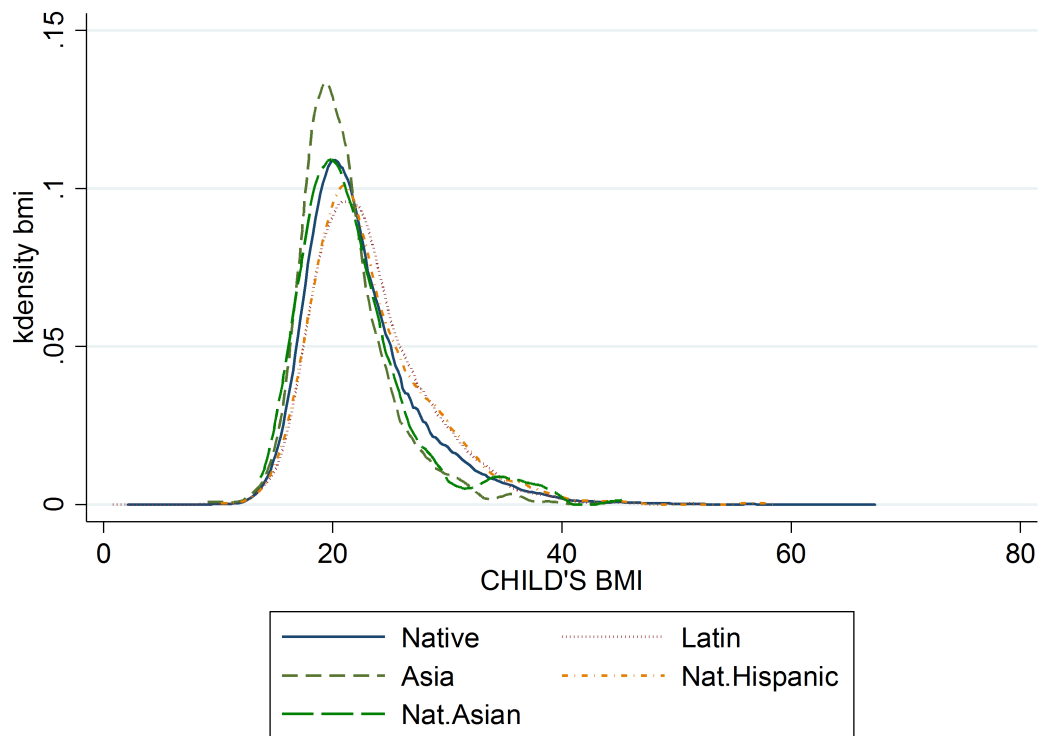# APPENDIX: Health Care Usage and Health Status of Immigrant Children: The Effects of Nativity versus Citizenship

