

SECTION VI. SCIENTIFIC SOUNDNESS OF THE MEASURE

VI.B. Validity

Predictive Validity

We also measure validity in terms of predictive validity (whether the measures of coverage predict an outcome of interest) and construct validity (whether the measures of coverage are associated with other measures of performance) (McDowell, 2006). To this end we have completed regression models to demonstrate the statistical association of coverage measures at the county level (as a measure of performance) and the probability that an individual child will be at risk for an ambulatory care sensitive condition (ACSC), after controlling for other known risk factors for ACSCs, and regressions to demonstrate the probability that an individual child will be at risk for selected health outcomes from the initial pediatric core quality measurement set (also termed the CHIPRA core quality metrics) after controlling for other known risk factors for these outcomes available in the MAX data.

CHIPRA Core Measures: Positive Outcomes & Utilization

Methods

First, we examined how the Duration and Coverage metrics related to seven of the CHIPRA core set measures: Preventive Dental, Emergency Dental, Well-child visits (15 months), Asthma, and ADHD follow-up (Centers for Medicare and CHIP Services, 2011). We selected these measures out of the full 24-measure CHIPRA core set because they affect a wide swath of the pediatric population and/or are sensitive to continuity of insurance (Haltermann, 2008; Cassidy, 2008; DeVoe, 2008; Federico, 2007; Lavarreda, 2008; Olson, 2005; Schoen, 2000, Jones, 2008; Ortega, 2001, Shatin, 1998). For Newborn Duration, we limited our selection to Well-child visits at 15 months, as the core set measures used in the analyses for the other metrics focus on older children. They are also evaluable with standard administrative claims datasets, such as MAX. Patient outcomes (0, 1 denoting achievement or non-achievement of a specific core measure) were the dependent variables. The independent variables included the continuity metric of interest, as well as specific patient level variables such as neighborhood education level, neighborhood percent poverty, and specific chronic diseases versus a reference of no chronic disease. Tables in the Appendix are displayed with seven models each, each model adding additional patient characteristics. As most of the outcomes are dichotomous variables, we report logit models and their C-statistics.

In the validation models using the CHIPRA quality outcomes, two different sampling schemes were used to avoid the mathematical tautology of using a patient characteristic as an explanatory and outcome variable. Specifically, since the metrics were stratified by county, using a patient in the calculation for their respective county and then applying that estimate to that patient is cyclical, in that the patient affects the estimate which affects the patient, and thus biases the resulting regression coefficients.

For some of the CHIPRA measures in the validation studies applicable to a particular subset of patients (i.e. those with asthma, ADHD, etc.), we used the classic method of applying the estimation set to the validation set such that all patients who did not possess the specific CHIPRA outcome were used as the estimation set for the coverage and duration metric numbers which were then applied to the patients who had the specific CHIPRA outcome. Another sampling scheme was used for the dental and well child visit outcomes that are applicable to all patients. For these outcomes, the patients were randomly split into two samples and the coverage and duration metrics were calculated in each outcome stratum. Then, the estimates from each of the samples were applied to the other sample, thus avoiding the mathematical tautology that a patient did not influence or contribute to the estimate used for that patient in the modeling process. After the estimates for each sample were applied to the other sample, the models were calculated at each step. Using these two sampling schemes for the metric estimates provided a way to avoid a cyclical estimation process between the metrics and the patient outcomes that would alter the estimates within each outcome stratum and thus biased the regression coefficients from the CHIPRA validation models.

Results

As seen in Appendix IVa, for Illinois, Newborn Duration at 6, 12, and 18 months demonstrated predictive validity, with higher Duration generally being significantly associated with better outcomes for well-child visits ($p < 0.0001$), meaning that more children were likely to have had 5 well-child visits by 15-months. In Louisiana, the single item base model (i.e. including the average county-level duration measures as the sole predictor), the average county-level duration of enrollment at 6, 18 months was significantly associated ($p < 0.05$) with worse outcomes, but were not significant in the fully-adjusted model. For duration of enrollment at 12 months, the single item base model (i.e. including the average county-level duration measures as the sole predictor) and full adjusted model for the average county-level duration of enrollment was significantly associated ($p < 0.01$) with better outcomes.

[APPENDIX IVA: CHIPRA outcome tables](#)

Ambulatory Care-Sensitive Conditions: Negative outcomes & unnecessary hospitalizations

Methods

We predicted that hospitalizations related to ambulatory care-sensitive conditions would be positively associated with poor performance on both the Duration and Coverage metrics. From the pediatric literature, we identified 22 ACSCs for use in our analysis: asthma, pediatric gastroenteritis, bacterial pneumonia, dehydration, UTIs, perforated appendix, seizure disorders, skin infection/cellulitis, failure to thrive, severe ENT infection, pelvic inflammatory disease, diabetes mellitus (short-term complications), immunization-preventable conditions, tuberculosis, anemia, congenital syphilis, congestive heart failure, dental conditions, hypoglycemia, nutritional deficiencies, and meningitis (Flores, 2003; Gadowski, 1998, Garg, 2003; Herrod, 2008; Parker, 2000; Tom, 2010). We divided the population into those who had at least one inpatient admission associated with any of these conditions ($=1$) and those who did not ($=0$), and looked for correlations with their Duration and/or Coverage metrics.

Results

In brief, Newborn Duration often showed a significant association with ACSC hospitalizations, but in the direction of increased Duration leading to increased likelihood of hospitalization. Specific results from the single item and fully adjusted models are described in the ensuing paragraphs. Notably, statistically significant results using conventional thresholds for p-values of <0.05 should be interpreted with caution because the sample sizes in each of the analyzed states are quite large.

[APPENDIX IVb: ACSC outcome tables](#)

In single item base models (i.e. including the average county-level duration measures as the sole predictor), the average county-level duration of enrollment at 6, 12, 18 months was significantly associated ($p<0.0001$) with an increase in a child's probability of an ACSC hospitalization in Illinois and Louisiana of $\sim 1.6\%$ and $\sim 9.0\%$, respectively. However, the opposite association was found in Utah such that the average county-level duration of enrollment at 6 months was significantly associated ($p<0.05$) with a 1.7% decreased odds of hospitalization for an ACSC condition, but was not significant at 12 and 18 months. The associations for North Carolina and Oregon were not significant at 6 months duration and significantly associated ($p<0.05$) at 12 and 18 months duration with increased odds of hospitalization. The association for Montana were not significant at 6 and 12 months duration and significantly associated ($p<0.0001$) at 18 months duration with increased odds of hospitalization. These associations were not significant in New Hampshire at any time point.

In the fully adjusted models, the average county-level duration of enrollment at 6, 12, 18 months was significantly associated ($p<0.01$) with an increase in a child's probability of an ACSC hospitalization in Illinois and Louisiana. In Oregon, these associations were not significant at 6 and 12 months, but was significantly associated ($p<0.01$) with increased odds of an ACSC hospitalization at 18 months. These associations were not significant at 6 and 12 months in North Carolina, but were significantly associated ($p<0.001$) with decreased odds of an ACSC hospitalization at 18 months. For New York, the associations at 6 and 12 months were significantly associated ($p<0.01$) with increased odds of an ACSC hospitalization, but were significantly associated ($p<0.0001$) with decreased odds of an ACSC hospitalization at 18 months. These associations were not significant in Montana, New Hampshire, and Utah at any time point.

APPENDIX IV: PREDICTIVE VALIDITY

APPENDIX IVa: CHIPRA Outcome Table

Well-child Visits, 15 months

Dependent variable: likelihood of each child 15 months of age to have had at least 5 well-child visits.

