Table 7: Detailed results: Link between		e and child/mate immunisation	ernal health outc	nal health outcomes, stratified by region.  Delivery			tal care	Child survival	
North Central	Full model	Interaction model (EXPxAGE)	At home	At private facility	At public facility	No. of antenatal care visits	No. of tetanus injections	Exposure decompositio n	Total exposure
EXP_CHI	0.026 <sup>*</sup> [-0.004, 0.056]	0.054 <sup>**</sup> [0.009, 0.100]				Violid		.,	
EXPxAGE		-0.001** [-0.002, -0.000]							
EXP_PREG			0.003 [-0.036, 0.042]	-0.015 [-0.061, 0.031]	0.002 [-0.034, 0.038]	0.034 [-0.030, 0.097]	0.003 [-0.015, 0.021]		
EXP_PREG_nod			[-0.030, 0.042]	[-0.001, 0.031]	[-0.004, 0.000]	[-0.030, 0.037]	[-0.013, 0.021]	-0.019	
(date approximation)  EXP CHI nod								[-0.076, 0.037] 0.030 <sup>*</sup>	
(date approximation)								[-0.001, 0.061]	
EXP_TOT_nod (total exposure, date approximation)									0.018 [-0.008, 0.044]
CHI_AGE	0.056*** [0.025, 0.087] -0.001***	0.017** [0.001, 0.033]						-0.003 [-0.027, 0.022]	-0.005 [-0.029, 0.018]
CHI_AGE2	-0.001 [-0.001, -0.000]							0.000 [-0.001, 0.000]	0.000
	-0.035	-0.034						-0.157***	-0.158***
CHI_ORD	[-0.088, 0.019]	[-0.087, 0.019]							-0.156 [-0.221, -0.095]
	-0.077	-0.075						0.217**	0.218**
CHI_SEX	[-0.230, 0.077] 0.093***	[-0.228, 0.079] 0.094***	-0.161***	0.061***	0.083***			[0.031, 0.404]	[0.032, 0.405] 0.004
MOT_ANC	[0.071, 0.115]	[0.072, 0.115]	[-0.181, -0.142]	[0.043, 0.080]	[0.067, 0.100]			[-0.023, 0.031]	[-0.023, 0.031]
MOT FDM	0.070***	0.070***	-0.057***	0.060***	0.031**	0.105***	0.028***	0.021	0.021
MOT_EDM	[0.035, 0.104]	[0.035, 0.104]	[-0.085, -0.029]	[0.025, 0.096]	[0.004, 0.059]	[0.059, 0.151]	[0.012, 0.043]	[-0.022, 0.063]	[-0.022, 0.063]
MOT_EDF	0.005 [-0.032, 0.042] 2.554***	0.005 [-0.031, 0.042] 2.547***	-0.024 [-0.053, 0.005] -0.660***	0.029 [-0.008, 0.067] -0.092	0.023 [-0.005, 0.052] 0.863***	0.053*** [0.016, 0.091] 1.760***	0.008 [-0.008, 0.025] 0.614***	0.010 [-0.033, 0.052]	0.010 [-0.032, 0.053]
MOT_AWE	[2.315, 2.793]	[2.309, 2.786]	[-0.809, -0.510]		[0.709, 1.018]	[1.484, 2.035]	[0.527, 0.701]		
	0.016*	0.016*	0.005	-0.003	-0.003	0.026***	0.004	0.010	0.010
MOT_AGE	[-0.001, 0.034] -0.035		[-0.005, 0.015] 0.750***			[0.010, 0.043]	[-0.002, 0.010] -0.096*		
HH_RUR	[-0.257, 0.186]	[-0.255, 0.188]	[0.553, 0.946]	[-0.623, -0.187]	[-0.599, -0.251]	[-1.103, -0.014]	[-0.201, 0.009]	[-0.336, 0.177]	[-0.337, 0.176]
HH_REL (ref: Catholic): Other	-0.105	-0.105	0.104	0.006	-0.106	0.160	0.037	0.164	0.165
Christian	[-0.373, 0.163]	[-0.373, 0.163]	[-0.115, 0.324]	[-0.235, 0.246]	[-0.316, 0.105]	[-0.217, 0.536]	[-0.096, 0.170]	[-0.142, 0.471]	[-0.142, 0.471]
HH_REL (ref: Catholic): Islam	-0.371**	-0.370**	0.095	0.000	-0.094	0.612***	-0.069	0.118	0.117
HH_NEL (Iel. Caulolic). Islam	[-0.674, -0.069]	[-0.673, -0.068]	[-0.160, 0.350]	[-0.289, 0.290]	[-0.331, 0.143]	[0.149, 1.074]	[-0.232, 0.094]	[-0.220, 0.457]	[-0.222, 0.456]
HH_REL (ref: Catholic): Traditionalist	-0.719	-0.695	0.277	-0.011	-0.612	-0.985***	-0.625 <sup>***</sup>	0.422	0.428
TIT_NEE (Tel. Catholic). Traditionalist			[-0.415, 0.969]		-	-	[-0.918, -0.331]	[-0.523, 1.367]	
HH_REL (ref: Catholic): Other	0.000	0.000	-0.391	0.960	-0.172	-0.750	-0.409	0.022	0.015
<u>_</u> <u>_</u>	[0.000, 0.000]	[0.000, 0.000]	[-1.789, 1.007]			[-2.634, 1.134]		[-2.033, 2.078]	
HH_ETH (ref: Ekoi): Fulani	-0.085	-0.065	0.749***	-1.294***	-0.500**	0.000	0.000	0.364	0.370
_ , ,	[-0.632, 0.462]	[-0.611, 0.481]		-	[-0.939, -0.061]		[0.000, 0.000]	[-0.165, 0.892]	
HH_ETH (ref: Ekoi): Hausa	-0.492**	-0.489**	0.854***	-0.647***	-0.546***	0.657*	0.305**	0.079	0.078
			[0.538, 1.170]			1.908***	[0.031, 0.580]	[-0.301, 0.460]	
HH_ETH (ref: Ekoi): Ibibio	-0.624 [-2.729, 1.481]	-0.628	-0.658 [-2.862, 1.546]	0.903	-0.511	[0.643, 3.172]	0.364 [-0.234, 0.962]	0.000	0.000
	-0.139	-0.141	-0.579***	0.276	0.418***	1.477***	0.848***	0.019	0.015
HH_ETH (ref: Ekoi): Igala	[-0.531, 0.253]		-0.579 [-0.962, -0.195]		[0.102, 0.733]	[0.605, 2.349]	[0.551, 1.145]	[-0.407, 0.445]	[-0.411, 0.441]
	-0.163	-0.151	-1.009***	0.672***	0.025	1.672***	0.249*	0.217	0.214
HH_ETH (ref: Ekoi): Igbo	[-0.689, 0.364]		[-1.546, -0.471]		[-0.341, 0.391]	[0.809, 2.535]		[-0.491, 0.926]	
	0.000	0.000	0.000	0.000	0.000	-1.779	0.427**	0.000	0.000