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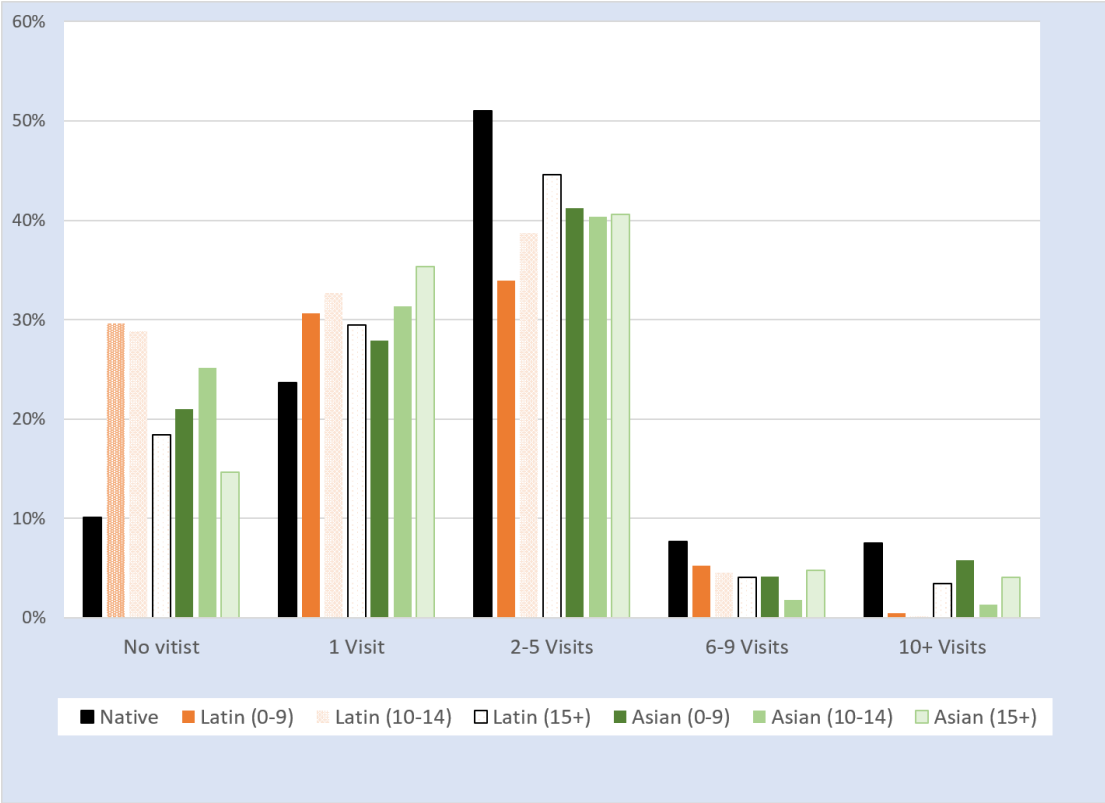
Figure 1: Children's BMI density by Region of Birth and Race/Ethnicity

Note:Complex sample design considered.

Figure 2: Doctor Visits: Children of Immigrants by Maternal Region of Birth and Years in the US

Note:Complex sample design considered.

