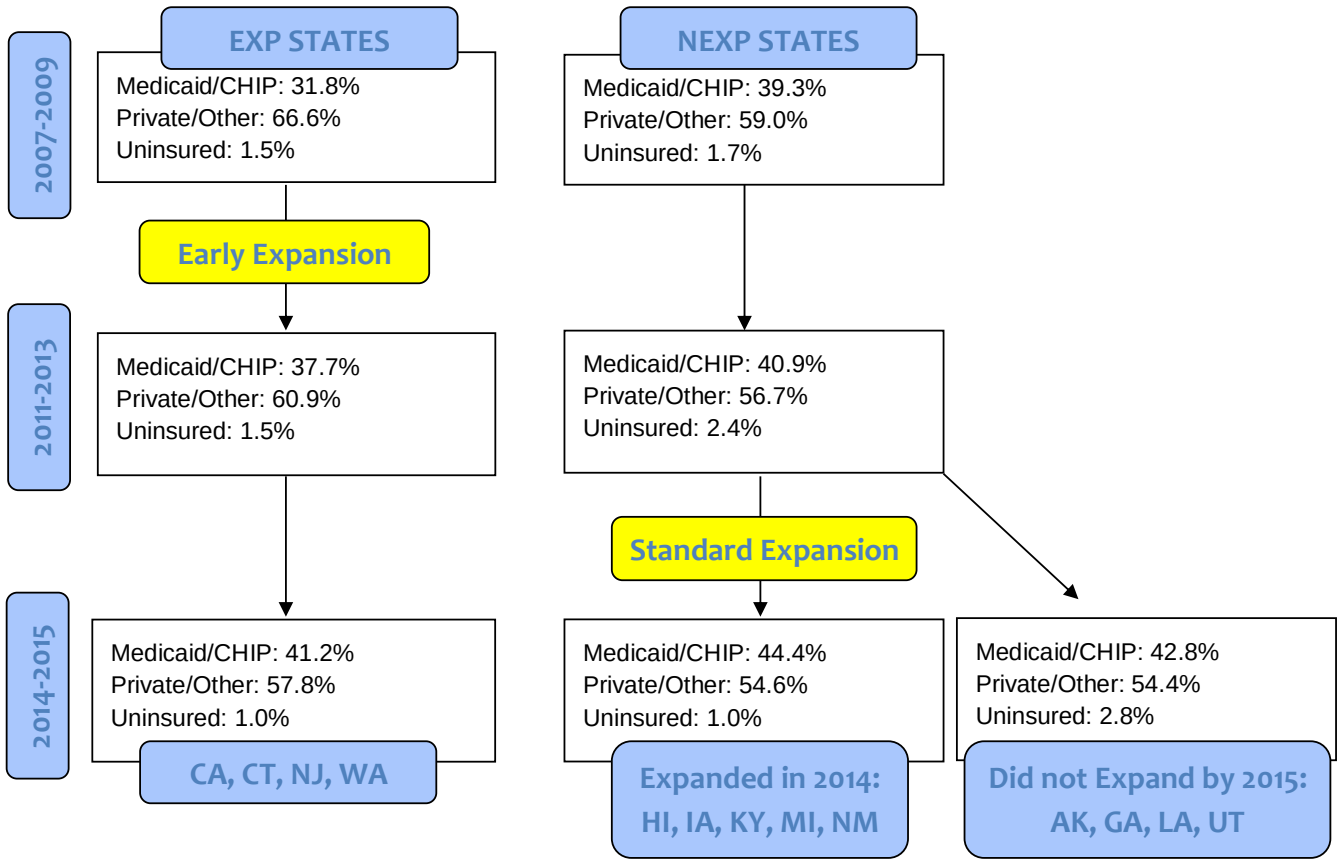
eFigure 3. Change in Childhood Cancer Insurance Status Over Time by State Medicaid Expansion Status