HH_ETH (ref: Ekoi): ljaw / lzon	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[-4.231, 0.674]	[0.080, 0.774]	[0.000, 0.000]	[0.000, 0.000]
	-0.722	-0.707	0.647	0.100	-0.611	2.708**	0.213	-0.902 <sup>*</sup>	-0.888
HH_ETH (ref: Ekoi): Kanuri / Beriberi	[-2.342, 0.898]	[-2.327, 0.913]		[-1.070, 1.270]		[0.535, 4.880]	[-0.284, 0.710]	[-1.967, 0.162]	
	-0.116	-0.118	-0.808***	0.945***	0.095	0.824**	0.218*	0.088	0.084
HH_ETH (ref: Ekoi): Tiv	[-0.491, 0.260]		-0.606 [-1.135, -0.481]		[-0.207, 0.398]	[0.013, 1.635]	[-0.009, 0.445]	[-0.253, 0.429]	
	0.183	0.191	-0.267	0.600***	-0.310**	2.871***	0.472***	0.301	0.305
HH_ETH (ref: Ekoi): Yoruba			[-0.587, 0.052]		[-0.568, -0.051]		[0.214, 0.731]	[-0.089, 0.692]	
	0.000	0.000	0.000	0.000	0.000	1.335***	0.516***	0.000	0.000
HH_ETH (ref: Ekoi): Other	[0.000, 0.000]	[0.000, 0.000]		[0.000, 0.000]	[0.000, 0.000]	[0.666, 2.004]	[0.319, 0.713]	[0.000, 0.000] 0.113***	[0.000, 0.000] 0.113***
HH_SIZ			[-0.012, 0.025]	[-0.020, 0.027]	[-0.026, 0.011]	[-0.098, -0.036]		[0.076, 0.149]	[0.076, 0.150]
	0.150***	0.149***	-0.182***	0.088***	0.116***	0.304***	0.055***	0.015	0.015

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HH_WEA	[0.107, 0.193]	[0.106, 0.192]	[-0.218, -0.146]	[0.046, 0.129]	[0.082, 0.149]	[0.225, 0.384]	[0.032, 0.078]	[-0.035, 0.065]	[-0.036, 0.065]
	0.988***	0.989***	-0.331 <sup>*</sup>	-0.344*	0.562***	<b>-</b> 1.690***	-0.205	0.183	0.170
YEAR (ref: 2003): 2008	[0.475, 1.501]	[0.474, 1.504]	[-0.691, 0.029]	[-0.742, 0.053]	[0.209, 0.915]	[-2.851, -0.529]	[-0.486, 0.077]	[-0.301, 0.667]	[-0.314, 0.653]
	0.818***	0.837***	-0.433**	-0.216	0.537***	-1.049 <sup>*</sup>	-0.120	0.412	0.406
YEAR (ref: 2003): 2013	[0.311, 1.326]	[0.328, 1.345]	[-0.792, -0.075]	[-0.607, 0.175]	[0.189, 0.886]	[-2.289, 0.191]	[-0.393, 0.153]	[-0.093, 0.917]	[-0.098, 0.911]
	1.134***	1.183***	-0.775***	-0.072	0.787***	-2.272 <sup>***</sup>	-0.304**	0.398	0.376
YEAR (ref: 2003): 2018	[0.609, 1.659]	[0.660, 1.707]	[-1.150, -0.400]	[-0.488, 0.343]	[0.421, 1.153]	[-3.442, -1.101]	[-0.579, -0.030]	[-0.090, 0.886]	[-0.111, 0.863]
	-5.527***	-5.158 <sup>***</sup>	1.901***	-2.371***	-2.459***	1.800***	0.579***	1.877***	1.829***
Constant	[-6.348, -4.707]	[-5.930, -4.386]	[1.358, 2.444]	[-3.004, -1.737]	[-2.986, -1.932]	[0.559, 3.042]	[0.175, 0.983]	[1.097, 2.657]	[1.053, 2.606]
	0.172***	0.172***	0.338***	0.410***	0.186***	0.030	<b>-</b> 1.683***	0.000	0.000
Multilevel variance parameter: Level 1	[0.066, 0.279]	[0.066, 0.278]	[0.185, 0.490]	[0.193, 0.628]	[0.090, 0.283]	[-0.159, 0.219]	[-2.031, -1.334]	[-0.000, 0.000]	[-0.000, 0.000]
Multilevel variance parameter:						1.263***	0.254***		
Residual						[1.193, 1.333]	[0.199, 0.309]		
Observations (Level 2)	4342	4342	6071	6071	6071	6103	6293	9028	9028
Observations (Level 1)	113	113	113	113	113	113	113	113	113
Akaike Information Criterion	4152.478	4159.676	6199.652	4691.431	6657.883	32962.923	21185.627	3710.053	3710.113
Prob. > $X^2$	< 0.001	< 0.001	< 0.001	<0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.001

	Non-polio full	immunisation		Delivery		Antenatal care		Child survival	
North East	Full model	Interaction model (EXPxAGE)	At home	At private facility	At public facility	No. of antenatal care visits	No. of tetanus injections	Exposure decompositio n	Total exposure
EVP OU	-0.074***	-0.058**				Viole			
EXP_CHI	[-0.106, -0.042]	[-0.104, -0.013]							
EVD <sub>V</sub> A CE		0.000							
EXPxAGE		[-0.001, 0.001]							
EXP PREG			-0.025	0.024	0.018	0.015	0.001		
EXI _I NEO			[-0.067, 0.017]	[-0.103, 0.151]	[-0.024, 0.060]	[-0.026, 0.055]	[-0.017, 0.019]		
EXP_PREG_nod (date approximation)								0.019 [-0.022, 0.060]	
EXP_CHI_nod (date approximation)								0.005 [-0.020, 0.029]	
EXP_TOT_nod (total exposure, date									0.008
approximation)									[-0.013, 0.030]
CHI ACE	0.085***	0.054***						-0.014	-0.014
CHI_AGE	[0.043, 0.128]	[0.032, 0.077]						[-0.035, 0.008]	[-0.035, 0.007]
CHI_AGE2	-0.001 <sup>*</sup>							0.000	0.000
CHI_AGE2	[-0.001, 0.000]							[-0.000, 0.000]	[-0.000, 0.000]
CHI_ORD	<b>-</b> 0.072**	-0.073**						-0.139***	-0.139 <sup>***</sup>
OH_OND	[-0.135, -0.010]	[-0.136, -0.011]							[-0.186, -0.093]
CHI_SEX	0.026	0.024						0.271***	0.271***
OHI_OLX	[-0.163, 0.215]	-						[0.121, 0.421]	[0.121, 0.420]
MOT_ANC	0.144***	0.144***	-0.218***	0.134***	0.203***			0.003	0.003