Table 1: Summary Statistics – Weighted

	Natives	Nat. Hispanic	Nat. Asian	Latin American	Asia
Obese	0.150***	0.206***	0.109***	0.191***	0.0790***
	(0.004)	(0.013)	(0.027)	(0.007)	(0.011)
0-9 Yrs in the US				0.0390***	0.0714***
				(0.004)	(0.009)
10-14 Yrs in the US				0.0841***	0.105***
				(0.006)	(0.013)
15 + Yrs in the US				0.817***	0.823***
				(0.008)	(0.015)
No visits	0.101***	0.137***	0.138***	0.195***	0.162***
	(0.003)	(0.011)	(0.031)	(0.009)	(0.014)
1 Visit	0.237***	0.245***	0.233***	0.295***	0.349***
	(0.004)	(0.013)	(0.039)	(0.010)	(0.017)
2-5 visits	0.510***	0.503***	0.495***	0.434***	0.406***
	(0.005)	(0.015)	(0.053)	(0.009)	(0.020)
6-9 visits	0.0770***	0.0627***	0.0674**	0.0430***	0.0441***
	(0.003)	(0.007)	(0.025)	(0.004)	(0.010)
10 + visits	0.0751***	0.0519***	0.0663***	0.0337***	0.0391***
	(0.003)	(0.007)	(0.022)	(0.004)	(0.008)
Child: Female	0.491***	0.495***	0.501***	0.497***	0.479***
	(0.005)	(0.014)	(0.051)	(0.010)	(0.020)
Child: Age	14.47***	14.42***	14.42***	14.49***	14.54***
	(0.017)	(0.050)	(0.160)	(0.033)	(0.069)
Child: Foreign born	0.0111***	0.0103***	0.0470**	0.238***	0.275***
	(0.001)	(0.003)	(0.018)	(0.009)	(0.018)
Mother: BMI	15.42***	15.25***	11.14***	13.41***	9.790***
	(0.206)	(0.543)	(1.292)	(0.333)	(0.573)
Mother: Unemployed	0.292***	0.305***	0.295***	0.432***	0.322***
	(0.005)	(0.015)	(0.047)	(0.011)	(0.019)
Mother: Married	0.690***	0.605***	0.733***	0.725***	0.863***
	(0.005)	(0.015)	(0.037)	(0.009)	(0.013)
Mother: High School Dropout	0.0846***	0.158***	0.0527**	0.514***	0.131***
	(0.003)	(0.012)	(0.021)	(0.011)	(0.014)
Mother: Some college	0.265***	0.315***	0.158***	0.146***	0.130***
	(0.005)	(0.014)	(0.031)	(0.007)	(0.014)
Mother: College Degree	0.352***	0.243***	0.383***	0.128***	0.426***
	(0.005)	(0.016)	(0.051)	(0.007)	(0.020)
Mother: Graduate School	0.0972***	0.0501***	0.136***	0.0289***	0.147***
	(0.003)	(0.006)	(0.029)	(0.003)	(0.015)
Mother: Age	43.04***	39.53***	43.11***	41.18***	43.62***
	(0.089)	(0.223)	(0.852)	(0.153)	(0.284)
Below Poverty level	0.187***	0.270***	0.150***	0.360***	0.200***
	(0.004)	(0.014)	(0.046)	(0.009)	(0.016)
Above Poverty level	0.149***	0.212***	0.134***	0.358***	0.142***
	(0.004)	(0.013)	(0.037)	(0.011)	(0.016)
Mother: Usual Place of Care	0.553***	0.594***	0.646***	0.651***	0.649***
	(0.005)	(0.016)	(0.047)	(0.010)	(0.020)
Mother: Uninsured	0.132***	0.181***	0.122***	0.436***	0.134***
	(0.004)	(0.011)	(0.033)	(0.011)	(0.013)
Mother: Non citizen				0.614***	0.271***
				(0.012)	(0.019)
Good Health	0.978***	0.971***	0.966***	0.965***	0.990***
	(0.002)	(0.004)	(0.024)	(0.004)	(0.003)
Survey year	2,011***	2,011***	2,011***	2,011***	2,011***
	(0.022)	(0.069)	(0.216)	(0.040)	(0.080)
US region	2.595***	3.062***	3.118***	3.001***	2.950***
	(0.015)	(0.039)	(0.107)	(0.031)	(0.048)
Observations	16,660	1,851	297	4,160	1,111

Table 2: Odd Ratios: Logit Regression – Comparison with Children of Native Born Mothers

VARIABLES	(1) Variables Nat/Latin	(2) Nat-Hisp/Latin	(3) Nat/Asia	(4) Nat-Asian/Asia
0-9 Yrs in the US	0.963	0.917	0.524	0.733
	(0.346)	(0.336)	(0.397)	(0.581)
10-14 Yrs in the US	0.692*	0.662*	0.107***	0.131**
	(0.154)	(0.153)	(0.0817)	(0.107)
15+ Yrs in the US	1.113*	0.840*		
	(0.0718)	(0.0838)		
Child: Female	0.622***	0.620***	0.629***	0.466***
	(0.0295)	(0.0505)	(0.0346)	(0.110)
CHild: age	0.911***	0.855***	0.927***	0.980
	(0.0139)	(0.0206)	(0.0160)	(0.0580)
Child:foreign	0.860	0.948	0.611**	0.422**
	(0.118)	(0.148)	(0.148)	(0.177)
Mother: bmi	1.013***	1.014***	1.014***	1.000
	(0.00157)	(0.00318)	(0.00170)	(0.0113)
Mother: unemployed	1.061	1.281***	1.011	0.998
	(0.0565)	(0.101)	(0.0611)	(0.236)
Mother: married	0.756***	0.934	0.713***	0.655
	(0.0383)	(0.0818)	(0.0413)	(0.193)
Mother: High School Dropout	1.114	1.130	1.126	1.686
	(0.0864)	(0.132)	(0.110)	(0.612)
esce_h	0.938	0.962	0.925	0.582
	(0.0710)	(0.135)	(0.0750)	(0.198)
eced_h	0.637***	0.865	0.625***	0.437***
	(0.0461)	(0.124)	(0.0483)	(0.123)
egse_h	0.438***	0.393***	0.458***	0.458*
	(0.0574)	(0.121)	(0.0618)	(0.207)
age_h	1.001	1.003	0.999	0.976
	(0.00283)	(0.00498)	(0.00311)	(0.0151)
nusualpl_h	1.397***	1.140	1.400***	1.006
	(0.0904)	(0.130)	(0.0995)	(0.377)
nocoverage_h	1.177**	1.127	1.173*	0.550**
	(0.0850)	(0.113)	(0.0980)	(0.165)
goodhealth	0.441***	0.553***	0.406***	1.189
	(0.0584)	(0.107)	(0.0619)	(0.769)
year	0.991	0.981	0.996	1.033
	(0.0115)	(0.0209)	(0.0133)	(0.0543)
region	1.007	1.027	0.991	0.869
	(0.0261)	(0.0396)	(0.0290)	(0.0993)
4.regionb			0.720*	0.624*
			(0.121)	(0.172)
Constant	1.412e+08	4.326e+17	4,455	0
	(3.304e+09)	(1.856e+19)	(119,554)	(0)
Observations	20,828	6,019	17,771	1,525