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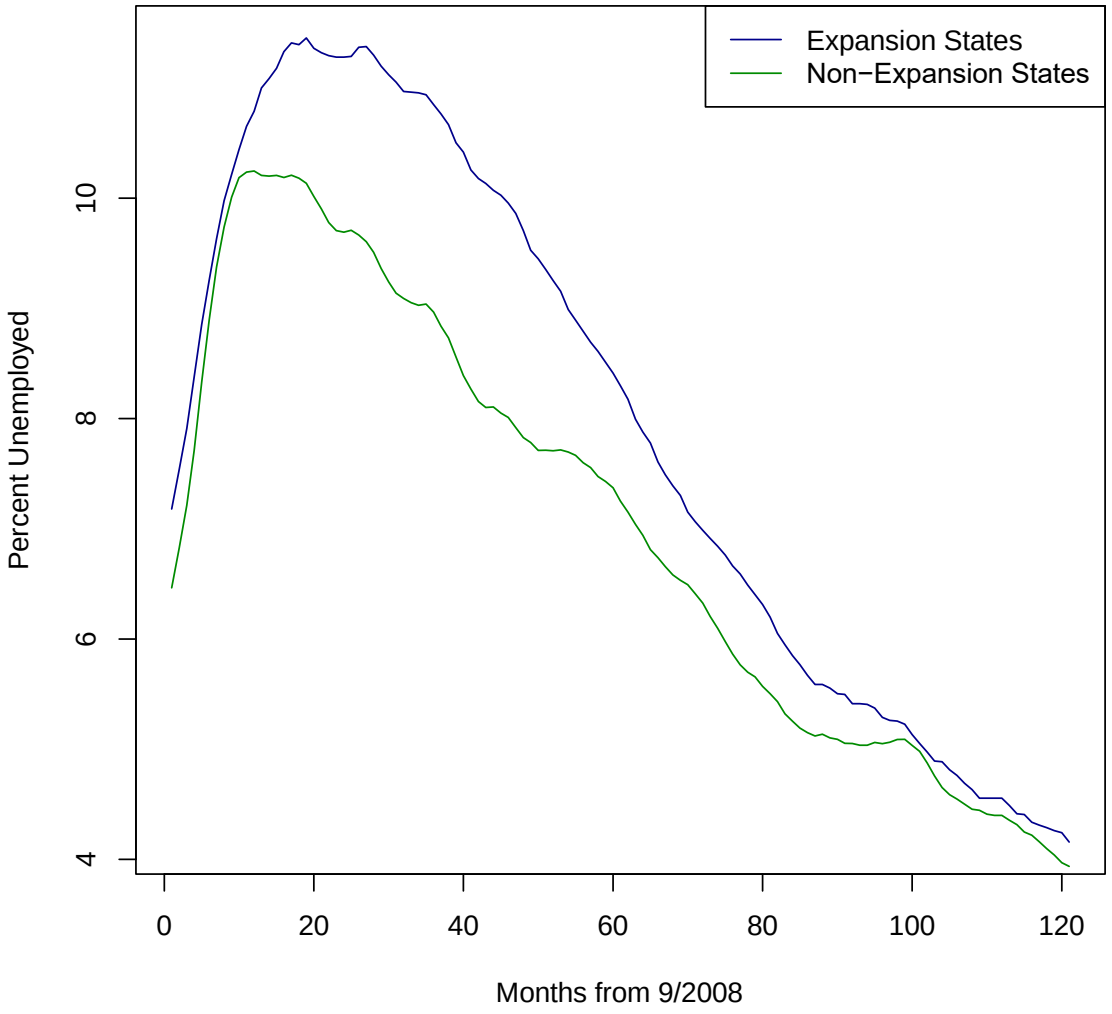
eFigure 4. The Percentage of Adults Unemployed in EXP and NEXP States During Time Period Surrounding the Recession



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eTable 1. Federal Poverty Limit Eligibility Levels for Medicaid/CHIP by Month/Year, Expansion Status, and Period