WO1_ANO	[0.109, 0.179]	[0.109, 0.179]	[-0.244, -0.192]	[0.069, 0.200]	[0.178, 0.229]			[-0.026, 0.031]	[-0.026, 0.031]
MOT_EDM	0.072***	0.071***	-0.083***	0.120***	0.072***	0.092***	0.030***	-0.009	-0.009
11101_E5111	[0.030, 0.115]	[0.029, 0.114]	[-0.114, -0.051]	[0.030, 0.210]	[0.040, 0.104]	[0.054, 0.130]	[0.016, 0.044]	[-0.050, 0.031]	[-0.049, 0.031]
MOT_EDF	0.006	0.006	-0.028 <sup>*</sup>	0.020	0.031*	0.104***	0.029***	0.038**	0.038**
			[-0.059, 0.003]	-		[0.071, 0.137]	[0.013, 0.044]	[0.002, 0.074]	[0.003, 0.074]
MOT_AWE	2.870***	2.872***	-0.834***	0.801***	0.806***	1.847***	0.740***		
	[2.563, 3.177]		[-0.998, -0.669]	[0.290, 1.311]	[0.640, 0.973]	[1.626, 2.068]	[0.663, 0.818]		
MOT_AGE	0.031***	0.031***	0.007	0.012	-0.009	0.001	0.000	0.008	0.008
<u>-</u>	[0.008, 0.055]	[0.007, 0.055]	[-0.004, 0.019]		-	[-0.009, 0.010]	-	[-0.010, 0.026]	[-0.010, 0.026]
HH_RUR	-0.159	-0.161	0.601***	0.123	-0.609***	-0.671***	-0.312***	-0.191	-0.190
_ '		[-0.435, 0.114]	[0.388, 0.814]			[-1.014, -0.328]	•		[-0.430, 0.051]
HH_REL (ref: Catholic): Other	-0.546	-0.558*	-0.366	0.534	0.338	0.285	0.114	-0.898**	-0.895**
Christian	-	-	[-0.866, 0.133]		-		-	-	-
HH_REL (ref: Catholic): Islam	-1.072***	-1.088***	-0.018	0.105	0.051	0.073	0.050	-0.776**	-0.772**
_ , ,			[-0.531, 0.495]					[-1.548, -0.004]	
HH_REL (ref: Catholic): Traditionalist	-1.618**	-1.630**	0.789	0.000	-0.609	-0.676	-0.263	-0.562	-0.560
		[-3.136, -0.124]		[0.000, 0.000]	[-1.842, 0.624]	-	[-0.583, 0.056]		[-1.749, 0.629]
HH_REL (ref: Catholic): Other	0.000	0.000	0.000	0.000	0.000	-2.056***	-0.787***	0.000	0.000
	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]		[-2.585, -1.526]		[0.000, 0.000]	[0.000, 0.000]
HH_ETH (ref: Ekoi): Fulani	-0.057 [-0.358, 0.245]	-0.065 [-0.366, 0.236]	-0.039 [-0.265, 0.188]	0.172	0.026 [-0.201, 0.253]	0.000	0.000	0.172 [-0.049, 0.393]	0.172 [-0.049, 0.393]
	-0.078	-0.082	0.209*	-0.302	-0.168	0.552***	0.128**	0.005	0.004
HH_ETH (ref: Ekoi): Hausa	[-0.382, 0.226]	[-0.387, 0.222]	[-0.019, 0.438]		[-0.396, 0.059]	[0.197, 0.907]	[0.025, 0.231]	[-0.224, 0.234]	[-0.224, 0.233]
	0.000	0.000	0.000	0.000	0.000	-1.698***	-0.297***	0.000	0.000
HH_ETH (ref: Ekoi): Ibibio	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]		-1.096 [-2.025, -1.371]		[0.000, 0.000]	[0.000, 0.000]
	0.000	0.000	-0.981	2.001	0.221	0.707	0.077	-1.173	-1.184
HH_ETH (ref: Ekoi): Igala	[0.000, 0.000]	[0.000, 0.000]	[-3.004, 1.041]			[-1.352, 2.765]			
	0.487	0.501	0.000	1.367**	0.292	3.466***	0.444**	-0.922	-0.925
HH_ETH (ref: Ekoi): Igbo		[-1.172, 2.174]		[0.048, 2.687]	[-0.831, 1.415]		[0.091, 0.796]	[-2.188, 0.343]	
LIL ETH / EF-N. H / I		=, ==]	[5:300, 0:000]	[2.5.0, 2.007]	[ 5.55., 1.710]	[50., 0.040]	[2.30., 000]	, =, 0.040]	, =, 0.041]
HH_ETH (ref: Ekoi): ljaw / lzon	0.000	0.040	o 4= :***	0.005	o**	0.050	0.004	0.404	0.400
HH_ETH (ref: Ekoi): Kanuri / Beriberi	-0.220	-0.218	0.454***	-0.625	-0.405**	-0.059	-0.021	0.121	0.123
•	[-0.684, 0.245]	[-0.683, 0.246]	[0.124, 0.784]		[-0.732, -0.078]		[-0.149, 0.107]	[-0.183, 0.425]	[-0.181, 0.426]
HH_ETH (ref: Ekoi): Tiv	-0.200	-0.236	-1.446***	-0.044	1.613***	-0.345	-0.123	0.065	0.069
		-	[-2.017, -0.874]	-		[-1.423, 0.733]		[-0.716, 0.847]	[-0.712, 0.851]
HH_ETH (ref: Ekoi): Yoruba	0.351	0.367	-0.990	1.845**	0.112	0.855	0.000	0.000	0.00.0
•	[-1.116, 1.818]	[-1.095, 1.829]	[-2.250, 0.270]	[0.224, 3.467]	[-1.022, 1.245]	[-1.072, 2.783]	[-0.583, 0.584]	[0.000, 0.000]	[0.000, 0.000]

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HH_ETH (ref: Ekoi): Other	0.000 [0.000, 0.000] -0.022*	0.000 [0.000, 0.000] -0.021*	0.000 [0.000, 0.000] 0.032***	0.000 [0.000, 0.000] -0.032	0.000 [0.000, 0.000] -0.028***	0.415*** [0.151, 0.679] -0.015*	0.191*** [0.085, 0.298] -0.007	0.000 [0.000, 0.000] 0.096****	0.000 [0.000, 0.000] 0.096***
HH_SIZ	[-0.047, 0.003]	[-0.047, 0.004]	[0.013, 0.051]	[-0.090, 0.027]	[-0.046, -0.009]	[-0.033, 0.002]	[-0.016, 0.002]	[0.071, 0.121]	[0.071, 0.121]
	0.103***	0.103***	-0.237***	0.040	0.230***	0.240***	0.071***	0.033	0.033
HH_WEA	[0.050, 0.157]	[0.049, 0.156]	[-0.279, -0.196]	[-0.073, 0.154]	[0.188, 0.271]	[0.185, 0.295]	[0.051, 0.091]	[-0.015, 0.081]	[-0.015, 0.081]
VEAD ( 5 0000) 0000	0.788*	0.799*	0.726***	-1.900 <sup>***</sup>	-0.354	0.217	0.109	0.097	0.108