Note: Observations: 22,638. Other controls include: year, US region, maternal education level, family size, single parent, parental employment status. Reference group depends on each column. Those compared to Natives, male native children with US born parents, with health insurance and usual place of care is the reference group. When compared to Nat. Hispanic/Asian: male native children with US born Hispanic/Asian parents, with health insurance and usual place of care is the reference group (OD=1.00). Standard errors in parenthesis. *** p¡0.01, ** p¡0.05, * p¡0.1 [Source] Author's calculations.

Decomposition Analysis – Comparison with Children of Native Born Mothers

	Variables	Nat-Latin	Nat-Asia	Nat/Hisp-Latin	Nat/Asian-Asia
overall	group_1	0.150 [0.004]**	0.150 [0.004]**	0.206 [0.013]**	0.163 [0.023]**
	group_2	0.191 [0.007]**	0.079 [0.011]**	0.191 [0.007]**	0.079 [0.011]**
	difference	-0.041 [0.008]**	0.071 [0.012]**	0.016 [0.014]	0.084 [0.026]**
	explained	-0.026 [0.006]**	0.044 [0.005]**	-0.011 [0.009]	0.044 [0.014]**
	unexplained	-0.015 [0.009]+	0.026 [0.012]*	0.027 [0.016]+	0.041 [0.024]+
explained	yrsinusrec_h== 1.0000	0.000 [0.002]	0.003 [0.004]	0.001 [0.002]	0.002 [0.004]
	yrsinusrec_h== 2.0000	0.004 [0.002]	0.018 [0.005]**	0.006 [0.003]+	0.016 [0.006]**
	female_c	0.000 [0.001]	-0.000 [0.001]	0.000 [0.001]	-0.002 [0.002]
	Age	0.000 [0.000]	0.000 [0.000]	0.002 [0.002]	0.000 [0.001]
	foreign_c	0.004 [0.004]	0.010 [0.005]*	0.002 [0.006]	0.017 [0.009]+
	BMI mother	0.003 [0.001]**	0.006 [0.001]**	0.004 [0.002]*	0.000 [0.005]
	unemployed_h	-0.001 [0.001]	-0.000 [0.000]	-0.005 [0.002]**	-0.000 [0.001]
	married	0.001 [0.000]**	0.004 [0.001]**	0.001 [0.002]	0.008 [0.006]
	High school drop out Mother	-0.006 [0.004]	-0.000 [0.000]	-0.007 [0.007]	-0.000 [0.001]
	Some college education Mother	-0.001 [0.001]	-0.001 [0.001]	-0.001 [0.004]	-0.005 [0.004]
	College education degree Mother	-0.013 [0.002]**	0.003 [0.001]**	-0.003 [0.003]	0.007 [0.004]+
	Graduate School education Mother	-0.007 [0.001]**	0.003 [0.001]**	-0.003 [0.002]*	0.004 [0.003]
	age_h	0.000 [0.001]	0.000 [0.000]	-0.001 [0.001]	0.003 [0.003]
	nusualpl_h	-0.004 [0.001]**	-0.002 [0.001]**	-0.001 [0.001]	-0.000 [0.003]
	nocoverage_h	-0.006 [0.003]*	-0.000 [0.000]	-0.005 [0.004]	-0.002 [0.002]
	goodhealth	-0.001 [0.000]**	0.001 [0.000]**	-0.001 [0.001]	-0.000 [0.002]
	Survey year	0.000 [0.000]	0.000 [0.000]	0.000 [0.000]	-0.001 [0.001]
	Region of residence	-0.000 [0.001]	0.000 [0.001]	0.000 [0.000]	-0.003 [0.003]