	Jul-06	Jan-08	Jan-09	Dec-09	Jan-11	Jan-12	Jan-13	Jan-14	Jan-15
Early Expansion States									
California	250	250	250	250	250	250	250	266	266
Connecticut	300	300	300	300	300	300	300	323	323
New Jersey	350	350	350	350	350	350	350	355	355
Washington	250	250	250	300	300	300	300	305	317
Weighted Average	**268.9**	**268.9**	**268.9**	**273.1**	**273.1**	**273.1**	**273.1**	**286.8**	**287.8**
Median	**275**	**275**	**275**	**300**	**300**	**300**	**300**	**314**	**320**
Not Early Expansion States									
Standard (2014) Expanders									
Hawaii	300	300	300	300	300	300	300	313	313
Iowa	200	200	200	300	300	300	300	380	380
Kentucky	200	200	200	200	200	200	200	218	218
Michigan	200	200	200	200	200	200	200	217	217
New Mexico	235	235	235	235	235	235	235	305	305
Weighted Average	**212.6**	**212.6**	**212.6**	**235.2**	**235.2**	**235.2**	**235.2**	**273.1**	**273.1**
Median	**200**	**200**	**200**	**235**	**235**	**235**	**235**	**305**	**305**
Never (by 2015) Expanders									
Alaska	175	175	175	175	175	175	175	208	208
Georgia	235	235	235	235	235	235	235	252	252
Louisiana	200	200	250	250	250	250	250	255	255
Utah	200	200	200	200	200	200	200	205	205
Weighted Average	**218.8**	**218.8**	**231.0**	**231.0**	**231.0**	**231.0**	**231.0**	**242.9**	**242.9**
Median	**200**	**200**	**217.5**	**217.5**	**217.5**	**217.5**	**217.5**	**230**	**230**
Combined NEXP States									
Weighted Average	**216.1**	**216.1**	**222.9**	**232.8**	**232.8**	**232.8**	**232.8**	**256.2**	**256.2**
Median	**200**	**200**	**200**	**235**	**235**	**235**	**235**	**252**	**252**

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eTable 2. Results of Sensitivity Analyses[a]

	Analysis of 2014 Medicaid Expansion (2011-2015)			Complete case analysis			Remove 2014-15 Medicaid expansion states			Remove 2014-2015		
	DID		DDD	DID		DDD	DID		DDD	DID		DDD
	Estimate (95% CI)[b]	p-value	p-value	Estimate (95% CI)[b]	p-value	p-value	Estimate (95% CI)[b]	p-value	p-value	Estimate (95% CI)[b]	p-value	p-value
	Medicaid											
Overall	2.16 (-2, 6.31)	0.31	NA	5.75 (3.1, 8.41)	<0.001	NA	8.37 (5.12, 11.61)	<0.001	NA	5.28 (2.19, 8.38)	<0.001	NA
<1 year	2.37 (-10.54, 15.29)	0.719	0.23	0.23 (-8.22, 8.68)	0.958	0.49	8.03 (-1.88, 17.93)	0.112	0.76	1.42 (-8.01, 10.85)	0.768	0.71
1-4 years	5.76 (-1.25, 12.78)	0.107		7.72 (3.19, 12.25)	0.001		10.98 (5.57, 16.4)	0		7.58 (2.48, 12.67)	0.004	
5-9 years	-5.6 (-13.74, 2.55)	0.178		5.43 (0.18, 10.68)	0.043		7.76 (1.31, 14.21)	0.018		5.91 (-0.02, 11.84)	0.051	
10-14 years	5.03 (-2.25, 12.31)	0.175		5.62 (0.74, 10.5)	0.024		5.59 (-0.6, 11.79)	0.077		3.55 (-1.98, 9.08)	0.209	
non-Hispanic White	0.49 (-4.65, 5.62)	0.853	0.49	5.8 (2.49, 9.11)	0.001	0.52	8.37 (4.33, 12.41)	0	0.83	6.01 (2.29, 9.73)	0.002	0.68
non-Hispanic Black	2.74 (-8.37, 13.85)	0.629		9.89 (1.57, 18.21)	0.02		12.26 (3.37, 21.15)	0.007		9.29 (-0.19, 18.77)	0.055	
non-Hispanic Other	-11.43 (-29.14, 6.28)	0.206		0.04 (-10.95, 11.03)	0.994		4.28 (-13.17, 21.73)	0.631		4.89 (-5.85, 15.63)	0.372	
Hispanic	7.04 (-4.01, 18.08)	0.212		4.27 (-2.9, 11.44)	0.243		7.46 (-1.97, 16.89)	0.121		2.29 (-5.96, 10.54)	0.586	
Male	2.11 (-3.72, 7.94)	0.478	0.94	10.43 (6.79, 14.06)	0	<0.001	12.25 (7.79, 16.7)	0	0.012	10.48 (6.13, 14.83)	0	<0.001
Female	2.21 (-3.71, 8.13)	0.464		0.23 (-3.67, 4.13)	0.908		3.83 (-0.86, 8.52)	0.109		-0.76 (-5.22, 3.71)	0.74	
non-metro	10.19 (-2.08, 22.46)	0.104	0.19	13.31 (0.5, 26.11)	0.042	0.24	12.83 (-1.2, 26.85)	0.073	0.57	10.22 (-3.93, 24.36)	0.157	0.59
metro	1.13 (-3.38, 5.63)	0.624		5.33 (2.47, 8.2)	0		8.59 (5.17, 12.01)	0		5.05 (1.7, 8.41)	0.003	
High county education	1.13 (-6.51, 8.77)	0.772	0.56	1.85 (-3.01, 6.7)	0.456	0.059	5.52 (-0.67, 11.7)	0.08	0.21	2.21 (-3.31, 7.73)	0.432	0.24
Mid-high county education	-1.36 (-8.77, 6.06)	0.72		3.9 (-1.2, 9.01)	0.134		4.07 (-1.95, 10.1)	0.185		3.74 (-2.01, 9.48)	0.202	
Mid-low county education	5.25 (-2.83, 13.32)	0.203		6.75 (1.39, 12.11)	0.014		11.42 (4.99, 17.86)	0.001		6.12 (0.11, 12.13)	0.046	
Low county education	7.09 (-3.44, 17.62)	0.187		12.92 (6.29, 19.56)	0		13.82 (5.8, 21.84)	0.001		12.12 (4.47, 19.76)	0.002	
Low county poverty	-0.14 (-11.62, 11.34)	0.981	0.91	-0.94 (-6.52, 4.63)	0.74	0.021	4.54 (-4.27, 13.35)	0.312	0.29	-1.48 (-7.89, 4.94)	0.652	0.16