YEAR (ref: 2003): 2008	[-0.031, 1.608]	[-0.024, 1.622]	[0.299, 1.153]	[-2.812, -0.988]	[-0.790, 0.083]	[-0.214, 0.649]	[-0.068, 0.286]	[-0.318, 0.512]	[-0.305, 0.521]
	1.338***	1.358***	0.396*	-1.756 <sup>***</sup>	-0.054	0.217	0.224**	0.184	0.193
YEAR (ref: 2003): 2013	[0.525, 2.151]	[0.542, 2.174]	[-0.026, 0.818]	[-2.679, -0.833]	[-0.484, 0.377]	[-0.198, 0.632]	[0.026, 0.421]	[-0.247, 0.615]	[-0.237, 0.623]
	1.692***	1.741***	0.091	-1.457***	0.258	-0.034	0.308***	0.115	0.138
YEAR (ref: 2003): 2018	[0.865, 2.518]	[0.915, 2.568]	[-0.352, 0.534]	[-2.441, -0.473]	[-0.195, 0.711]	[-0.467, 0.400]	[0.110, 0.505]	[-0.303, 0.532]	[-0.273, 0.548]
	-5.962***	<b>-</b> 5.653***	2.646***	-5.294***	-2.948***	1.088***	0.410***	3.024***	3.046***
Constant	[-7.134, -4.790]	[-6.771, -4.535]	[1.930, 3.362]	[-7.033, -3.555]	[-3.666, -2.230]	[0.398, 1.778]	[0.106, 0.714]	[2.074, 3.974]	[2.099, 3.993]
	0.158**	0.163***	0.317***	1.656***	0.237***	-0.479***	-1.597 <sup>***</sup>	0.053*	0.052*
Multilevel variance parameter: Level 1	[0.037, 0.278]	[0.040, 0.286]	[0.160, 0.475]	[0.508, 2.804]	[0.100, 0.374]	[-0.643, -0.316]	[-1.924, -1.270]	[-0.007, 0.113]	[-0.008, 0.112]
Multilevel variance parameter: Residual						0.924*** [0.864, 0.985]	0.079*** [0.035, 0.123]		
Observations (Level 2)	5017	5017	7350	7304	7370	7387	7479	11269	11269
Observations (Level 1)	100	100	100	100	100	100	100	101	101
Akaike Information Criterion	2854.824	2857.651	5075.901	966.734	5023.467	34819.738	22572.587	5492.777	5491.124
Prob. $> X^2$	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

	Non-polio full	immunisation		Delivery			tal care	Child s	urvival
North West	Full model	Interaction model	At home	At private facility	At public facility	No. of antenatal care	No. of tetanus injections	Exposure decompositio	Total exposure
	-0.076**	(EXPxAGE) -0.034		<u> </u>	-	visits	•	<u>n</u>	•
EXP_CHI	[-0.151, -0.002]	[-0.110, 0.042]							
		-0.001 <sup>*</sup>							
EXPxAGE		[-0.002, 0.000]							
			-0.015	-0.059	0.025	0.025	0.002		
EXP_PREG			[-0.067, 0.037]	[-0.197, 0.080]	[-0.028, 0.078]	[-0.005, 0.055]	[-0.013, 0.017]		
EXP_PREG_nod								-0.008	
(date approximation)								[-0.051, 0.035]	
EXP_CHI_nod								0.025	
(date approximation)								[-0.011, 0.060]	
EXP_TOT_nod (total exposure, date									0.013
approximation)									[-0.019, 0.045]
0111 405	0.105***	0.065***						-0.047***	-0.043***
CHI_AGE	[0.038, 0.172]	[0.017, 0.114]						[-0.072, -0.021]	[-0.068, -0.018]
0111 4050	-0.001**							0.000*	0.000**
CHI_AGE2	[-0.001, -0.000]							[-0.000, 0.001]	[0.000, 0.001]
OHI OPP	-0.063 <sup>*</sup>	-0.063 <sup>*</sup>						-0.162***	-0.162***
CHI_ORD	[-0.129, 0.002]	[-0.129, 0.002]						[-0.200, -0.124]	[-0.200, -0.124]
CHI SEV	0.045	0.045						0.126**	0.125**
CHI_SEX	-	-						[0.010, 0.241]	[0.010, 0.241]
MOT_ANC	0.063***	0.063***	-0.203***	0.221***	0.188***			0.015	0.015
WOT_ANC	[0.026, 0.099]	[0.027, 0.099]	[-0.228, -0.178]	[0.147, 0.296]	[0.162, 0.213]			[-0.009, 0.040]	[-0.009, 0.040]
MOT_EDM	0.068***	0.067***	-0.058***	0.011	0.062***	0.127***	0.036***	0.013	0.013
MOT_EDIVI	[0.021, 0.114]	[0.021, 0.114]	[-0.091, -0.025]	[-0.099, 0.120]	[0.028, 0.095]	[0.091, 0.163]	[0.024, 0.049]	[-0.021, 0.048]	[-0.021, 0.048]
MOT_EDF	0.029	0.029	-0.007	-0.043	0.017	0.106***	0.034***	0.043***	0.043***
WO1_EDF	-	[-0.013, 0.071]	-	[-0.158, 0.071]	-	[0.083, 0.128]	[0.026, 0.043]	[0.016, 0.070]	[0.015, 0.070]
MOT_AWE	3.547***	3.543***	-0.696***	0.676**	0.688***	1.471***	0.505***		
MOT_AVVE	[3.265, 3.828]	[3.262, 3.824]	[-0.864, -0.528]	[0.030, 1.323]	[0.517, 0.858]	[1.270, 1.673]	[0.428, 0.582]		
MOT_AGE	0.037***	0.037***	0.007	0.003	-0.009	0.004	-0.002 <sup>*</sup>	0.029***	0.029***
	[0.012, 0.062]	[0.012, 0.062]	[-0.004, 0.019]		-	-	-	[0.014, 0.044]	[0.014, 0.044]
HH_RUR	-0.099	-0.101	0.777***	-0.793 <sup>**</sup>	-0.765***	-0.776***	-0.260***	-0.131	-0.133
	[-0.415, 0.218]	[-0.417, 0.215]	[0.572, 0.982]	•	-	[-1.122, -0.429]	•	•	[-0.319, 0.054]
HH_REL (ref: Catholic): Other	0.451	0.441	-0.394	-0.061	0.411	0.504	0.005	0.183	0.180
Christian				[-0.966, 0.845]					[-0.567, 0.927]
HH_REL (ref: Catholic): Islam	-0.326	-0.332	0.722**	-1.716***	-0.383	-0.201	-0.190	0.150	0.145
	-0.677	[-1.144, 0.479] -0.669	[0.116, 1.327] 0.942	[-2.973, -0.459] 0.236	-0.913	-0.536	-0.253**	[-0.549, 0.850] 0.132	[-0.554, 0.844] 0.131