Illinois (N=83,289)

Newborn enrollees– 6 months

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.492	0.495	0.509	0.562	0.619	0.625	0.630
Intercept (log odds)	0.5986 ^d	0.6071 ^d	0.6289 ^d	0.8779 ^d	0.5930 ^d	0.8508 ^d	0.7862 ^d
Centered Frequency at 6 months	1.024 ^d	1.024 ^d	1.024 ^d	1.027 ^d	1.026 ^d	1.024 ^d	1.026 ^d
Age							
< 1 Year old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1-5 years old	/	0.179 ^d	0.179 ^d	0.173 ^d	0.177 ^d	0.172 ^d	0.171 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.957 ^b	0.959 ^b	1.027	1.027	1.027
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.589 ^d	0.575 ^d	0.672 ^d	0.756 ^d
Hispanic	/	/	/	0.778 ^d	0.790 ^d	0.925 ^c	0.983
Other	/	/	/	0.765 ^d	0.794 ^d	0.915 ^b	0.939 ^a
Chronic							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	2.267 ^d	2.261 ^d	2.265 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	<0.001	<0.001
Urban Cluster	/	/	/	/	/	1.036	1.003
Urbanized Area	/	/	/	/	/	0.652 ^d	0.701 ^d
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.940 ^a
25-50% income level	/	/	/	/	/	/	1.085
< 25% income level	/	/	/	/	/	/	1.072 ^a
Missing income level	/	/	/	/	/	/	1.191 ^d
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.057 ^a
25-50% with HS Degree	/	/	/	/	/	/	0.924 ^b
< 25% with HS Degree	/	/	/	/	/	/	0.934 ^a
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.110 ^c
50-75% below FPL	/	/	/	/	/	/	0.957
≥ 75% below FPL	/	/	/	/	/	/	0.739 ^d

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Well-child Visits, 15 months

Dependent variable: *likelihood of each child 15 months of age to have had at least 5 well-child visits.*

Louisiana (N= 37,587)

Newborn enrollees– 6 months

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.502	0.504	0.502	0.520	0.573	0.587	0.599
Intercept (log odds)	0.6066 ^d	0.6148 ^d	0.6112 ^d	0.6634 ^d	0.4402 ^d	0.1923 ^d	0.0227
Centered Frequency at 6 months	0.989 ^a	0.989 ^a	0.989 ^a	0.986 ^b	0.980 ^c	0.990	0.998
Age							
< 1 Year old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1-5 years old	/	0.167 ^d	0.167 ^d	0.171 ^d	0.177 ^d	0.178 ^d	0.179 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	1.007	1.007	1.046 ^a	1.045 ^a	1.045 ^a
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.935 ^b	0.932 ^b	0.895 ^d	0.911 ^c
Hispanic	/	/	/	0.779 ^d	0.810 ^d	0.788 ^d	0.806 ^d
Other	/	/	/	0.904 ^a	0.921	0.889 ^a	0.894 ^a
Chronic							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	1.691 ^d	1.685 ^d	1.675 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.502 ^d	0.510 ^d
Urban Cluster	/	/	/	/	/	1.261 ^d	1.262 ^d
Urbanized Area	/	/	/	/	/	1.441 ^d	1.493 ^d
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.942
25-50% income level	/	/	/	/	/	/	1.173 ^a
< 25% income level	/	/	/	/	/	/	0.848 ^b
Missing income level	/	/	/	/	/	/	0.665 ^d
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.036
25-50% with HS Degree	/	/	/	/	/	/	1.116 ^a
< 25% with HS Degree	/	/	/	/	/	/	1.135 ^a
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.327 ^d
50-75% below FPL	/	/	/	/	/	/	1.406 ^d
≥ 75% below FPL	/	/	/	/	/	/	1.335 ^d

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Well-child Visits, 15 months

Dependent variable: *likelihood of each child 15 months of age to have had at least 5 well-child visits.*

Illinois (N= 83,289)

Newborn enrollees– 12 months

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.504	0.508	0.506	0.563	0.620	0.626	0.631
Intercept (log odds)	0.5987 ^d	0.6071 ^d	0.6289 ^d	0.8824 ^d	0.5975 ^d	0.8619 ^d	0.7893 ^d
Centered Frequency at 12 months	1.023 ^d	1.023 ^d	1.023 ^d	1.027 ^d	1.027 ^d	1.027 ^d	1.028 ^d
Age							
< 1 Year old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1-5 years old	/	0.179 ^d	0.180 ^d	0.174 ^d	0.178 ^d	0.172 ^d	0.172 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.957 ^b	0.959 ^b	1.027	1.027	1.027
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.586 ^d	0.572 ^d	0.672 ^d	0.754 ^d
Hispanic	/	/	/	0.771 ^d	0.783 ^d	0.919 ^d	0.980
Other	/	/	/	0.760 ^d	0.789 ^d	0.910 ^b	0.936 ^a
Chronic							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	2.269 ^d	2.263 ^d	2.266 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	<0.001	<0.001
Urban Cluster	/	/	/	/	/	1.039	1.005
Urbanized Area	/	/	/	/	/	0.645 ^d	0.698 ^d
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.949 ^a
25-50% income level	/	/	/	/	/	/	1.089
< 25% income level	/	/	/	/	/	/	1.089 ^a
Missing income level	/	/	/	/	/	/	1.219 ^d
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.047
25-50% with HS Degree	/	/	/	/	/	/	0.911 ^c
< 25% with HS Degree	/	/	/	/	/	/	0.913 ^b
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.111 ^c
50-75% below FPL	/	/	/	/	/	/	0.965
≥ 75% below FPL	/	/	/	/	/	/	0.741 ^d

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Well-child Visits, 15 months

Dependent variable: *likelihood of each child 15 months of age to have had at least 5 well-child visits.*

Louisiana (N= 37,587)

Newborn enrollees– 12 months

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.522	0.525	0.525	0.523	0.573 ^d	0.590	0.600
Intercept (log odds)	0.6066 ^d	0.6147 ^d	0.6106 ^d	0.6556 ^d	0.4350 ^d	0.1779 ^d	0.0171
Centered Frequency at 12 months	1.009 ^b	1.009 ^b	1.009 ^b	1.007 ^a	1.004	1.008 ^b	1.010 ^b
Age							
< 1 Year old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1-5 years old	/	0.168 ^d	0.168 ^d	0.171 ^d	0.177 ^d	0.178 ^d	0.179 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	1.008	1.008	1.047 ^a	1.046 ^a	1.046 ^a
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.945 ^a	0.941 ^b	0.902 ^d	0.920 ^b
Hispanic	/	/	/	0.796 ^d	0.827 ^c	0.799 ^d	0.816 ^d
Other	/	/	/	0.917	0.933	0.898 ^a	0.902 ^a
Chronic							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	1.683 ^d	1.679 ^d	1.670 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.510 ^d	0.514 ^d
Urban Cluster	/	/	/	/	/	1.249 ^d	1.250 ^d
Urbanized Area	/	/	/	/	/	1.468 ^d	1.508 ^d
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.952
25-50% income level	/	/	/	/	/	/	1.171 ^a
< 25% income level	/	/	/	/	/	/	0.852 ^b
Missing income level	/	/	/	/	/	/	0.659 ^d
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.038
25-50% with HS Degree	/	/	/	/	/	/	1.123 ^a
< 25% with HS Degree	/	/	/	/	/	/	1.127 ^a
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.310 ^d
50-75% below FPL	/	/	/	/	/	/	1.394 ^d
≥ 75% below FPL	/	/	/	/	/	/	1.335 ^d

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Well-child Visits, 15 months

Dependent variable: *likelihood of each child 15 months of age to have had at least 5 well-child visits.*
Illinois (N= 83,289)