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Mid-low county poverty	1.24 (-6.56, 9.04)	0.755		4.06 (-1.19, 9.32)	0.13		6.16 (-0.02, 12.34)	0.051		4.62 (-1.41, 10.64)	0.133	
Mid-high county poverty	2.39 (-6.83, 11.61)	0.611		11.06 (5.09, 17.03)	0		13.37 (6.61, 20.13)	0		8.39 (1.58, 15.2)	0.016	
High county poverty	4.45 (-2.69, 11.58)	0.222		6.86 (1.83, 11.89)	0.008		8.45 (2.41, 14.5)	0.006		6.76 (0.9, 12.62)	0.024	
	Uninsured											
Overall	-0.74 (-2.07, 0.58)	0.27	NA	-0.78 (-1.54, -0.01)	0.047	NA	-0.8 (-1.82, 0.22)	0.12	NA	-0.61 (-1.51, 0.29)	0.18	NA
<1 year	-4.04 (-7.57, -0.51)	0.025	0.51	-1.39 (-3.61, 0.83)	0.22	0.52	-2.55 (-4.99, -0.11)	0.041	0.19	-0.85 (-3.55, 1.84)	0.535	0.48
1-4 years	-0.36 (-2.2, 1.48)	0.702		-1.41 (-2.61, -0.22)	0.02		-1.88 (-3.6, -0.16)	0.032		-1.37 (-2.69, -0.05)	0.041	
5-9 years	-0.28 (-2.62, 2.07)	0.817		-0.47 (-2.06, 1.13)	0.566		0.28 (-1.81, 2.37)	0.792		-0.71 (-2.45, 1.02)	0.422	
10-14 years	-0.23 (-2.37, 1.9)	0.83		-0.1 (-1.64, 1.43)	0.895		0.2 (-1.85, 2.25)	0.85		0.35 (-1.42, 2.12)	0.697	
non-Hispanic White	0.17 (-1.31, 1.66)	0.818	0.27	-0.11 (-1.02, 0.79)	0.806	0.69	0.16 (-1.02, 1.35)	0.788	0.66	-0.45 (-1.53, 0.64)	0.418	0.99
non-Hispanic Black	0.8 (-2.28, 3.87)	0.611		-0.61 (-3.26, 2.04)	0.651		-0.85 (-3.67, 1.97)	0.554		-0.39 (-3.35, 2.58)	0.798	
non-Hispanic Other	-2.58 (-6.75, 1.59)	0.225		-1.4 (-3.81, 1.02)	0.256		-2.32 (-7.82, 3.17)	0.407		-0.09 (-2.81, 2.62)	0.946	
Hispanic	-4.08 (-7.08, -1.07)	0.008		-1.25 (-4.03, 1.54)	0.38		-1.8 (-5.83, 2.22)	0.38		-0.07 (-2.58, 2.45)	0.957	
Male	-1.1 (-2.9, 0.71)	0.234	0.54	-0.52 (-1.56, 0.51)	0.322	0.48	-0.39 (-1.74, 0.95)	0.567	0.39	-0.15 (-1.35, 1.06)	0.813	0.26
Female	-0.24 (-2.16, 1.68)	0.807		-1.06 (-2.19, 0.06)	0.064		-1.27 (-2.81, 0.28)	0.107		-1.19 (-2.55, 0.16)	0.085	
non-metro	-0.44 (-4.35, 3.47)	0.827	0.78	-3.67 (-8.54, 1.19)	0.139	0.19	-1.63 (-6.73, 3.47)	0.53	0.7	-3.44 (-9.18, 2.29)	0.24	0.28
metro	-0.95 (-2.35, 0.45)	0.185		-0.49 (-1.27, 0.29)	0.217		-0.88 (-1.94, 0.17)	0.102		-0.04 (-0.93, 0.84)	0.922	
High county education	0.07 (-2.21, 2.35)	0.949	0.87	-1.51 (-2.9, -0.12)	0.033	0.49	-1.62 (-3.5, 0.25)	0.09	0.64	-1.64 (-3.24, -0.04)	0.044	0.43
Mid-high county education	-0.37 (-2.2, 1.47)	0.697		-1.33 (-2.83, 0.17)	0.083		-1.39 (-3.47, 0.69)	0.189		-0.69 (-2.38, 1)	0.421	
Mid-low county education	-1.56 (-4.03, 0.91)	0.215		0.08 (-1.53, 1.68)	0.923		-0.5 (-2.53, 1.52)	0.627		0.33 (-1.47, 2.13)	0.721	
Low county education	-0.46 (-3.24, 2.32)	0.744		-0.78 (-2.83, 1.28)	0.46		0.12 (-2.24, 2.48)	0.919		-1.57 (-3.71, 0.58)	0.152	
Low county poverty	2.1 (-0.96, 5.16)	0.179	0.14	-0.8 (-2.21, 0.62)	0.27	0.3	-0.47 (-2.26, 1.33)	0.61	0.093	-0.55 (-2.23, 1.12)	0.518	0.27