HH_REL (ref: Catholic): Traditionalist	[-2.263, 0.910]	[-2.251, 0.913]							[-0.787, 1.049]
	0.000	0.000	[-0.244, 2.127] 0.000	0.000	0.000	[-1.263, 0.192] 1.210	-0.414***	-1.208	-1.195
HH_REL (ref: Catholic): Other	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]			[-3.688, 1.271]	
	0.087	0.089	0.537**	-0.375	-0.552**	0.389***	0.208***	2.211	2.191
HH_ETH (ref: Ekoi): Fulani	[-0.590, 0.763]	[-0.587, 0.766]	[0.041, 1.032]		-0.552 [-1.053, -0.050]		[0.138, 0.278]		[-0.615, 4.996]
	0.339	0.338	0.474**	-0.792	-0.401**	0.735***	0.333***	1.858	1.841
HH_ETH (ref: Ekoi): Hausa	[-0.180, 0.859]	[-0.181, 0.857]	[0.096, 0.851]		[-0.782, -0.021]		[0.272, 0.394]	[-0.943, 4.659]	[-0.959, 4.641]
	0.000	0.000	0.000	0.000	0.000	0.980***	-0.492	0.000	0.000
HH_ETH (ref: Ekoi): Ibibio	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.667, 1.292]	[-2.642, 1.658]	[0.000, 0.000]	[0.000, 0.000]
	0.000	0.000	0.000	0.000	0.000	3.909***	2.169***	0.000	0.000
HH_ETH (ref: Ekoi): lgala	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[3.548, 4.269]	[2.042, 2.296]	[0.000, 0.000]	[0.000, 0.000]
HH_ETH (ref: Ekoi): Igbo	0.216	0.209	-1.134 <sup>*</sup>	-0.479	0.412	1.275**	0.422***	0.000	0.000
	[-0.866, 1.298]	[-0.872, 1.290]	[-2.357, 0.088]	[-1.729, 0.772]	[-0.482, 1.306]	[0.105, 2.444]	[0.130, 0.714]	[0.000, 0.000]	[0.000, 0.000]
HH_ETH (ref: Ekoi): ljaw / lzon									
UU ETU (vof. Elsoi). Kannai / Davila ad	0.626	0.641	1.715**	0.000	-1.428 <sup>*</sup>	1.051***	0.828***	2.261	2.241
HH_ETH (ref: Ekoi): Kanuri / Beriberi	[-0.630, 1.882]	[-0.614, 1.895]	[0.170, 3.259]	[0.000, 0.000]	[-2.963, 0.107]	[0.453, 1.649]	[0.349, 1.307]	[-0.649, 5.170]	[-0.667, 5.149]
HU ETU /rof: Ekoi): Ti-:	0.000	0.000	0.000	1.472	0.197	0.694	-0.069	0.000	0.000
HH_ETH (ref: Ekoi): Tiv	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[-1.265, 4.208]	[-2.515, 2.909]	[-0.510, 1.898]	• .	[0.000, 0.000]	[0.000, 0.000]
HH_ETH (ref: Ekoi): Yoruba	0.609	0.610	-0.492	0.489	0.230	0.606	0.475***	2.118	2.107
TITI_ETTT (Tel. EROI). TOTUDA	[-0.739, 1.958]	[-0.736, 1.957]	[-1.475, 0.491]	[-0.939, 1.918]		_	[0.162, 0.787]	[-1.034, 5.270]	[-1.043, 5.258]
	0.000	0.000	0.000	0.000	0.000	0.760***	0.386***	2.275	2.257

HH_ETH (ref: Ekoi): Other	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.412, 1.107]	[0.256, 0.516]	[-0.546, 5.096]	[-0.563, 5.076]
	-0.009	-0.009	0.044***	-0.012	-0.038***	-0.016 <sup>*</sup>	-0.006*	0.122***	0.122***
HH_SIZ	[-0.037, 0.020]	[-0.037, 0.020]	[0.022, 0.065]	[-0.081, 0.058]	[-0.060, -0.017]	[-0.033, 0.001]	[-0.013, 0.001]	[0.101, 0.143]	[0.101, 0.143]
	0.133***	0.133***	-0.203***	0.286***	0.170***	0.221***	0.063***	-0.005	-0.005
HH_WEA	[0.080, 0.186]	[0.080, 0.186]	[-0.243, -0.163]	[0.166, 0.405]	[0.130, 0.209]	[0.183, 0.259]	[0.048, 0.079]	[-0.042, 0.031]	[-0.042, 0.031]
	1.387***	1.287***	0.109	-0.886 <sup>*</sup>	0.023	-0.710***	-0.120 <sup>*</sup>	0.276	0.270
YEAR (ref: 2003): 2008	[0.505, 2.270]	[0.402, 2.172]	[-0.313, 0.531]	[-1.808, 0.035]	[-0.417, 0.462]	[-1.208, -0.212]	[-0.257, 0.018]	[-0.075, 0.627]	[-0.081, 0.621]
VEAR ( 5 0000) 0040	1.739***	1.575***	-0.181	-1.844***	0.376*	-0.523 <sup>*</sup>	0.032	0.289	0.309
YEAR (ref: 2003): 2013	[0.753, 2.726]	[0.593, 2.557]	[-0.602, 0.239]	[-2.814, -0.874]	[-0.062, 0.813]	[-1.053, 0.006]	[-0.126, 0.190]	[-0.146, 0.723]	[-0.127, 0.745]
VEAD (5:4: 0000): 0040	1.087**	1.170***	-0.450**	0.043	0.476**	-0.116	0.268***	0.272	0.207
YEAR (ref: 2003): 2018	[0.216, 1.959]	[0.304, 2.035]	[-0.872, -0.028]	[-0.846, 0.932]	[0.037, 0.915]	[-0.623, 0.391]	[0.113, 0.424]	[-0.054, 0.599]	[-0.106, 0.520]
	<b>-</b> 8.155***	<b>-</b> 7.870***	2.044***	-3.822***	-2.524 <sup>***</sup>	1.132 <sup>**</sup>	0.415**	-0.185	-0.229
Constant	[-9.559, -6.752]	[-9.212, -6.529]	[1.300, 2.788]	[-5.669, -1.975]	[-3.287, -1.760]	[0.205, 2.059]	[0.095, 0.736]	[-3.118, 2.747]	[-3.160, 2.701]
Multilared	0.708***	0.705***	0.134***	0.290	0.143***	-0.338***	-1.448 <sup>***</sup>	0.025	0.026
Multilevel variance parameter: Level 1	[0.391, 1.025]	[0.389, 1.020]	[0.038, 0.230]	[-0.208, 0.789]	[0.041, 0.244]	[-0.492, -0.183]	[-1.629, -1.267]	[-0.012, 0.062]	[-0.012, 0.063]
Multilevel variance parameter:						0.845***	-0.043*		
Residual						[0.798, 0.892]	[-0.094, 0.007]		
Observations (Level 2) Observations (Level 1)	7249 166	7249 166	10429 166	10383 166	10432 166	10447 166	10663 166	16552 166	16552 166