Newborn enrollees– 18 months

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.486	0.484	0.494	0.560	0.618	0.626	0.631
Intercept (log odds)	0.5970 ^d	0.6054 ^d	0.6272 ^d	0.8849 ^d	0.6003 ^d	0.9187 ^d	0.8396 ^d
Centered Frequency at 18 months	1.007 ^d	1.007 ^c	1.007 ^c	1.016 ^d	1.017 ^d	1.025 ^d	1.028 ^d
Age							
< 1 Year old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1-5 years old	/	0.179 ^d	0.179 ^d	0.174 ^d	0.178 ^d	0.173 ^d	0.172 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.957 ^b	0.959 ^b	1.027	1.027	1.027
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.580 ^d	0.566 ^d	0.669 ^d	0.749 ^d
Hispanic	/	/	/	0.771 ^d	0.782 ^d	0.915 ^d	0.976
Other	/	/	/	0.757 ^d	0.785 ^d	0.907 ^c	0.933 ^a
Chronic							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	2.271 ^d	2.264 ^d	2.266 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	<0.001 ^d	<0.001
Urban Cluster	/	/	/	/	/	1.034	0.997
Urbanized Area	/	/	/	/	/	0.606 ^d	0.656 ^d
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.956
25-50% income level	/	/	/	/	/	/	1.090
< 25% income level	/	/	/	/	/	/	1.116 ^b
Missing income level	/	/	/	/	/	/	1.253 ^d
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.041
25-50% with HS Degree	/	/	/	/	/	/	0.904 ^c
< 25% with HS Degree	/	/	/	/	/	/	0.900 ^c
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.117 ^c
50-75% below FPL	/	/	/	/	/	/	0.963
≥ 75% below FPL	/	/	/	/	/	/	0.732 ^d

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Well-child Visits, 15 months

Dependent variable: *likelihood of each child 15 months of age to have had at least 5 well-child visits.*

Louisiana (N= 37,587)

Newborn enrollees– 18 months

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.507	0.511	0.513	0.523	0.576	0.588	0.599
Intercept (log odds)	0.6069 ^d	0.6151 ^d	0.6115 ^d	0.6603 ^d	0.4353 ^d	0.1918 ^d	0.0250
Centered Frequency at 18 months	0.991 ^c	0.991 ^c	0.991 ^c	0.991 ^d	0.988 ^d	0.993 ^b	0.996
Age							
< 1 Year old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
1-5 years old	/	0.167 ^d	0.167 ^d	0.171 ^d	0.177 ^d	0.178 ^d	0.179 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	1.007	1.007	1.046 ^a	1.045 ^a	1.045 ^a
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.941 ^b	0.941 ^b	0.900 ^d	0.910 ^c
Hispanic	/	/	/	0.779 ^d	0.813 ^d	0.790 ^d	0.805 ^d
Other	/	/	/	0.901 ^a	0.919	0.889 ^a	0.892 ^a
Chronic							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	1.693 ^d	1.686 ^d	1.677 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.500 ^d	0.508 ^d
Urban Cluster	/	/	/	/	/	1.269 ^d	1.267 ^d
Urbanized Area	/	/	/	/	/	1.432 ^d	1.485 ^d
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.939
25-50% income level	/	/	/	/	/	/	1.174 ^a
< 25% income level	/	/	/	/	/	/	0.849 ^b
Missing income level	/	/	/	/	/	/	0.670 ^d
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.027
25-50% with HS Degree	/	/	/	/	/	/	1.103 ^a
< 25% with HS Degree	/	/	/	/	/	/	1.126 ^a
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.339 ^d
50-75% below FPL	/	/	/	/	/	/	1.420 ^d
≥ 75% below FPL	/	/	/	/	/	/	1.346 ^d

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

APPENDIX IVb: ACSC Outcome Tables

Illinois

Newborn enrollees - 6 months (N= 268,905)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.507	0.720	0.730	0.737	0.822	0.823	0.826
Intercept	-3.8297 ^d	-4.6718 ^d	-4.5653 ^d	-4.5767 ^d	-5.2639 ^d	-5.3294 ^d	-5.5235 ^d
Centered Frequency 6 months	1.019 ^d	1.010 ^b	1.010 ^b	1.013 ^c	1.008 ^a	1.008 ^a	1.011 ^b
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.433 ^d	0.431 ^d	0.434 ^d	0.412 ^d	0.412 ^d	0.414 ^d
1-5 years old	/	0.851 ^a	0.848 ^a	0.854 ^a	0.733 ^d	0.733 ^d	0.734 ^d
0-1 years old	/	4.724 ^d	4.689 ^d	4.691 ^d	3.200 ^d	3.201 ^d	3.177 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.811 ^d	0.810 ^d	0.956	0.956	0.955
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.234 ^d	1.220 ^d	1.251 ^d	1.168 ^c
Hispanic	/	/	/	0.927 ^a	0.986	1.012	0.957
Other	/	/	/	0.689 ^d	0.780 ^d	0.797 ^c	0.795 ^c
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.287 ^d	6.278 ^d	6.236 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	<0.001 ^d	<0.001 ^d
Urban Cluster	/	/	/	/	/	1.177 ^a	1.104
Urbanized Area	/	/	/	/	/	1.038	1.096
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.015
Missing	/	/	/	/	/	/	1.228 ^a
25-50% income level	/	/	/	/	/	/	1.162 ^a
< 25% income level	/	/	/	/	/	/	1.237 ^b
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.025
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.071
< 25% with HS Degree	/	/	/	/	/	/	1.070
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.051
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.175 ^a
≥ 75% below FPL	/	/	/	/	/	/	0.993

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Illinois
Newborn enrollees - 12 Months (N= 268,905)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.500	0.718	0.729	0.737	0.822	0.823	0.826
Intercept	-3.8297 ^d	-4.6724 ^d	-4.5659 ^d	-4.5769 ^d	-5.2638 ^d	-5.3274 ^d	-5.5217 ^d
Centered Frequency 6 months	1.016 ^d	1.007 ^a	1.007 ^a	1.010 ^b	1.007	1.007	1.011 ^b
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.433 ^d	0.431 ^d	0.435 ^d	0.412 ^d	0.412 ^d	0.414 ^d
1-5 years old	/	0.851 ^a	0.848 ^a	0.854 ^a	0.733 ^d	0.733 ^d	0.734 ^d
0-1 years old	/	4.727 ^d	4.693 ^d	4.694 ^d	3.201 ^d	3.202 ^d	3.178 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.811 ^d	0.810 ^d	0.956	0.956	0.955
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.234 ^d	1.220 ^d	1.252 ^d	1.168 ^c
Hispanic	/	/	/	0.927 ^a	0.985	1.012	0.957
Other	/	/	/	0.689 ^d	0.779 ^d	0.798 ^c	0.795 ^c
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.290 ^d	6.280 ^d	6.237 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	<0.001 ^d	<0.001 ^d
Urban Cluster	/	/	/	/	/	1.178 ^a	1.105
Urbanized Area	/	/	/	/	/	1.035	1.093
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.018
Missing	/	/	/	/	/	/	1.229 ^a
25-50% income level	/	/	/	/	/	/	1.168 ^a
< 25% income level	/	/	/	/	/	/	1.245 ^b
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.021
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.066
< 25% with HS Degree	/	/	/	/	/	/	1.062
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.052
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.178 ^a
≥ 75% below FPL	/	/	/	/	/	/	0.994

