

**Supplementary Table A. Hazard ratios of the predictors of influenza vaccination rate among children and adolescents without high-risk condition; presentation by age group and season**

Season 2012/2013	2–3 year olds			4–8 year olds			9–17 year olds		
	Estimate	95% CI	P	Estimate	95% CI	p	Estimate	95% CI	p
<b>Sex</b>									
Male	1.00*			1.00*			1.00*		
Female	0.79	(0.69;0.90)	<0.001	0.79	(0.73;0.86)	<0.001	1.12	(1.06;1.18)	<0.001
<b>Region</b>									
England/North	1.11	(0.90;1.35)		0.95	(0.84;1.08)		0.77	(0.71;0.85)	
England/Midlands	0.84	(0.68;1.03)		0.85	(0.75;0.95)		0.66	(0.61;0.72)	
England/South	1.00*			1.00*			1.00*		
England/London	0.92	(0.74;1.15)		0.87	(0.76;0.99)		0.70	(0.63;0.77)	
Northern Ireland	1.74	(1.29;2.30)		1.82	(1.53;2.15)		1.27	(1.12;1.44)	
Scotland	1.04	(0.82;1.30)		0.88	(0.76;1.02)		0.90	(0.82;0.99)	
Wales	1.09	(0.86;1.39)	<0.001	0.91	(0.78;1.06)	<0.001	0.78	(0.70;0.86)	<0.001

\*reference group.

**Supplementary Table A continued. Hazard ratios of the predictors of influenza vaccination rate among children and adolescents without high-risk condition; presentation by age group and season**

Season 2013/2014	2–3 year olds			4–8 year olds			9–17 year olds		
	Estimate	95% CI	p	Estimate	95% CI	p	Estimate	95% CI	p
<b>Sex</b>									
Male	1.00*			1.00*			1.00*		
Female	1.00	(0.98;1.02)	0.80	0.94	(0.91;0.98)	<0.01	1.04	(1.00;1.08)	0.03
<b>Region</b>									
England/North	0.94	(0.91;0.98)		8.98	(8.36;9.67)		2.48	(2.32;2.64)	
England/Midlands	0.95	(0.92;0.98)		0.83	(0.74;0.93)		0.68	(0.62;0.74)	
England/South	1.00*			1.00*			1.00*		
England/London	0.69	(0.67;0.71)		5.13	(4.75;5.55)		1.51	(1.40;1.63)	
Northern Ireland	1.93	(1.84;2.02)		1.79	(1.52;2.08)		4.57	(4.22;4.93)	
Scotland	1.23	(1.20;1.28)		5.81	(5.37;6.28)		5.22	(4.93;5.52)	
Wales	0.82	(0.79;0.85)	<0.001	0.92	(0.80;1.06)	<0.001	4.15	(3.89;4.41)	<0.001

\*reference group.

**Supplementary Table A continued. Hazard ratios of the predictors of influenza vaccination rate among children and adolescents without high-risk condition; presentation by age group and season**

Season 2014/2015	2–3 year olds			4–8 year olds			9–17 year olds		
	Estimate	95% CI	p	Estimate	95% CI	p	Estimate	95% CI	p
<b>Sex</b>									
Male	1.00*			1.00*			1.00*		
Female	0.99	(0.97;1.01)	0.40	0.98	(0.95;1.00)	0.08	1.06	(1.03;1.09)	<0.001
<b>Region</b>									
England/North	0.90	(0.86;0.93)		1.73	(1.65;1.81)		2.59	(2.41;2.77)	
England/Midlands	0.89	(0.86;0.92)		1.25	(1.20;1.31)		3.96	(3.73;4.19)	
England/South	1.00*			1.00*			1.00*		
England/London	0.66	(0.64;0.69)		0.89	(0.84;0.94)		1.01	(0.92;1.10)	
Northern Ireland	1.95	(1.86;2.04)		0.62	(0.56;0.68)		1.30	(1.15;1.47)	
Scotland	1.19	(1.15;1.23)		5.85	(5.65;6.05)		7.70	(7.30;8.13)	
Wales	0.81	(0.77;0.84)	<0.001	0.90	(0.85;0.96)	<0.001	3.54	(3.32;3.77)	<0.001

\*reference group.

**Supplementary Table B. Hazard ratios of the predictors of influenza vaccination rate among children and adolescents with high-risk condition; presentation by age group and season**