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Mid-low county poverty	0.2 (-1.98, 2.37)	0.86		-1.71 (-3.15, -0.27)	0.02		-1.5 (-3.31, 0.32)	0.105		-2.23 (-3.9, -0.57)	0.009	
Mid-high county poverty	-1.81 (-4.55, 0.93)	0.196		-1.21 (-3.07, 0.64)	0.2		-2.35 (-4.56, -0.14)	0.037		-0.33 (-2.4, 1.74)	0.754	
High county poverty	-1.48 (-3.28, 0.33)	0.108		0.2 (-1.26, 1.65)	0.792		1.08 (-0.85, 3.02)	0.273		0.24 (-1.44, 1.92)	0.779	
	Private/Other											
Overall	-1.41 (-5.61, 2.78)	0.509	NA	-4.98 (-7.65, -2.31)	<0.001	NA	-7.57 (-10.82, -4.31)	<0.001	NA	-4.45 (-7.48, -1.42)	0.004	NA
<1 year	1.67 (-11.21, 14.55)	0.799	0.199	1.71 (-10.67, 14.09)	0.787	0.501	-5.47 (-15.32, 4.37)	0.275	0.906	0.16 (-9.39, 9.72)	0.973	0.722
1-4 years	-5.41 (-12.38, 1.56)	0.128		-5.64 (-12.34, 1.06)	0.099		-9.1 (-14.51, -3.69)	0.001		-6.09 (-11.2, -0.98)	0.019	
5-9 years	5.87 (-2.47, 14.22)	0.168		4.43 (-7.38, 16.24)	0.462		-8.04 (-14.52, -1.57)	0.015		-4.65 (-10.74, 1.45)	0.135	
10-14 years	-4.8 (-12.13, 2.53)	0.199		-4.79 (-11.84, 2.25)	0.182		-5.79 (-12.03, 0.45)	0.069		-4.1 (-9.83, 1.63)	0.16	
non-Hispanic White	-0.66 (-5.91, 4.59)	0.806	0.506	-1.25 (-7.71, 5.2)	0.703	0.374	-8.53 (-12.64, -4.43)	<0.001	0.761	-5.49 (-9.37, -1.62)	0.005	0.787
non-Hispanic Black	-3.54 (-14.62, 7.54)	0.531		-4.44 (-16.14, 7.26)	0.457		-11.41 (-20.26, -2.56)	0.012		-8.74 (-18.45, 0.96)	0.077	
non-Hispanic Other	14.01 (-3.68, 31.69)	0.121		12.26 (-7.48, 32)	0.223		-1.95 (-19.42, 15.52)	0.826		-4.03 (-16.14, 8.08)	0.514	
Hispanic	-2.96 (-14.02, 8.1)	0.6		-3.23 (-13.76, 7.29)	0.547		-5.66 (-14.78, 3.47)	0.224		-1.76 (-9.9, 6.38)	0.671	
Male	-1.01 (-6.92, 4.89)	0.737	0.791	-2.23 (-11.3, 6.84)	0.629	<0.001	-11.86 (-16.32, -7.39)	0	0.006	-10.11 (-14.29, -5.92)	<0.001	<0.001
Female	-1.97 (-7.88, 3.93)	0.512		-1.56 (-7.65, 4.54)	0.617		-2.57 (-7.28, 2.15)	0.287		2.15 (-2.33, 6.63)	0.347	
non-metro	-9.75 (-22.11, 2.61)	0.122	0.162	-9.93 (-22.38, 2.51)	0.118	0.494	-11.19 (-25.35, 2.96)	0.121	0.668	-7.03 (-21.4, 7.34)	0.337	0.856
metro	-0.18 (-4.7, 4.35)	0.939		-0.76 (-6.49, 4.98)	0.796		-7.71 (-11.15, -4.26)	0		-4.7 (-7.99, -1.42)	0.005	
High county education	-1.2 (-8.96, 6.56)	0.762	0.629	-0.96 (-8.38, 6.46)	0.8	0.029	-3.89 (-10.11, 2.33)	0.22	0.104	-0.27 (-5.97, 5.43)	0.926	0.174
Mid-high county education	1.72 (-5.74, 9.19)	0.651		1.15 (-6.86, 9.17)	0.778		-2.68 (-8.74, 3.39)	0.387		-2.83 (-8.81, 3.15)	0.353	
Mid-low county education	-3.68 (-11.82, 4.45)	0.375		-4.25 (-12.4, 3.89)	0.306		-10.92 (-17.39, -4.45)	0.001		-6.31 (-12.46, -0.15)	0.045	
Low county education	-6.62 (-17.18, 3.93)	0.219		-7.29 (-18.32, 3.75)	0.196		-13.94 (-21.89, -6)	0.001		-10.58 (-18.2, -2.96)	0.007	