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Illinois
Newborn enrollees- 18 months (N=268,905)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.501	0.722	0.729	0.737	0.822	0.823	0.826
Intercept	-3.8293 ^d	-4.6727 ^d	-4.5662 ^d	-4.5746 ^d	-5.2604 ^d	-5.3099 ^d	-5.4993 ^d
Centered Frequency 6 months	1.014 ^d	1.004	1.004	1.007 ^a	1.006	1.007 ^a	1.013 ^b
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.433 ^d	0.431 ^d	0.435 ^d	0.412 ^d	0.412 ^d	0.414 ^d
1-5 years old	/	0.851 ^a	0.847 ^a	0.853 ^a	0.733 ^d	0.733 ^d	0.735 ^d
0-1 years old	/	4.729 ^d	4.694 ^d	4.697 ^d	3.201 ^d	3.202 ^d	3.178 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.811 ^d	0.810 ^d	0.956	0.956	0.955
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.226 ^d	1.212 ^d	1.249 ^d	1.162 ^c
Hispanic	/	/	/	0.924 ^a	0.980	1.009	0.953
Other	/	/	/	0.687 ^d	0.775 ^d	0.796 ^c	0.792 ^c
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.293 ^d	6.282 ^d	6.237 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	<0.001 ^d	<0.001 ^d
Urban Cluster	/	/	/	/	/	1.177 ^a	1.099
Urbanized Area	/	/	/	/	/	1.016	1.063
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.023
Missing	/	/	/	/	/	/	1.231 ^a
25-50% income level	/	/	/	/	/	/	1.184 ^b
< 25% income level	/	/	/	/	/	/	1.271 ^b
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.017
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.059
< 25% with HS Degree	/	/	/	/	/	/	1.048
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.055
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.180 ^a
≥ 75% below FPL	/	/	/	/	/	/	0.989

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept. Age is not included as the sample only includes newborn.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Louisiana
Newborn enrollees - 6 months (N= 110,412)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.573	0.729	0.730	0.733	0.800	0.803	0.803
Intercept	-3.1711 ^d	-4.2791 ^d	-4.2239 ^d	-4.2282 ^d	-4.8145 ^d	-4.6140 ^d	-4.8171 ^d
Centered Frequency 6 months	1.151 ^d	1.136 ^d	1.136 ^d	1.134 ^d	1.120 ^d	1.095 ^d	1.092 ^d
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.585 ^d	0.584 ^d	0.586 ^d	0.550 ^d	0.554 ^d	0.556 ^d
1-5 years old	/	1.323 ^b	1.320 ^b	1.348 ^b	1.139	1.153	1.157
0-1 years old	/	5.636 ^d	5.626 ^d	5.653 ^d	4.083 ^d	4.052 ^d	4.068 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.895 ^c	0.895 ^c	0.991	0.989	0.989
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.066	1.068 ^a	1.106 ^b	1.076 ^a
Hispanic	/	/	/	0.701 ^d	0.769 ^b	0.823 ^a	0.838 ^a
Other	/	/	/	0.698 ^d	0.726 ^d	0.763 ^c	0.762 ^c
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	4.730 ^d	4.682 ^d	4.677 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.421 ^d	0.397 ^d
Urban Cluster	/	/	/	/	/	1.001	1.007
Urbanized Area	/	/	/	/	/	0.730 ^d	0.773 ^d
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.148 ^a
Missing	/	/	/	/	/	/	1.310 ^b
25-50% income level	/	/	/	/	/	/	1.183
< 25% income level	/	/	/	/	/	/	1.262 ^a
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.119
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	0.975
< 25% with HS Degree	/	/	/	/	/	/	1.013
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.003
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.033
≥ 75% below FPL	/	/	/	/	/	/	0.981

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Louisiana
Newborn enrollees - 12 Months (N= 110,412)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.560	0.722	0.723	0.728	0.797	0.802	0.803
Intercept	-3.1591 ^d	-4.2665 ^d	-4.2108 ^d	-4.2146 ^d	-4.8007 ^d	-4.5745 ^d	-4.7459 ^d
Centered Frequency 6 months	1.064 ^d	1.055 ^d	1.055 ^d	1.054 ^d	1.047 ^d	1.034 ^d	1.033 ^d
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.585 ^d	0.584 ^d	0.586 ^d	0.550 ^d	0.555 ^d	0.556 ^d
1-5 years old	/	1.324 ^b	1.321 ^b	1.351 ^b	1.139	1.155	1.156
0-1 years old	/	5.618 ^d	5.608 ^d	5.637 ^d	4.075 ^d	4.046 ^d	4.066 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.894 ^c	0.894 ^c	0.990	0.989	0.989
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.067 ^a	1.065	1.107 ^b	1.065
Hispanic	/	/	/	0.684 ^d	0.746 ^c	0.808 ^a	0.819 ^a
Other	/	/	/	0.692 ^d	0.719 ^d	0.760 ^c	0.757 ^c
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	4.733 ^d	4.682 ^d	4.685 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.410 ^d	0.380 ^d
Urban Cluster	/	/	/	/	/	0.985	0.988
Urbanized Area	/	/	/	/	/	0.700 ^d	0.732 ^d
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.127
Missing	/	/	/	/	/	/	1.296 ^a
25-50% income level	/	/	/	/	/	/	1.185
< 25% income level	/	/	/	/	/	/	1.303 ^b
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.106
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	0.907
< 25% with HS Degree	/	/	/	/	/	/	0.926
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.014
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.065
≥ 75% below FPL	/	/	/	/	/	/	1.028

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Louisiana
Newborn enrollees- 18 months (N=110,412)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.560	0.722	0.725	0.729	0.799	0.803	0.804
Intercept	-3.1658 ^d	-4.2772 ^d	-4.2209 ^d	-4.1959 ^d	-4.7872 ^d	-4.5716 ^d	-4.7613 ^d
Centered Frequency 6 months	1.054 ^d	1.048 ^d	1.048 ^d	1.046 ^d	1.041 ^d	1.031 ^d	1.030 ^d
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.587 ^d	0.586 ^d	0.588 ^d	0.552 ^d	0.556 ^d	0.558 ^d
1-5 years old	/	1.326 ^b	1.322 ^b	1.349 ^b	1.138	1.154	1.157
0-1 years old	/	5.657 ^d	5.646 ^d	5.675 ^d	4.104 ^d	4.070 ^d	4.089 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.893 ^c	0.893 ^c	0.990	0.988	0.989
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.012	1.018	1.067	1.047
Hispanic	/	/	/	0.668 ^d	0.733 ^c	0.794 ^b	0.811 ^a
Other	/	/	/	0.684 ^d	0.714 ^d	0.754 ^c	0.757 ^c
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	4.740 ^d	4.689 ^d	4.686 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.408 ^d	0.383 ^d
Urban Cluster	/	/	/	/	/	0.976	0.986
Urbanized Area	/	/	/	/	/	0.713 ^d	0.746 ^d
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.136
Missing	/	/	/	/	/	/	1.291 ^a
25-50% income level	/	/	/	/	/	/	1.181
< 25% income level	/	/	/	/	/	/	1.260 ^d
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.166 ^a
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	0.977
< 25% with HS Degree	/	/	/	/	/	/	1.005
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	0.987
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.005
≥ 75% below FPL	/	/	/	/	/	/	0.960

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept. Age is not included as the sample only includes newborn.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Montana
Newborn enrollees - 6 months (N= 252,234)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.526	0.769	0.773	0.791	0.851	0.855	0.859
Intercept	-4.0097 ^d	-4.5528 ^d	-4.4671 ^d	-4.7126 ^d	-5.3049 ^d	-5.3823 ^d	-5.5318 ^d
Centered Frequency 6 months	1.015	1.014	1.014	1.017	1.009	1.012	1.012
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.324 ^d	0.322 ^d	0.325 ^d	0.310 ^d	0.310 ^d	0.309 ^d
1-5 years old	/	0.728	0.726	0.735	0.570 ^b	0.570 ^b	0.563 ^b
0-1 years old	/	5.172 ^d	5.162 ^d	5.155 ^d	3.826 ^d	3.835 ^d	3.812 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.838	0.838	0.984	0.992	0.992
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.656	0.622	0.650	0.618
Hispanic	/	/	/	1.252	1.298	1.337	1.274
Other	/	/	/	2.064 ^d	2.048 ^d	2.065 ^d	1.697 ^d
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.044 ^d	6.002 ^d	5.948 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.849	1.709
Urban Cluster	/	/	/	/	/	1.215	1.458 ^b
Urbanized Area	/	/	/	/	/	0.956	1.165
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.294
Missing	/	/	/	/	/	/	0.616
25-50% income level	/	/	/	/	/	/	1.781 ^a
< 25% income level	/	/	/	/	/	/	2.657 ^d
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	0.794
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	0.772
< 25% with HS Degree	/	/	/	/	/	/	1.130
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	0.997
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	0.525 ^b
≥ 75% below FPL	/	/	/	/	/	/	0.561 ^a

