## **Supplemental Information**

SUPPLEMENTAL TABLE 5 Association Between Well-Child Adherence and Asthma Exacerbations by Type, Stratified by Age, Race, and Insurance Type

Outcome and Stratum	n	Unadjusted, HR (95% CI)	Adjusted for Age, Sex, and Race, HR (95% CI)	Adjusted for Everything Else, HR (95% CI) <sup>a</sup>	Interaction P <sup>b</sup>
Hospital encounters >24 h					
0verall	5656	0.53 (0.39-0.71)	0.51 (0.38–0.70)	0.53 (0.39-0.71)	_
Age 5–11 y	4107	0.56 (0.41-0.78)	0.58 (0.41-0.81)	0.58 (0.42-0.81)	.14
Age 12–18 y	1549	0.35 (0.15-0.81)	0.34 (0.15-0.79)	0.37 (0.16-0.87)	_
Male sex	3190	0.50 (0.34-0.73)	0.50 (0.34-0.72)	0.51 (0.36-0.73)	_
Female sex	2466	0.59 (0.36-0.98)	0.59 (0.36-0.98)	0.58 (0.34-0.99)	_
Non-Hispanic white	1137	0.81 (0.25-2.59)	0.83 (0.27–2.56)	1.15 (0.47–2.85)	<.01
Non-Hispanic Black	3321	0.51 (0.35-0.72)	0.48 (0.34-0.69)	0.50 (0.35-0.71)	_
Hispanic	684	0.71 (0.26-1.98)	0.66 (0.26–1.68)	0.57 (0.20-1.57)	_
Private insurance	2260	0.56 (0.26-1.21)	0.58 (0.27-1.24)	0.69 (0.33-1.43)	.96
Public insurance	3625	0.55 (0.39-0.78)	0.52 (0.36–0.74)	0.50 (0.35-0.70)	
Self-pay	509	0.67 (0.20–2.27)	0.67 (0.19–2.37)	NA	_
ED and hospital encounters					
<24 h					
Overall	5656	0.65 (0.55-0.77)	0.65 (0.55–0.77)	0.69 (0.59-0.82)	_
Age 5–11 y	4107	0.68 (0.56–0.82)	0.70 (0.57–0.84)	0.72 (0.60–0.87)	.45
Age 12–18 y	1549	0.51 (0.36–0.73)	0.53 (0.37–0.77)	0.64 (0.44–0.95)	_
Male sex	3190	0.66 (0.53–0.83)	0.68 (0.54–0.85)	0.72 (0.57–0.90)	_
Female sex	2466	0.63 (0.50–0.81)	0.64 (0.50–0.82)	0.69 (0.54–0.88)	_
Non-Hispanic white	1137	0.59 (0.30–1.17)	0.58 (0.29–1.14)	0.68 (0.35–1.34)	.49
Non-Hispanic Black	3321	0.62 (0.52–0.75)	0.62 (0.51–0.74)	0.66 (0.55–0.80)	
Hispanic	684	0.97 (0.58–1.61)	0.94 (0.55–1.60)	0.90 (0.54–1.52)	_
Private insurance	2260	0.88 (0.56–1.39)	0.91 (0.57–1.43)	0.94 (0.59–1.51)	.93
Public insurance	3625	0.68 (0.56–0.82)	0.65 (0.54–0.79)	0.65 (0.54–0.78)	
Self-pay	509	0.82 (0.37–1.82)	0.79 (0.35–1.76)	0.87 (0.40–1.91)	
Urgent care encounters	000	0.02 (0.01 1.02)	0.73 (0.00 1.70)	0.07 (0.40 1.01)	
Overall	5656	0.84 (0.72-0.98)	0.82 (0.70-0.97)	0.78 (0.66–0.92)	
Age 5–11 y	4107	0.83 (0.70–0.98)	0.84 (0.71–1.00)	0.79 (0.67–0.94)	.93
Age 12–18 y	1549	0.87 (0.54–1.39)	0.88 (0.56–1.37)	0.96 (0.59–1.56)	.50
Male sex	3190	0.86 (0.70–1.07)	0.85 (0.69–1.05)	0.78 (0.63–0.96)	_
Female sex	2466	0.80 (0.63–1.01)	0.83 (0.69–1.03)	0.79 (0.61–1.01)	_
	1137		0.76 (0.61–0.59)		<u> </u>
Non-Hispanic white		0.99 (0.55–1.77)		0.95 (0.55–1.64)	.50
Non-Hispanic Black	3321	0.83 (0.68–1.01)	0.79 (0.65–0.97)	0.75 (0.61–0.92)	
Hispanic	684	1.01 (0.67–1.51)	0.97 (0.65–1.45)	0.86 (0.58–1.28)	
Private insurance	2260	0.74 (0.55–0.99)	0.74 (0.56–1.00)	0.75 (0.56–1.01)	.60
Public insurance	3625	0.87 (0.72–1.06)	0.86 (0.71–1.05)	0.82 (0.67–1.00)	_
Self-pay	509	0.56 (0.13–2.47)	0.57 (0.12–2.63)	0.95 (0.12–7.68)	_
Outpatient encounters	5050	100 (110 110)	1 01 (1 07 1 70)	1.17 (1.01 .1.71)	
Overall	5656	1.26 (1.12–1.42)	1.21 (1.07–1.36)	1.17 (1.04–1.31)	
Age 5–11 y	4107	1.28 (1.12–1.45)	1.25 (1.10–1.42)	1.21 (1.06–1.37)	.48
Age 12–18 y	1549	1.20 (0.90–1.59)	1.18 (0.89–1.56)	1.20 (0.90–1.62)	_
Male sex	3190	1.36 (1.18–1.57)	1.30 (1.13–1.51)	1.23 (1.07–1.43)	_
Female sex	2466	1.19 (0.98–1.43)	1.14 (0.94–1.37)	1.13 (0.93–1.36)	_
Non-Hispanic white	1137	1.19 (0.91–1.56)	1.18 (0.91–1.53)	1.26 (0.98–1.62)	.44
Non-Hispanic Black	3321	1.22 (1.05–1.41)	1.19 (1.03–1.38)	1.11 (0.96–1.29)	_
Hispanic	684	1.97 (1.31–2.94)	1.93 (1.29–2.91)	1.72 (1.13–2.63)	_
Private insurance	2260	1.07 (0.90–1.27)	1.06 (0.89–1.26)	1.09 (0.92–1.29)	.01
Public insurance	3625	1.31 (1.12–1.54)	1.25 (1.06–1.47)	1.20 (1.02–1.42)	_
Self-pay	509	3.42 (1.01-11.53)	2.70 (0.76–9.62)	3.22 (0.92–11.32)	_

Values represent HRs (95% Cls) for having the event for patients who had expected well-child visits versus those who did not among patients in the well-child cohort. All models are stratified by number of events. —, not applicable.

<sup>&</sup>lt;sup>a</sup> Adjustment variables are age, sex, race, insurance type, number of encounters in the past year, atopy, obesity, and medication use. Models stratifying by a variable do not additionally adjust for that variable. Age groups represent age at time of first well-child visit. Insurance status strata include patients who have had the insurance status at any point during their follow-up (so some patients may be counted in multiple categories).

b Interaction models include all covariates and the interactions of interest alone; reference groups are age 5-11 y, male sex, Non-Hispanic white race, and private insurance.