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Low county poverty	-1.95 (-13.67, 9.76)	0.744	NR	-1.28 (-12.66, 10.11)	0.826	0.019	-4.07 (-12.92, 4.77)	0.367	0.373	2.17 (-4.33, 8.68)	0.512	0.133
Mid-low county poverty	-1.44 (-9.14, 6.27)	0.715		-1.56 (-9.04, 5.92)	0.682		-4.66 (-10.89, 1.57)	0.142		-2.46 (-8.55, 3.63)	0.429	
Mid-high county poverty	-0.58 (-9.79, 8.62)	0.901		-1.7 (-13.25, 9.86)	0.773		-11.02 (-17.8, -4.24)	0.001		-7.73 (-14.61, -0.85)	0.028	
High county poverty	-2.97 (-10.09, 4.16)	0.414		-3.61 (-11.2, 3.99)	0.352		-9.54 (-15.54, -3.53)	0.002		-6.75 (-12.58, -0.92)	0.023	

[a]Estimates are based on multiple imputation with the exception of the complete case analysis results.
[b]Estimates are based on models adjusted for age, race, sex, residence, county education, and county poverty, except the variable used to define the strata in stratified analyses.
Note that the following analyses did not meet the parallel trends assumption and should be interpreted with caution: Remove 2014-2015 Expansion States: Medicaid non-Hispanic other, Uninsured age 10-14; Complete Case Analysis: Medicaid non-Hispanic white, Medicaid mid-low county poverty; Remove 2014-2015: Uninsured <1 year, Uninsured 5-9 years.
DID = difference-in-differences. DDD = difference-in-difference-in-differences. NR = not reported due to non-parallel trends. NA = not applicable.