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Montana
Newborn enrollees - 12 Months (N= 25,234)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.507	0.766	0.771	0.790	0.851	0.855	0.859
Intercept	-4.0087 ^d	-4.5521 ^d	-4.4667 ^d	-4.7135 ^d	-5.3070 ^d	-5.3910 ^d	-5.5297 ^d
Centered Frequency 6 months	1.004	1.004	1.004	1.009	1.005	1.008	1.010
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.324 ^d	0.322 ^d	0.325 ^d	0.310 ^d	0.310 ^d	0.309 ^d
1-5 years old	/	0.728	0.726	0.735	0.570 ^b	0.571 ^b	0.563 ^b
0-1 years old	/	5.175 ^d	5.165 ^d	5.156 ^d	3.829 ^d	3.838 ^d	3.813 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.839	0.838	0.985	0.992	0.992
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.662	0.624	0.653	0.619
Hispanic	/	/	/	1.245	1.292	1.330	1.269
Other	/	/	/	2.078 ^d	2.056 ^d	2.084 ^d	1.706 ^d
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.055 ^d	6.012 ^d	5.953 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.850	1.710
Urban Cluster	/	/	/	/	/	1.224	1.473 ^b
Urbanized Area	/	/	/	/	/	0.962	1.164
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.288
Missing	/	/	/	/	/	/	0.610
25-50% income level	/	/	/	/	/	/	1.776 ^a
< 25% income level	/	/	/	/	/	/	2.645 ^d
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	0.776
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	0.763
< 25% with HS Degree	/	/	/	/	/	/	1.115
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.000
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	0.527 ^b
≥ 75% below FPL	/	/	/	/	/	/	0.570 ^a

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Montana
Newborn enrollees- 18 months (N=25,234)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.562	0.781	0.783	0.792	0.853	0.856	0.860
Intercept	-4.0252 ^d	-4.5833 ^d	-4.4969 ^d	-4.7050 ^d	-5.2928 ^d	-5.3786 ^d	-5.5233 ^d
Centered Frequency 6 months	1.027 ^d	1.029 ^d	1.029 ^d	1.020 ^c	1.013 ^a	1.013 ^a	1.007
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.329 ^d	0.327 ^d	0.327 ^d	0.310 ^d	0.310 ^d	0.309 ^d
1-5 years old	/	0.738	0.735	0.739	0.570 ^b	0.570 ^b	0.563 ^b
0-1 years old	/	5.245 ^d	5.231 ^d	5.184 ^d	3.825 ^d	3.828 ^d	3.809 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.838	0.838	0.987	0.993	0.993
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.660	0.620	0.643	0.616
Hispanic	/	/	/	1.254	1.297	1.322	1.259
Other	/	/	/	1.916 ^d	1.940 ^d	1.962 ^d	1.677 ^d
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.003 ^d	5.968 ^d	5.953 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.864	1.656
Urban Cluster	/	/	/	/	/	1.212	1.432 ^b
Urbanized Area	/	/	/	/	/	0.994	1.187
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.287
Missing	/	/	/	/	/	/	0.631
25-50% income level	/	/	/	/	/	/	1.719 ^a
< 25% income level	/	/	/	/	/	/	2.563 ^c
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	0.791
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	0.768
< 25% with HS Degree	/	/	/	/	/	/	1.101
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.026
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	0.547 ^b
≥ 75% below FPL	/	/	/	/	/	/	0.578 ^a

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept. Age is not included as the sample only includes newborn.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

North Carolina
Newborn enrollees - 6 months (N= 263,356)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.499	0.721	0.722	0.724	0.809	0.810	0.814
Intercept	-4.0432 ^d	-4.5849 ^d	-4.5592 ^d	-4.5376 ^d	-5.1482 ^d	-5.0147 ^d	-5.2557 ^d
Centered Frequency 6 months	1.021	1.012	1.012	1.012	1.007	1.007	0.989
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.411 ^d	0.411 ^d	0.413 ^d	0.357 ^d	0.359 ^d	0.359 ^d
1-5 years old	/	0.893	0.892	0.904	0.617 ^d	0.620 ^d	0.621 ^d
0-1 years old	/	3.988 ^d	3.983 ^d	4.049 ^d	2.624 ^d	2.622 ^d	2.619 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.951	0.951	1.093 ^b	1.093 ^b	1.092 ^b
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.970	0.919 ^a	0.940	0.934
Hispanic	/	/	/	0.851 ^c	0.899 ^a	0.924	0.934
Other	/	/	/	1.035	1.030	1.050	1.060
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	5.797 ^d	5.766 ^d	5.758 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.808	0.999
Urban Cluster	/	/	/	/	/	0.925	0.947
Urbanized Area	/	/	/	/	/	0.814 ^d	0.907 ^a
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.877 ^a
Missing	/	/	/	/	/	/	1.005
25-50% income level	/	/	/	/	/	/	0.885
< 25% income level	/	/	/	/	/	/	1.041
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.308 ^d
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.426 ^d
< 25% with HS Degree	/	/	/	/	/	/	1.400 ^d
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.025
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	0.953
≥ 75% below FPL	/	/	/	/	/	/	0.939

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

North Carolina
Newborn enrollees - 12 Months (N= 263,356)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.517	0.726	0.724	0.727	0.809	0.811	0.814
Intercept	-4.0431 ^d	-4.5845 ^d	-4.5588 ^d	-4.5410 ^d	-5.1506 ^d	-5.0167 ^d	-5.2458 ^d
Centered Frequency 6 months	1.033 ^d	1.024 ^b	1.024 ^b	1.024 ^b	1.021 ^b	1.016	1.004
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.411 ^d	0.411 ^d	0.413 ^d	0.357 ^d	0.358 ^d	0.359 ^d
1-5 years old	/	0.894	0.893	0.905	0.618 ^d	0.620 ^d	0.621 ^d
0-1 years old	/	3.983 ^d	3.979 ^d	4.046 ^d	2.622 ^d	2.620 ^d	2.619 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.951	0.951	1.093 ^b	1.093 ^b	1.092 ^b
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.977	0.926 ^a	0.944	0.934
Hispanic	/	/	/	0.854 ^c	0.900 ^a	0.924	0.933
Other	/	/	/	1.039	1.033	1.051	1.059
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	5.795 ^d	5.766 ^d	5.758 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.814	1.002
Urban Cluster	/	/	/	/	/	0.915	0.937
Urbanized Area	/	/	/	/	/	0.819 ^d	0.904 ^a
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.878 ^a
Missing	/	/	/	/	/	/	0.998
25-50% income level	/	/	/	/	/	/	0.885
< 25% income level	/	/	/	/	/	/	1.044
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.296 ^d
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.409 ^d
< 25% with HS Degree	/	/	/	/	/	/	1.378 ^d
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.029
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	0.958
≥ 75% below FPL	/	/	/	/	/	/	0.944