Observations: 22,638. Other controls include: year, US region, maternal education level, family size, single parent, parental employment status. Reference group depends on each column. Those compared to Natives, male native children with US born parents, with health insurance and usual place of care is the reference group. When compared to Nat. Hispanic/Asian: male native children with US born Hispanic/Asian parents, with health insurance and usual place of care is the reference group (OD=1.00). Standard errors in parenthesis. $+ p < 0.1$; $* p < 0.05$; $** p < 0.01$

Percent changes: Poisson – Comparison with Children of Native Born Mothers

Variables	Nat-Latin	Nat.Hispanic-Latin	Nat-Asia	Nat.Asian-Asia
regionb	-0.099	-0.041	-0.043	-0.031
	[0.018]**	[0.008]**	[0.021]*	[0.016]+
yrsinusrec_h== 1.0000	-0.179	0.019	-0.158	0.102
	[0.076]*	[0.109]	[0.079]*	[0.121]
yrsinusrec_h== 2.0000	-0.165	-0.165	-0.151	-0.094
	[0.063]**	[0.118]	[0.065]*	[0.118]
female_c	0.061	0.056	0.078	0.025
	[0.010]**	[0.011]**	[0.022]**	[0.045]
Age	0.004	0.006	-0.011	0.008
	[0.003]	[0.003]+	[0.006]+	[0.014]
foreign_c	-0.079	-0.026	-0.104	-0.043
	[0.031]*	[0.042]	[0.038]**	[0.074]
BMI mother	-0.001	-0.001	0.000	-0.001
	[0.000]	[0.000]	[0.001]	[0.003]
obese	0.055	0.051	0.067	-0.041
	[0.015]**	[0.016]**	[0.027]*	[0.076]
poverty_c==100-199%	-0.045	-0.042	-0.059	0.042
	[0.014]**	[0.016]**	[0.025]*	[0.065]
poverty_c==Less than 100%	-0.001	-0.005	0.016	-0.046
	[0.018]	[0.019]	[0.030]	[0.100]
unemployed_h	0.083	0.081	0.043	-0.097
	[0.011]**	[0.012]**	[0.024]+	[0.055]+
married	-0.012	-0.016	-0.002	-0.058
	[0.012]	[0.014]	[0.021]	[0.068]
High school drop out Mother	-0.048	-0.056	-0.066	-0.065
	[0.022]*	[0.025]*	[0.035]+	[0.094]
Some college education Mother	0.080	0.082	0.040	0.174
	[0.015]**	[0.016]**	[0.035]	[0.081]*
College education degree Mother	0.097	0.090	0.132	0.075
	[0.015]**	[0.016]**	[0.031]**	[0.062]
Graduate School education Mother	0.132	0.130	0.093	0.155
	[0.021]**	[0.022]**	[0.048]+	[0.080]+
age_h	-0.000	0.000	0.000	0.000
	[0.001]	[0.001]	[0.001]	[0.003]
nusualpl_h	-0.056	-0.052	-0.094	-0.141
	[0.015]**	[0.016]**	[0.032]**	[0.091]
nocoverage_h	-0.094	-0.104	-0.062	-0.243
	[0.018]**	[0.021]**	[0.024]*	[0.077]**
goodhealth	-0.411	-0.442	-0.316	-0.532
	[0.026]**	[0.027]**	[0.048]**	[0.117]**
Survey year	0.003	0.001	0.010	0.007
	[0.003]	[0.003]	[0.006]+	[0.011]
Region of residence	-0.032	-0.031	-0.033	-0.034
	[0.006]**	[0.006]**	[0.010]**	[0.020]+
Constant	-4.436	-1.617	-18.706	-13.523
	[5.370]	[5.518]	[11.322]+	[22.897]
F statistic	36.0	29.8	13.5	3.5