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eTable 3. Characteristics of Study Population by Missing Data on Insurance Status

No. (%)	Total	Not.Missing	Missing	p-value[a]
Total	21069 (100)	20347 (96.6)	722 (3.4)	NA
Insurance				NA
None	12294 (100)	12294 (100)	0 (0)	
Medicaid	7728 (100)	7728 (100)	0 (0)	
Private	325 (100)	325 (100)	0 (0)	
Missing	722 (100)	0 (0)	722 (100)	
Early Medicaid Expansion Status				<.001
Expansion	7833 (100)	7466 (95.3)	367 (4.7)	
Non-Expansion	13236 (100)	12881 (97.3)	355 (2.7)	
Time Period				0.72
2007-2009	8438 (100)	8234 (97.6)	204 (2.4)	
2011-2015	12631 (100)	12113 (95.9)	518 (4.1)	
Sex				0.63
Male	11265 (100)	10886 (96.6)	379 (3.4)	
Female	9804 (100)	9461 (96.5)	343 (3.5)	
Age				0.018
<1	2071 (100)	1969 (95.1)	102 (4.9)	
1-4	7427 (100)	7186 (96.8)	241 (3.2)	
5-9	5463 (100)	5307 (97.1)	156 (2.9)	
10-14	6108 (100)	5885 (96.3)	223 (3.7)	
Race/Ethnicity				0.19
Non-Hispanic White	10185 (100)	9860 (96.8)	325 (3.2)	
Non-Hispanic Other	1854 (100)	1803 (97.2)	51 (2.8)	
Non-Hispanic Black	2317 (100)	2215 (95.6)	102 (4.4)	
Hispanic	6441 (100)	6261 (97.2)	180 (2.8)	
Missing	272 (100)	208 (76.5)	64 (23.5)	
County Education				<.001
<10.9	4910 (100)	4704 (95.8)	206 (4.2)	
>=10.9 & <14.1	4923 (100)	4744 (96.4)	179 (3.6)	
>=14.1 & <20.7	5232 (100)	5066 (96.8)	166 (3.2)	
>20.7	5999 (100)	5829 (97.2)	170 (2.8)	
Missing	5 (100)	4 (80)	1 (20)	
County Income				0.012
<38	5086 (100)	4914 (96.6)	172 (3.4)	
>=38 & <43	5441 (100)	5281 (97.1)	160 (2.9)	

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No. (%)	Total	Not.Missing	Missing	p-value[a]
>=43 & <63	4112 (100)	3940 (95.8)	172 (4.2)	
>63	6425 (100)	6208 (96.6)	217 (3.4)	
Missing	5 (100)	4 (80)	1 (20)	
Residence				0.23
Non-metro	1871 (100)	1781 (95.2)	90 (4.8)	
Metro	19131 (100)	18501 (96.7)	630 (3.3)	
Missing	67 (100)	65 (97)	2 (3)	
Cancer Type				<.001
CNS and miscellaneous intracranial and intraspinal neoplasms	4289 (100)	4150 (96.8)	139 (3.2)	
Germ cell tumors, trophoblastic tumors, and neoplasms of gonads	730 (100)	710 (97.3)	20 (2.7)	
Hepatic Tumors	389 (100)	378 (97.2)	11 (2.8)	
Leukemias, myeloproliferative diseases, and myelodysplastic diseases	6797 (100)	6625 (97.5)	172 (2.5)	
Lymphomas and reticuloendothelial neoplasms	2180 (100)	2102 (96.4)	78 (3.6)	
Malignant Bone Tumors	963 (100)	940 (97.6)	23 (2.4)	
Neuroblastoma and other peripheral nervous cell tumors	1438 (100)	1387 (96.5)	51 (3.5)	
Other malignant epithelial neoplasms and malignant melanomas	1052 (100)	980 (93.2)	72 (6.8)	
Other/Unspecified	75 (100)	59 (78.7)	16 (21.3)	
Renal Tumors	1121 (100)	1078 (96.2)	43 (3.8)	
Retinoblastoma	586 (100)	556 (94.9)	30 (5.1)	
Soft tissue and other extraosseous sarcomas	1449 (100)	1382 (95.4)	67 (4.6)	
Stage				0.013
I	3109 (100)	2998 (96.4)	111 (3.6)	
II	1871 (100)	1826 (97.6)	45 (2.4)	
III	7955 (100)	7768 (97.6)	187 (2.4)	
Unstaged	7683 (100)	7420 (96.6)	263 (3.4)	
Missing	451 (100)	335 (74.3)	116 (25.7)	

[a]p-values are based on estimates from a multivariable logistic regression model with binary variable indicating missing insurance as the response variable.

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