Akaike Information Criterion	2869.01	2870.86	5101.199	687.393	5117.543	47639.029	29619.064	8734.342	8734.38
Prob. > $X^2$	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Non-polio full immunisation		n Delivery			Antena	tal care	Child survival		
South East	-	Interaction		At private	At public	No. of	No. of tetanus	Exposure	Total
	Full model 0.092	model (EXPxAGE) 0.238**	At home	facility	facility	antenatal care visits	injections	decompositio n	exposure
EXP_CHI	[-0.035, 0.220]	[0.056, 0.420]							
EXPxAGE		-0.005*** [-0.008, -0.002]							
EXP_PREG			0.036 [-0.062, 0.135]	0.020	-0.049	0.155**	0.010 [-0.021, 0.042]		
			[-0.002, 0.135]	[-0.060, 0.099]	[-0.129, 0.030]	[0.001, 0.308]	[-0.021, 0.042]	0.036	
EXP_PREG_nod (date approximation)								[-0.116, 0.189]	
EXP_CHI_nod (date approximation)								-0.043 [-0.171, 0.085]	
EXP_TOT_nod (total exposure, date approximation)									-0.013 [-0.126, 0.099]
	0.112***	0.048***						-0.017	-0.013
CHI_AGE	[0.069, 0.155]	[0.019, 0.078]						[-0.056, 0.022]	[-0.052, 0.025]
CHI_AGE2	-0.002*** [-0.002, -0.001]							0.000 [-0.000, 0.001]	0.000 [-0.000, 0.001]
	-0.037	-0.036						-0.122***	-0.122***
CHI_ORD	[-0.100, 0.026]	[-0.099, 0.027]						-	[-0.195, -0.048]
CHI_SEX	-0.149 [-0.362, 0.063]	-0.148 [-0.360, 0.065]						0.386*** [0.127, 0.645]	0.383*** [0.124, 0.642]
	0.030***	0.030***	-0.104***	0.037***	0.021**			-0.008	-0.007
MOT_ANC	[0.007, 0.053]	[0.007, 0.053]	[-0.131, -0.077]	[0.020, 0.055]	[0.003, 0.038]			[-0.033, 0.017]	[-0.032, 0.018]
MOT_EDM	0.055*	0.055*	-0.075**	-0.027	0.099***	0.056	0.040***	-0.001	-0.001
WO1_EBW			[-0.132, -0.018]			[-0.061, 0.173]	[0.020, 0.061]	-	[-0.071, 0.069]
MOT_EDF	0.016	0.016	-0.106***	0.055**	0.036	0.008	-0.004	0.024	0.026
	[-0.046, 0.079] 2.623***	[-0.047, 0.078] 2.613***	[-0.164, -0.048] -0.974***	[0.003, 0.106]	[-0.016, 0.088] 0.802***	1.372***	[-0.032, 0.024] 0.448***	[-0.046, 0.095]	[-0.045, 0.096]
MOT_AWE	[2.236, 3.011]	[2.226, 3.000]	-0.974 [-1.244, -0.703]		[0.520, 1.083]	[0.702, 2.042]	[0.274, 0.621]		
	0.013	0.013	-0.020**	-0.001	0.012*	-0.001	0.002	-0.019	-0.019
MOT_AGE	[-0.010, 0.036]	[-0.011, 0.036]	[-0.037, -0.002]	[-0.015, 0.013]	[-0.002, 0.026]	[-0.024, 0.022]	[-0.003, 0.007]	[-0.044, 0.007]	[-0.044, 0.007]
LIII DUD	-0.094	-0.102	-0.003	-0.129	0.181*	-0.018	-0.060	-0.306**	-0.305**
HH_RUR	[-0.343, 0.155]	[-0.351, 0.147]	[-0.271, 0.264]	[-0.333, 0.075]	-	[-0.493, 0.457]	[-0.141, 0.020]	[-0.571, -0.041]	[-0.570, -0.041]
HH_REL (ref: Catholic): Other	-0.110	-0.103	0.016	-0.189 <sup>**</sup>	0.206**	-0.235	-0.099**	-0.316 <sup>**</sup>	-0.312**
Christian	•		[-0.221, 0.254]	-	-			[-0.590, -0.041]	•
HH_REL (ref: Catholic): Islam	-0.055 [-2.549, 2.440]	-0.031 [-2.503, 2.442]	-0.726	1.069 [-0.661, 2.798]	-0.588 [-2.638_1.463]	0.705	-0.146 [-0.858, 0.567]	0.000	0.000
	-0.235	-0.223	1.728***	-1.829***	-0.951**	-1.223 <sup>**</sup>	-0.326**	-0.303	-0.299
HH_REL (ref: Catholic): Traditionalist	[-0.870, 0.400]	[-0.859, 0.412]		[-2.694, -0.964]		[-2.193, -0.254]		[-1.031, 0.424]	
HH_REL (ref: Catholic): Other	0.000	0.000	0.000	0.000	0.000	16.125 <sup>***</sup> [15.152,	1.493***	-1.997	-2.025
_	0.000	0.000	0.000	[0.000, 0.000]	[0.000, 0.000]	17.099] 0.000	[1.304, 1.683] 0.000	[-4.770, 0.776] 0.000	[-4.787, 0.737] 0.000
HH_ETH (ref: Ekoi): Fulani	[0.000, 0.000] -1.150	[0.000, 0.000] -1.069	[0.000, 0.000] -0.604	[0.000, 0.000] 0.283	[0.000, 0.000] -0.489	[0.000, 0.000] 3.793***	[0.000, 0.000] 0.286 <sup>*</sup>	[0.000, 0.000] 0.370	[0.000, 0.000] 0.389
HH_ETH (ref: Ekoi): Hausa	[-2.979, 0.679]	[-2.890, 0.753]	[-3.250, 2.042]	[-1.011, 1.577]	[-1.841, 0.863]	[2.817, 4.769]	[-0.006, 0.578]	[-1.248, 1.989]	[-1.227, 2.006]
HH_ETH (ref: Ekoi): Ibibio	-0.356	-0.310	0.975	-1.174	0.507	0.393	0.100	0.296	0.303
TITI_ETTT (Tel. Ekol). Ibibio			[-1.143, 3.094]			[-1.936, 2.722]	•		[-2.023, 2.629]
HH_ETH (ref: Ekoi): Igala	-0.604	-0.637	-0.394	-2.032	1.572*	3.192***	0.983	0.282	0.279
	-0.887	-0.856	[-2.689, 1.901]		0.120	3.875***	-	[-1.560, 2.124] 0.828	0.839
HH_ETH (ref: Ekoi): Igbo	-0.887 [-2.193, 0.419]		-0.040 [-1.256, 1.177]	-0.183 [-1.007, 0.640]		3.875 [3.160, 4.590]	0.400*** [0.282, 0.518]	0.828 [-0.257, 1.914]	[-0.246, 1.924]
	0.000	0.000	0.000	0.000	0.000	-0.404	-1.627***	0.000	0.000