Season 2012/2013	2–3 year olds			4–8 year olds			9–17 year olds		
	Estimate	95% CI	p	Estimate	95% CI	p	Estimate	95% CI	p
<b>Region</b>									
England/North	1.15	(0.96;1.36)		1.11	(1.02;1.20)		1.06	(1.01;1.12)	
England/Midlands	1.31	(1.12;1.54)		1.12	(1.04;1.21)		1.05	(1.00;1.10)	
England/South	1.00*			1.00*			1.00*		
England/London	0.92	(0.74;1.13)		0.82	(0.75;0.90)		0.85	(0.79;0.90)	
Northern Ireland	1.94	(1.49;2.48)		1.73	(1.55;1.93)		1.64	(1.52;1.76)	
Scotland	1.06	(0.86;1.30)		1.10	(1.00;1.20)		1.12	(1.06;1.18)	
Wales	0.84	(0.86;1.30)	<0.001	0.77	(0.69;0.85)	<0.001	0.85	(0.80;0.90)	<0.001
<b>Clinical Risk Group</b>									
Chronic respiratory disease/asthma	1.00*			1.00*			1.00*		
Chronic heart disease	0.80	(0.69;0.92)		0.64	(0.59;0.70)		0.54	(0.50;0.58)	
Chronic neurological disease	0.73	(0.58;0.91)		0.69	(0.61;0.78)		0.60	(0.55;0.65)	
Diabetes	1.45	(0.81;2.37)		1.98	(1.71;2.27)		1.89	(1.77;2.02)	
Other clinical risk group**	1.44	(1.15;1.78)	<0.001	1.24	(1.11;1.39)	<0.001	1.12	(1.06;1.19)	<0.001

\*reference group.

\*\*chronic kidney disease, chronic liver disease, immunosuppression, or pregnancy.

**Supplementary Table B continued. Hazard ratios of the predictors of influenza vaccination rate among children and adolescents with high-risk condition; presentation by age group and season**

Season 2013/2014	2–3 year olds			4–8 year olds			9–17 year olds		
	Estimate	95% CI	p	Estimate	95% CI	p	Estimate	95% CI	p
<b>Region</b>									
England/North	1.00	(0.86;1.17)		1.39	(1.29;1.51)		1.11	(1.05;1.18)	
England/Midlands	0.95	(0.81;1.11)		1.15	(1.07;1.25)		1.07	(1.01;1.13)	
England/South	1.00*			1.00*			1.00*		
England/London	0.83	(0.70;0.98)		0.90	(0.82;0.98)		0.81	(0.76;0.87)	
Northern Ireland	1.41	(1.09;1.80)		1.62	(1.45;1.81)		1.56	(1.45;1.68)	
Scotland	1.15	(0.98;1.35)		1.27	(1.17;1.39)		1.21	(1.15;1.28)	
Wales	0.86	(0.70;1.04)	0.001	0.81	(0.73;0.89)	<0.001	0.91	(0.86;0.97)	<0.001
<b>Clinical Risk Group</b>									
Chronic respiratory disease/asthma	1.00*			1.00*			1.00*		
Chronic heart disease	0.89	(0.79;1.00)		0.66	(0.61;0.72)		0.58	(0.54;0.62)	
Chronic neurological disease	0.82	(0.68;0.99)		0.67	(0.59;0.76)		0.63	(0.57;0.68)	
Diabetes	1.17	(0.72;1.79)		1.79	(1.53;2.07)		1.79	(1.67;1.91)	
Other clinical risk group**	1.13	(0.91;1.39)	0.04	1.20	(1.07;1.33)	<0.001	1.02	(0.96;1.09)	<0.001

\*reference group.

\*\*chronic kidney disease, chronic liver disease, immunosuppression, or pregnancy.

**Supplementary Table B continued. Hazard ratios of the predictors of influenza vaccination rate among children and adolescents with high-risk condition; presentation by age group and season**

Season 2014/2015	2–3 year olds			4–8 year olds			9–17 year olds		
	Estimate	95% CI	p	Estimate	95% CI	p	Estimate	95% CI	p
<b>Region</b>									
England/North	0.94	(0.78;1.12)		1.15	(1.05;1.26)		1.06	(0.99;1.13)	
England/Midlands	0.89	(0.73;1.07)		1.11	(1.02;1.20)		1.11	(1.05;1.18)	
England/South	1.00*			1.00*			1.00*		
England/London	0.76	(0.61;0.93)		0.79	(0.71;0.88)		0.78	(0.72;0.84)	
Northern Ireland	1.67	(1.27;2.17)		0.48	(0.40;0.56)		1.20	(1.10;1.30)	
Scotland	1.18	(0.98;1.41)		1.08	(0.99;1.18)		1.10	(1.04;1.17)	
Wales	0.92	(0.76;1.11)	<0.001	0.82	(0.74;0.90)	<0.001	0.88	(0.82;0.94)	<0.001
<b>Clinical Risk Group</b>									
Chronic respiratory disease/asthma	1.00*			1.00*			1.00*		
Chronic heart disease	0.86	(0.75;0.98)		0.74	(0.68;0.81)		0.59	(0.54;0.63)	
Chronic neurological disease	0.68	(0.54;0.85)		0.72	(0.63;0.82)		0.60	(0.55;0.66)	
Diabetes	2.29	(1.46;3.38)		1.51	(1.27;1.78)		1.72	(1.60;1.85)	
Other clinical risk group**	1.21	(0.94;1.53)	<0.001	1.03	(0.92;1.16)	<0.001	1.00	(0.93;1.07)	<0.001

\*reference group.

\*\*chronic kidney disease, chronic liver disease, immunosuppression, or pregnancy