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

North Carolina
Newborn enrollees- 18 months (N=263,356)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.511	0.724	0.724	0.726	0.809	0.811	0.815
Intercept	-4.0422 ^d	-4.5846 ^d	-4.5589 ^d	-4.5418 ^d	-5.1498 ^d	-5.0066 ^d	-5.2507 ^d
Centered Frequency 6 months	1.014 ^d	1.008 ^a	1.008 ^a	1.007 ^a	1.004	0.995	0.987 ^c
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.412 ^d	0.411 ^d	0.413 ^d	0.357 ^d	0.359 ^d	0.359 ^d
1-5 years old	/	0.895	0.894	0.906	0.618 ^d	0.620 ^d	0.620 ^d
0-1 years old	/	3.985 ^d	3.981 ^d	4.045 ^d	2.622 ^d	2.623 ^d	2.625 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.951	0.951	1.093 ^b	1.093 ^b	1.093 ^b
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.978	0.923 ^a	0.938	0.930
Hispanic	/	/	/	0.859 ^c	0.903 ^a	0.923	0.931
Other	/	/	/	1.042	1.033	1.049	1.057
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	5.794 ^d	5.767 ^d	5.760 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.797	0.966
Urban Cluster	/	/	/	/	/	0.934	0.960
Urbanized Area	/	/	/	/	/	0.801 ^d	0.872 ^b
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.875 ^a
Missing	/	/	/	/	/	/	1.024
25-50% income level	/	/	/	/	/	/	0.893
< 25% income level	/	/	/	/	/	/	1.049
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.330 ^d
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.470 ^d
< 25% with HS Degree	/	/	/	/	/	/	1.459 ^d
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.014
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	0.934
≥ 75% below FPL	/	/	/	/	/	/	0.924

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept. Age is not included as the sample only includes newborn.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

**New Hampshire
Newborn enrollees - 6 months (N= 24,257)**

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.499	0.721	0.720	0.730	0.812	0.814	0.824
Intercept	-4.4785 ^d	-5.2992 ^d	-5.3031 ^d	-5.3296 ^d	-6.0105 ^d	-6.0057 ^d	-5.9109 ^d
Centered Frequency 6 months	1.019	1.011	1.011	1.010	1.008	1.025	1.013
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.779	0.780	0.774	0.738	0.736	0.728
1-5 years old	/	1.371	1.371	1.358	1.038	1.037	1.015
0-1 years old	/	6.109 ^d	6.110 ^d	6.063 ^d	4.139 ^d	4.136 ^d	4.045 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	1.008	1.014	1.182	1.177	1.176
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.962 ^a	1.969 ^a	1.889 ^a	1.719
Hispanic	/	/	/	1.315	1.257	1.174	1.037
Other	/	/	/	0.420	0.458	0.446	0.435
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.198 ^d	6.189 ^d	6.132 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	1.579	2.300
Urban Cluster	/	/	/	/	/	0.794	0.785
Urbanized Area	/	/	/	/	/	1.089	0.916
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.671
Missing	/	/	/	/	/	/	0.641
25-50% income level	/	/	/	/	/	/	0.629
< 25% income level	/	/	/	/	/	/	0.678
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.216
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.216
< 25% with HS Degree	/	/	/	/	/	/	1.557
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.051
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.068
≥ 75% below FPL	/	/	/	/	/	/	1.436

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

**New Hampshire
Newborn enrollees - 12 Months (N= 24,257)**

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.500	0.721	0.719	0.730	0.811	0.813	0.824
Intercept	-4.4797 ^d	-5.3017 ^d	-5.3059 ^d	-5.3332 ^d	-6.0138 ^d	-6.0176 ^d	-5.9096 ^d
Centered Frequency 6 months	1.015	1.013	1.013	1.015	1.012	1.022	1.000
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.781	0.781	0.775	0.739	0.739	0.729
1-5 years old	/	1.374	1.374	1.361	1.041	1.041	1.016
0-1 years old	/	6.122 ^d	6.123 ^d	6.076 ^d	4.148 ^d	4.156 ^d	4.052 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	1.009	1.014	1.183	1.178	1.176
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.979 ^a	1.983 ^a	1.911 ^a	1.727
Hispanic	/	/	/	1.322	1.263	1.186	1.040
Other	/	/	/	0.423	0.460	0.448	0.435
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.196 ^d	6.185 ^d	6.136 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	1.577	2.254
Urban Cluster	/	/	/	/	/	0.806	0.786
Urbanized Area	/	/	/	/	/	1.093	0.904
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.678
Missing	/	/	/	/	/	/	0.644
25-50% income level	/	/	/	/	/	/	0.640
< 25% income level	/	/	/	/	/	/	0.684
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.228
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.216
< 25% with HS Degree	/	/	/	/	/	/	1.549
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.047
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.039
≥ 75% below FPL	/	/	/	/	/	/	1.439

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

**New Hampshire
Newborn enrollees- 18 months (N=24,257)**

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	**	0.722	0.722	0.726	0.812	0.814	0.822
Intercept	-4.4792 ^d	-5.2997 ^d	-5.3039 ^d	-5.3304 ^d	-6.0113 ^d	-6.0002 ^d	-5.9032 ^d
Centered Frequency 6 months	1.004	1.001	1.001	1.002	1.000	1.009	0.995
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.779	0.779	0.774	0.739	0.738	0.729
1-5 years old	/	1.370	1.370	1.357	1.038	1.039	1.015
0-1 years old	/	6.114 ^d	6.114 ^d	6.067 ^d	4.141 ^d	4.149 ^d	4.050 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	1.008	1.014	1.182	1.178	1.176
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.964 ^a	1.968 ^a	1.906 ^a	1.726
Hispanic	/	/	/	1.317	1.258	1.189	1.038
Other	/	/	/	0.419	0.457	0.448	0.434
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.199 ^d	6.191 ^d	6.138 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	1.540	2.236
Urban Cluster	/	/	/	/	/	0.798	0.787
Urbanized Area	/	/	/	/	/	1.067	0.896
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.681
Missing	/	/	/	/	/	/	0.642
25-50% income level	/	/	/	/	/	/	0.641
< 25% income level	/	/	/	/	/	/	0.683
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.230
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.216
< 25% with HS Degree	/	/	/	/	/	/	1.555
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.044
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.027
≥ 75% below FPL	/	/	/	/	/	/	1.438

**Note: Measures of association between the observed and predicted values were not calculated because the predicted probabilities are indistinguishable when they are classified into intervals of length 0.002.

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept. Age is not included as the sample only includes newborn.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

**New York
Newborn enrollees - 6 months (N= 403,229)**

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.531	0.680	0.686	0.702	0.799	0.799	0.800
Intercept	-3.6096 ^d	-4.3343 ^d	-4.2318 ^d	-4.5974 ^d	-5.2222 ^d	-5.2222 ^d	-5.2204 ^d
Centered Frequency 6 months	1.122 ^d	1.090 ^d	1.090 ^d	1.045 ^d	1.045 ^d	1.046 ^d	1.038 ^b
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.669 ^d	0.665 ^d	0.658 ^d	0.581 ^d	0.581 ^d	0.582 ^d
1-5 years old	/	1.404 ^d	1.396 ^d	1.381 ^d	0.949	0.950	0.953
0-1 years old	/	3.776 ^d	3.757 ^d	3.943 ^d	2.511 ^d	2.512 ^d	2.533 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.811 ^d	0.808 ^d	0.927 ^c	0.927 ^c	0.926 ^c
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.657 ^d	1.637 ^d	1.640 ^d	1.523 ^d
Hispanic	/	/	/	1.836 ^d	1.708 ^d	1.712 ^d	1.582 ^d
Other	/	/	/	1.074 ^a	1.184 ^d	1.187 ^d	1.127 ^c
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.022 ^d	6.013 ^d	6.004 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.682 ^a	0.768
Urban Cluster	/	/	/	/	/	1.020	1.030
Urbanized Area	/	/	/	/	/	1.000	0.933
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.938
Missing	/	/	/	/	/	/	0.929
25-50% income level	/	/	/	/	/	/	0.959
< 25% income level	/	/	/	/	/	/	1.114
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.122 ^b
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.282 ^d
< 25% with HS Degree	/	/	/	/	/	/	1.268 ^d
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	0.989
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	0.862 ^b
≥ 75% below FPL	/	/	/	/	/	/	0.949