HH_ETH (ref: Ekoi): ljaw / lzon	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]		[-1.814, -1.440]		[0.000, 0.000]
HH_ETH (ref: Ekoi): Kanuri / Beriberi									
HH_ETH (ref: Ekoi): Tiv	0.000	0.00.0	0.000	0.000	0.000	-3.047***	-1.582***	0.000	0.000
,	0.000	0.000	[0.000, 0.000]	[0.000, 0.000] -1.742 <sup>*</sup>	[0.000, 0.000]	[-3.747, -2.348] 2.502**	[-1.708, -1.456] 0.491	0.000	[0.000, 0.000]
HH_ETH (ref: Ekoi): Yoruba	[0.000, 0.000]	[0.000, 0.000]		-1.742 [-3.529, 0.045]		2.502 [0.025, 4.978]	[-0.231, 1.212]	[0.000, 0.000]	[0.000, 0.000]
HH FTH (ref: Fkoi): Other	0.000	0.000	0.000	0.000	0.000	4.086***	0.676***	0.000	0.000
HH FIH (LET. FKUI). ( )ther							· <del>-</del>		

THI_ETTI (IOI. ENOI). Outoi	[0.000, 0.000] -0.012	[0.000, 0.000] -0.013	[0.000, 0.000] 0.023	[0.000, 0.000] -0.002	[0.000, 0.000] -0.012	[1.888, 6.284] -0.101***	[0.389, 0.964] -0.006	[0.000, 0.000] 0.206***	[0.000, 0.000] 0.206***
HH_SIZ	[-0.052, 0.028]	[-0.053, 0.027]	[-0.017, 0.064]	[-0.035, 0.030]	[-0.045, 0.021]	[-0.166, -0.037]	[-0.018, 0.007]	[0.132, 0.280]	[0.132, 0.280]
	0.165***	0.164***	-0.214***	0.152***	-0.016	0.297***	0.046***	0.034	0.034
HH_WEA	[0.114, 0.217]	[0.113, 0.215]	[-0.268, -0.161]	[0.111, 0.192]	[-0.055, 0.024]	[0.201, 0.393]	[0.029, 0.064]	[-0.025, 0.093]	[-0.025, 0.093]
	0.876***	0.878***	-0.072	0.063	-0.165	-0.647	-0.070	0.265	0.227
YEAR (ref: 2003): 2008	[0.211, 1.541]	[0.214, 1.542]	[-0.638, 0.494]	[-0.404, 0.530]	[-0.641, 0.312]	[-1.778, 0.484]	[-0.286, 0.147]	[-0.444, 0.973]	[-0.477, 0.930]
	0.906***	0.914***	-0.075	-0.150	0.092	0.659	0.113	0.234	0.166
YEAR (ref: 2003): 2013	[0.250, 1.563]	[0.258, 1.571]	[-0.629, 0.479]	[-0.602, 0.302]	[-0.367, 0.551]	[-0.404, 1.722]	[-0.119, 0.345]	[-0.475, 0.943]	[-0.529, 0.861]
	1.159***	1.301***	-0.147	-0.237	0.217	-0.653	0.027	0.468	0.462
YEAR (ref: 2003): 2018	[0.408, 1.910]	[0.534, 2.067]	[-0.738, 0.444]	[-0.718, 0.244]	[-0.268, 0.702]	[-1.764, 0.458]	[-0.217, 0.270]	[-0.359, 1.295]	[-0.365, 1.289]
	<b>-</b> 4.957***	-4.578 <sup>***</sup>	2.123***	-1.095**	-2.661 <sup>***</sup>	2.038**	1.009***	1.657**	1.685**
Constant	[-6.650, -3.263]	[-6.238, -2.917]	[0.628, 3.618]	[-2.177, -0.013]	[-3.796, -1.526]	[0.300, 3.777]	[0.663, 1.355]	[0.114, 3.199]	[0.144, 3.226]
	0.169**	0.169**	0.750***	0.355***	0.238***	0.613***	<b>-</b> 1.893***	0.000	0.000
Multilevel variance parameter: Level 1	[0.034, 0.304]	[0.033, 0.304]	[0.346, 1.154]	[0.183, 0.528]	[0.105, 0.371]	[0.435, 0.791]	[-2.192, -1.594]	[-0.000, 0.000]	[-0.000, 0.000]
Multilevel variance parameter:						1.510***	-0.008		
Residual						[1.439, 1.582]	[-0.073, 0.056]		
Observations (Level 2)	2036	2036	2900	2900	2900	2949	3229	4362	4362
Observations (Level 1)	85	85	86	86	123	86	87	87	87
Akaike Information Criterion	2198.177	2202.549	2361.019	3572.969	3513.076	17468.034	9205.156	1926.233	1925.154
Prob. $> X^2$	< 0.001	<0.001	< 0.001	<0.001	< 0.001	<0.001	<0.001	<0.001	<0.001

	Non-polio full			Delivery		Antena	tal care		survival
South South	Full model	Interaction model (EXPxAGE)	At home	At private facility	At public facility	No. of antenatal care visits	No. of tetanus injections	Exposure decompositio n	Total exposure
EXP_CHI	0.065	0.171**							
	[-0.042, 0.171]	[0.001, 0.341]							
EXPxAGE		-0.003***							
		[-0.006, -0.001]	0.000	0.000	0.044	0.070	0.007*		
EXP_PREG			-0.023 [-0.102, 0.056]	0.038	0.014 [-0.060, 0.088]	0.072	0.037 <sup>*</sup> [-0.000, 0.074]		
			[-0.102, 0.056]	[-0.074, 0.150]	[-0.000, 0.000]	[-0.055, 0.198]	[-0.000, 0.074]	-0.056	
EXP_PREG_nod (date approximation)								[-0.206, 0.094]	
								-0.005	
EXP_CHI_nod (date approximation)								[-0.139, 0.128]	
EXP TOT nod (total exposure, date									-0.026
approximation)									[-0.142, 0.091]
CIII ACE	0.073***	0.028**						0.023	0.021
CHI_AGE	[0.035, 0.110]	[0.003, 0.053]						[-0.015, 0.061]	[-0.016, 0.059]
CHI_AGE2	-0.001***							0.000	0.000
OHI_AGE2	[-0.002, -0.000]							[-0.001, 0.000]	[-0.001, 0.000]
CHI_ORD	-0.073**	-0.074**						-0.239***	-0.239 <sup>***</sup>
<u>-</u>		[-0.137, -0.011]							[-0.318, -0.160]
CHI_SEX	0.176*	0.173*						0.317**	0.317**
	[-0.016, 0.368]	[-0.019, 0.365]	0.440***	0.070***	0.000***			[0.054, 0.580]	[0.054, 0.580]
MOT_ANC	0.039*** [0.019, 0.060]	0.039*** [0.019, 0.060]	-0.143***	0.072***	0.083***			0.017 [-0.011, 0.046]	0.017