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$

Percent Changes: Poisson – Individual models comparison

Variables	Native	Nat. Hispanic	Nat. Asian	Latin American	Asia
female_c	0.058	0.070	0.040	0.117	0.028
	[0.011]**	[0.034]*	[0.108]	[0.039]**	[0.072]
Age	0.006	-0.012	-0.023	-0.014	0.017
	[0.003]+	[0.011]	[0.031]	[0.011]	[0.024]
foreign_c	-0.019	0.148	-0.136	-0.177	-0.060
	[0.048]	[0.129]	[0.181]	[0.055]**	[0.112]
BMI mother	-0.001	0.001	-0.007	-0.001	0.001
	[0.000]	[0.001]	[0.006]	[0.002]	[0.005]
obese	0.052	0.072	0.113	0.093	-0.085
	[0.017]**	[0.045]	[0.165]	[0.052]+	[0.127]
poverty_c==100-199	[0.016]**	[0.039]*	[0.128]	[0.048]	[0.105]
poverty_c==Less than 100	[0.019]	[0.053]	[0.220]	[0.050]	[0.150]
unemployed_h	0.090	0.067	0.072	0.049	-0.174
	[0.012]**	[0.037]+	[0.125]	[0.041]	[0.089]+
married	-0.014	-0.029	0.001	0.014	-0.123
	[0.014]	[0.039]	[0.106]	[0.036]	[0.113]
High school drop out Mother	-0.055	-0.188	0.054	-0.030	-0.130
	[0.026]*	[0.057]**	[0.195]	[0.057]	[0.148]
Some college education Mother	0.079	0.005	0.092	0.097	0.259
	[0.016]**	[0.053]	[0.182]	[0.061]	[0.125]*
College education degree Mother	0.092	0.094	0.195	0.240	0.069
	[0.016]**	[0.045]*	[0.155]	[0.061]**	[0.095]
Graduate School education Mother	0.129	0.039	0.265	0.209	0.189
	[0.022]**	[0.073]	[0.203]	[0.100]*	[0.119]
age_h	0.000	0.003	-0.001	-0.002	-0.001
	[0.001]	[0.002]	[0.006]	[0.003]	[0.005]
nusualpl_h	-0.048	-0.065	-0.228	-0.153	-0.160
	[0.016]**	[0.049]	[0.207]	[0.057]**	[0.148]
nocoverage_h	-0.100	-0.062	-0.146	-0.098	-0.337
	[0.022]**	[0.045]	[0.240]	[0.039]*	[0.126]**
goodhealth	-0.441	-0.438	-0.831	-0.366	-0.723
	[0.027]**	[0.066]**	[0.206]**	[0.095]**	[0.216]**
Survey year	0.001	-0.001	-0.006	0.023	0.019
	[0.003]	[0.008]	[0.026]	[0.010]*	[0.018]
Region of residence	-0.031	-0.033	-0.044	-0.053	-0.035
	[0.006]**	[0.016]*	[0.047]	[0.018]**	[0.031]
yrsinusrec_h== 1.0000				-0.209	0.141
				[0.114]+	[0.177]
yrsinusrec_h== 2.0000				-0.195	-0.129
				[0.093]*	[0.170]
Constant	-0.766	3.708	13.214		
	[5.699]	[16.264]	[51.520]		

+ $p < 0.1$; * $p < 0.05$; ** $p < 0.01$