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

**New York
Newborn enrollees - 12 Months (N= 403,229)**

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.532	0.680	0.685	0.702	0.799	0.799	0.800
Intercept	-3.6086 ^d	-4.3340 ^d	-4.2315 ^d	-4.6010 ^d	-5.2272 ^d	-5.2236 ^d	-5.2185 ^d
Centered Frequency 6 months	1.068 ^d	1.048 ^d	1.048 ^d	1.028 ^d	1.026 ^d	1.026 ^d	1.022 ^b
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.669 ^d	0.665 ^d	0.658 ^d	0.581 ^d	0.581 ^d	0.582 ^d
1-5 years old	/	1.405 ^d	1.397 ^d	1.381 ^d	0.950	0.951	0.954
0-1 years old	/	3.778 ^d	3.758 ^d	3.942 ^d	2.511 ^d	2.512 ^d	2.533 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.811 ^d	0.808 ^d	0.927 ^c	0.927 ^c	0.926 ^c
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.666 ^d	1.647 ^d	1.646 ^d	1.527 ^d
Hispanic	/	/	/	1.846 ^d	1.722 ^d	1.721 ^d	1.587 ^d
Other	/	/	/	1.079 ^a	1.192 ^d	1.191 ^d	1.131 ^c
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.019 ^d	6.010 ^d	6.002 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.680 ^a	0.764
Urban Cluster	/	/	/	/	/	1.001	1.015
Urbanized Area	/	/	/	/	/	0.999	0.931
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.935
Missing	/	/	/	/	/	/	0.928
25-50% income level	/	/	/	/	/	/	0.955
< 25% income level	/	/	/	/	/	/	1.108
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.127 ^c
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.290 ^d
< 25% with HS Degree	/	/	/	/	/	/	1.277 ^d
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	0.987
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	0.859 ^b
≥ 75% below FPL	/	/	/	/	/	/	0.946

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

**New York
Newborn enrollees- 18 months (N=403,229)**

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.502	0.673	0.683	0.701	0.798	0.799	0.800
Intercept	-3.6095 ^d	-4.3411 ^d	-4.2384 ^d	-4.6209 ^d	-5.2450 ^d	-5.3248 ^d	-5.2836 ^d
Centered Frequency 6 months	0.999	0.995 ^a	0.995 ^a	0.992 ^c	0.988 ^d	0.986 ^d	0.987 ^d
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.669 ^d	0.666 ^d	0.658 ^d	0.581 ^d	0.581 ^d	0.581 ^d
1-5 years old	/	1.408 ^d	1.400 ^d	1.382 ^d	0.950	0.950	0.953
0-1 years old	/	3.815 ^d	3.795 ^d	3.968 ^d	2.529 ^d	2.526 ^d	2.541 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.811 ^d	0.808 ^d	0.927 ^c	0.927 ^c	0.927 ^c
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.693 ^d	1.668 ^d	1.622 ^d	1.507 ^d
Hispanic	/	/	/	1.890 ^d	1.754 ^d	1.701 ^d	1.568 ^d
Other	/	/	/	1.096 ^b	1.203 ^d	1.166 ^d	1.108 ^b
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.030 ^d	6.020 ^d	6.011 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.750	0.830
Urban Cluster	/	/	/	/	/	1.047	1.060
Urbanized Area	/	/	/	/	/	1.124 ^a	1.017
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.891 ^b
Missing	/	/	/	/	/	/	0.913
25-50% income level	/	/	/	/	/	/	0.903 ^a
< 25% income level	/	/	/	/	/	/	1.057
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.144 ^c
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.300 ^d
< 25% with HS Degree	/	/	/	/	/	/	1.289 ^d
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.013
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	0.885 ^a
≥ 75% below FPL	/	/	/	/	/	/	0.971

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept. Age is not included as the sample only includes newborn.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Oregon
Newborn enrollees - 6 months (N= 103,110)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.501	0.738	0.745	0.748	0.826	0.827	0.830
Intercept	-4.5586 ^d	-4.9319 ^d	-4.8689 ^d	-4.9752 ^d	-5.5874 ^d	-5.4162 ^d	-5.5266 ^d
Centered Frequency 6 months	1.019	1.014	1.014	1.018	1.018	1.019	1.017
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.356 ^d	0.355 ^d	0.349 ^d	0.336 ^d	0.337 ^d	0.337 ^d
1-5 years old	/	0.730 ^a	0.728 ^a	0.710 ^b	0.567 ^d	0.567 ^d	0.567 ^d
0-1 years old	/	3.925 ^d	3.917 ^d	3.792 ^d	2.870 ^d	2.879 ^d	2.883 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.879 ^a	0.878 ^a	1.015	1.015	1.014
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.921	0.842	0.851	0.835
Hispanic	/	/	/	1.454 ^d	1.409 ^d	1.422 ^d	1.459 ^d
Other	/	/	/	1.176 ^a	1.247 ^b	1.250 ^b	1.264 ^b
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.336 ^d	6.343 ^d	6.338
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.799	1.425
Urban Cluster	/	/	/	/	/	0.808	0.761 ^a
Urbanized Area	/	/	/	/	/	0.832	0.819
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.888
Missing	/	/	/	/	/	/	0.608
25-50% income level	/	/	/	/	/	/	0.833
< 25% income level	/	/	/	/	/	/	0.803
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.300 ^a
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.140
< 25% with HS Degree	/	/	/	/	/	/	0.934
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.274 ^a
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.204
≥ 75% below FPL	/	/	/	/	/	/	1.348

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Oregon
Newborn enrollees - 12 Months (N= 103,110)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.497	0.739	0.746	0.750	0.827	0.827	0.830
Intercept	-4.5599 ^d	-4.9347 ^d	-4.8713 ^d	-4.9814 ^d	-5.5922 ^d	-5.4220 ^d	-5.5137 ^d
Centered Frequency 6 months	1.035 ^a	1.033	1.033	1.037 ^a	1.033	1.033	1.024
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.356 ^d	0.356 ^d	0.350 ^d	0.336 ^d	0.337 ^d	0.337 ^d
1-5 years old	/	0.731 ^a	0.730 ^a	0.711 ^b	0.567 ^d	0.568 ^d	0.567 ^d
0-1 years old	/	3.931 ^d	3.923 ^d	3.797 ^d	2.872 ^d	2.881 ^d	2.883 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.878 ^a	0.877 ^a	1.014	1.015	1.014
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.941	0.858	0.865	0.842
Hispanic	/	/	/	1.465 ^d	1.418 ^d	1.430 ^d	1.461 ^d
Other	/	/	/	1.182 ^a	1.254 ^b	1.256 ^b	1.267 ^b
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.330 ^d	6.337 ^d	6.336 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.821	1.432
Urban Cluster	/	/	/	/	/	0.807	0.761 ^a
Urbanized Area	/	/	/	/	/	0.835	0.818
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.887
Missing	/	/	/	/	/	/	0.606
25-50% income level	/	/	/	/	/	/	0.834
< 25% income level	/	/	/	/	/	/	0.793
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.292 ^a
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.147
< 25% with HS Degree	/	/	/	/	/	/	0.943
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.251
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.187
≥ 75% below FPL	/	/	/	/	/	/	1.317

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Oregon
Newborn enrollees- 18 months (N=103,110)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.528	0.747	0.747	0.753	0.829	0.829	0.831
Intercept	-4.5642 ^d	-4.9396 ^d	-4.8758 ^d	-4.9814 ^d	-5.5913 ^d	-5.4298 ^d	-5.4747 ^d
Centered Frequency 6 months	1.044 ^c	1.041 ^c	1.041 ^c	1.045 ^c	1.042 ^c	1.041 ^c	1.038 ^b
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.357 ^d	0.356 ^d	0.350 ^d	0.336 ^d	0.336 ^d	0.336 ^d
1-5 years old	/	0.734 ^a	0.732 ^a	0.714 ^b	0.569 ^d	0.569 ^d	0.568 ^d
0-1 years old	/	3.930 ^d	3.922 ^d	3.792 ^d	2.869 ^d	2.877 ^d	2.878 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	0.878 ^a	0.877 ^a	1.014	1.015	1.014
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	0.861	0.790	0.803	0.806
Hispanic	/	/	/	1.465 ^d	1.415 ^d	1.429 ^d	1.469 ^d
Other	/	/	/	1.176 ^a	1.246 ^b	1.251 ^b	1.269 ^b
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	6.323 ^d	6.329 ^d	6.327 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.819	1.467
Urban Cluster	/	/	/	/	/	0.827	0.784 ^a
Urbanized Area	/	/	/	/	/	0.835	0.825
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	0.855
Missing	/	/	/	/	/	/	0.564 ^a
25-50% income level	/	/	/	/	/	/	0.801
< 25% income level	/	/	/	/	/	/	0.809
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.294 ^a
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.125
< 25% with HS Degree	/	/	/	/	/	/	0.977
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	1.214
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.107
≥ 75% below FPL	/	/	/	/	/	/	1.216

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept. Age is not included as the sample only includes newborn.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Utah
Newborn enrollees - 6 months (N= 72,752)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.499	0.748	0.747	0.760	0.834	0.835	0.842
Intercept	-4.1740 ^d	-5.0032 ^d	-5.0101 ^d	-5.1391 ^d	-5.6875 ^d	-5.5176 ^d	-5.9208 ^d
Centered Frequency 6 months	0.983 ^a	0.977 ^a	0.977 ^a	0.988	0.979	0.978 ^a	0.990
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.463 ^d	0.463 ^d	0.463 ^d	0.487 ^c	0.486 ^c	0.495 ^c
1-5 years old	/	1.006	1.006	1.005	0.872	0.874	0.889
0-1 years old	/	5.914 ^d	5.916 ^d	5.913 ^d	4.458 ^d	4.466 ^d	4.563 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	1.014	1.012	1.153 ^a	1.152 ^a	1.152 ^a
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.648 ^b	1.569 ^b	1.584 ^b	1.448 ^a
Hispanic	/	/	/	1.336 ^d	1.358 ^d	1.362 ^d	1.240 ^b
Other	/	/	/	1.456 ^b	1.489 ^b	1.466 ^b	1.405 ^b
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	5.949 ^d	5.935 ^d	5.937 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.707	0.942
Urban Cluster	/	/	/	/	/	0.822	0.963
Urbanized Area	/	/	/	/	/	0.843	0.992
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.034
Missing	/	/	/	/	/	/	1.136
25-50% income level	/	/	/	/	/	/	0.955
< 25% income level	/	/	/	/	/	/	1.307
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.122
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.130
< 25% with HS Degree	/	/	/	/	/	/	1.587 ^d
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	0.989
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.334
≥ 75% below FPL	/	/	/	/	/	/	0.782

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Utah
Newborn enrollees - 12 Months (N= 72,752)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.498	0.748	0.747	0.757	0.834	0.835	0.843
Intercept	-4.1731 ^d	-4.9999 ^d	-5.0066 ^d	-5.1411 ^d	-5.6887 ^d	-5.5227 ^d	-5.9321 ^d
Centered Frequency 6 months	0.995	0.992	0.992	1.000	0.996	0.994	1.002
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.462 ^d	0.462 ^d	0.463 ^d	0.486 ^c	0.486 ^c	0.495 ^c
1-5 years old	/	1.003	1.003	1.004	0.871	0.872	0.888
0-1 years old	/	5.899 ^d	5.900 ^d	5.909 ^d	4.450 ^d	4.456 ^d	4.560 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	1.014	1.011	1.153 ^a	1.152 ^a	1.152 ^a
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.663 ^b	1.590 ^b	1.601 ^b	1.454 ^a
Hispanic	/	/	/	1.343 ^d	1.369 ^d	1.371 ^d	1.242 ^b
Other	/	/	/	1.490 ^b	1.533 ^c	1.508 ^b	1.436 ^b
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	5.937 ^d	5.925 ^d	5.934 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.713	0.959
Urban Cluster	/	/	/	/	/	0.819	0.969
Urbanized Area	/	/	/	/	/	0.848	1.005
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.032
Missing	/	/	/	/	/	/	1.131
25-50% income level	/	/	/	/	/	/	0.953
< 25% income level	/	/	/	/	/	/	1.287
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.125
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.136
< 25% with HS Degree	/	/	/	/	/	/	1.620 ^d
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	0.979
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.326
≥ 75% below FPL	/	/	/	/	/	/	0.785

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001

Utah
Newborn enrollees- 18 months (N=72,752)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
C-statistic	0.502	0.746	0.746	0.757	0.834	0.835	0.842
Intercept	-4.1735 ^d	-4.9987 ^d	-5.0056 ^d	-5.1392 ^d	-5.6869 ^d	-5.5341 ^d	-5.9284 ^d
Centered Frequency 6 months	0.990	0.989	0.989	0.995	0.994	0.994	0.999
Age							
13+ years old	/	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
6-12 years old	/	0.462 ^d	0.462 ^d	0.463 ^d	0.486 ^c	0.486 ^c	0.495 ^c
1-5 years old	/	1.002	1.002	1.003	0.869	0.871	0.888
0-1 years old	/	5.890 ^d	5.891 ^d	5.905 ^d	4.445 ^d	4.449 ^d	4.560 ^d
Sex							
Male	/	/	Ref.	Ref.	Ref.	Ref.	Ref.
Female	/	/	1.014	1.012	1.153 ^a	1.152 ^a	1.152 ^a
Race							
Non-Hispanic White	/	/	/	Ref.	Ref.	Ref.	Ref.
Non-Hispanic Black	/	/	/	1.659 ^b	1.589 ^b	1.600 ^b	1.453 ^a
Hispanic	/	/	/	1.340 ^d	1.368 ^d	1.369 ^d	1.242 ^b
Other	/	/	/	1.471 ^b	1.522 ^c	1.506 ^b	1.425 ^b
Chronic Condition							
No	/	/	/	/	Ref.	Ref.	Ref.
Yes	/	/	/	/	5.937 ^d	5.926 ^d	5.935 ^d
Geography							
Rural	/	/	/	/	/	Ref.	Ref.
Missing	/	/	/	/	/	0.724	0.954
Urban Cluster	/	/	/	/	/	0.824	0.966
Urbanized Area	/	/	/	/	/	0.861	1.002
Income							
≥ 75% income level	/	/	/	/	/	/	Ref.
50-75% income level	/	/	/	/	/	/	1.032
Missing	/	/	/	/	/	/	1.133
25-50% income level	/	/	/	/	/	/	0.954
< 25% income level	/	/	/	/	/	/	1.293
Education							
≥ 75% with HS Degree	/	/	/	/	/	/	Ref.
50-75% with HS Degree	/	/	/	/	/	/	1.126
Missing	/	/	/	/	/	/	--
25-50% with HS Degree	/	/	/	/	/	/	1.134
< 25% with HS Degree	/	/	/	/	/	/	1.612 ^d
Poverty							
< 25% below FPL	/	/	/	/	/	/	Ref.
25-50% below FPL	/	/	/	/	/	/	0.981
Missing	/	/	/	/	/	/	--
50-75% below FPL	/	/	/	/	/	/	1.328
≥ 75% below FPL	/	/	/	/	/	/	0.783

Note: The outcome variable is hospitalizations for ambulatory care sensitive conditions. All output is reported as odds ratios except the intercept. Age is not included as the sample only includes newborn.

^a p<0.05, ^b p<0.01, ^c p<0.001, ^d p<0.0001