	0.050*	0.050*	[-0.162, -0.124] -0.023	[0.050, 0.093]	[0.067, 0.100] 0.015	0.075**	0.031***	0.033	[-0.011, 0.046] 0.033
MOT_EDM	[-0.000, 0.101]	[-0.001, 0.101]	[-0.069, 0.023]	[-0.038, 0.094]	[-0.028, 0.058]	[0.005, 0.146]	[0.010, 0.051]	[-0.032, 0.097]	[-0.032, 0.097]
	0.010	0.010	-0.005	0.029	-0.007	0.094*	-0.011	-0.036	-0.036
MOT_EDF	[-0.046, 0.066]		[-0.055, 0.044]		[-0.054, 0.040]	[-0.000, 0.188]		[-0.113, 0.040]	
	2.921***	2.908***	-1.262***	0.825***	1.080***	2.596***	0.657***	,	
MOT_AWE	[2.577, 3.265]		[-1.510, -1.015]		[0.830, 1.330]	[2.197, 2.995]	[0.539, 0.775]		
	0.026**	0.026**	-0.030***	0.007	0.023***	0.019	0.001	-0.003	-0.003
MOT_AGE	[0.005, 0.047]	[0.005, 0.048]	[-0.044, -0.016]	[-0.013, 0.027]	[0.010, 0.036]	[-0.006, 0.045]	[-0.005, 0.007]	[-0.031, 0.025]	[-0.031, 0.025]
	-0.040	-0.047	0.715***	-0.564***	-0.322***	-1.067***	-0.065	-0.405**	-0.405**
HH_RUR	[-0.280, 0.200]	[-0.288, 0.193]	[0.476, 0.953]	[-0.874, -0.253]	[-0.543, -0.100]	[-1.594, -0.539]	[-0.192, 0.062]	[-0.762, -0.048]	[-0.762, -0.049]
HH_REL (ref: Catholic): Other	-0.391**	-0.396**	0.312**	0.237	-0.446***	-0.375	-0.106 <sup>*</sup>	0.054	0.054
Christian		[-0.746, -0.046]		•	[-0.710, -0.182]	-	[-0.226, 0.015]	[-0.403, 0.510]	
HH_REL (ref: Catholic): Islam	0.009	0.006	-0.084	0.063	0.157	0.019	0.169	0.786	0.787
_	-0.746	[-0.765, 0.776] -0.727	[-0.771, 0.603] 0.634	-0.113	[-0.457, 0.771] -0.469	0.748	[-0.139, 0.477] -0.339	[-0.598, 2.169] -0.562	[-0.597, 2.171] -0.557
HH_REL (ref: Catholic): Traditionalist						[-0.852, 2.347]		[-1.539, 0.415]	
	-0.300	-0.294	-0.562	0.000	0.518	-0.793	-0.237	0.000	0.000
HH_REL (ref: Catholic): Other	[-1.524, 0.924]	[-1.520, 0.932]	[-1.606, 0.482]	[0.000, 0.000]	[-0.484, 1.519]	[-2.518, 0.933]	[-1.005, 0.532]	[0.000, 0.000]	[0.000, 0.000]
HH_ETH (ref: Ekoi): Fulani									
· · · · <u>-</u> - · · · ( · · · - · · · ) · · · · · · · · ·	-1.438	-1.440	0.033	0.177	0.135	1.450	-0.187	-1.042	-1.025
HH_ETH (ref: Ekoi): Hausa	[-3.691, 0.815]	[-3.692, 0.813]	[-1.779, 1.845]	[-2.288, 2.643]	[-1.520, 1.790]	[-2.747, 5.646]	[-0.686, 0.312]	[-3.402, 1.317]	[-3.384, 1.334]
	-0.923***	-0.920***	0.244	0.183	-0.129	0.598	-0.003	-0.496	-0.494
HH_ETH (ref: Ekoi): Ibibio	[-1.445, -0.401]	[-1.444, -0.397]	[-0.267, 0.754]	[-0.805, 1.171]	[-0.625, 0.367]	[-0.506, 1.701]	[-0.274, 0.267]	[-1.258, 0.265]	[-1.255, 0.267]
HU ETH (ref: Ekei): Irele	-0.758	-0.740	0.050	1.096	-0.256	0.828	-0.337	-0.964	-0.963
HH_ETH (ref: Ekoi): Igala	[-3.413, 1.898]	[-3.351, 1.871]	[-1.849, 1.949]			_	[-1.153, 0.479]	[-3.153, 1.225]	[-3.151, 1.224]
HH_ETH (ref: Ekoi): lgbo	-0.492 <sup>*</sup>	-0.488 <sup>*</sup>	-0.025	1.214***	-0.488 <sup>**</sup>	1.838***	0.088	-0.304	-0.300
···· <u>-</u> -···(·-··//·· <b>3</b>	-	[-1.049, 0.073]	-	-	[-0.975, -0.000]	[0.562, 3.114]	[-0.165, 0.342]	[-1.113, 0.506]	
HH_ETH (ref: Ekoi): ljaw / lzon	-0.640**	-0.639**	0.804***	-0.043	-0.679***	0.095	-0.018	-0.213	-0.212
	0.000	[-1.140, -0.139] 0.000	0.000	0.000	[-1.178, -0.180] 0.000	[-1.029, 1.219]	[-0.265, 0.229]	[-0.951, 0.526] 0.000	[-0.950, 0.526]
HH_ETH (ref: Ekoi): Kanuri / Beriberi	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	[0.000, 0.000]	**	***	[0.000, 0.000]	[0.000, 0.000]
HH_ETH (ref: Ekoi): Tiv	0.000	0.000	0.000	0.000	0.000	1.582**	-1.433***	0.000	0.000
_	[0.000, 0.000]	[0.000, 0.000]		[0.000, 0.000]	[0.000, 0.000]		[-1.688, -1.177]		[0.000, 0.000]
HH_ETH (ref: Ekoi): Yoruba	-2.193*** [-3.155 -1.231]	-2.185*** [-3.1481.222]	-0.089	2.236***	-1.470*** [-2.336, -0.604]	1.253	0.005	0.131	0.137 [-1 491 1 765]
	-0.887***	-0.885***	0.126	0.953**	-0.384 <sup>*</sup>	1.037*	0.063	-0.202	-0.201
	-0.007	-0.000	0.120	0.800	-0.304	1.037	0.000	-0.202	-0.201

HH_ETH (ref: Ekoi): Other	[-1.352, -0.423]	[-1.352, -0.419]	[-0.319, 0.571]	[0.066, 1.840]	[-0.814, 0.046]	[-0.022, 2.095]	[-0.169, 0.294]	[-0.905, 0.500]	[-0.903, 0.501]
	-0.016	-0.017	0.058***	-0.043	-0.030 <sup>*</sup>	-0.002	-0.016 <sup>*</sup>	0.314***	0.315***
HH_SIZ	[-0.060, 0.027]	[-0.060, 0.027]	[0.020, 0.095]	[-0.095, 0.010]	[-0.065, 0.005]	[-0.067, 0.064]	[-0.033, 0.002]	[0.236, 0.393]	[0.236, 0.394]
	0.120***	0.119***	-0.180***	0.139***	0.103***	0.409***	0.066***	-0.041	-0.041
HH_WEA	[0.074, 0.167]	[0.072, 0.166]	[-0.223, -0.137]	[0.079, 0.199]	[0.063, 0.144]	[0.316, 0.502]	[0.043, 0.088]	[-0.105, 0.022]	[-0.104, 0.023]
	0.898**	0.906**	0.499*	-0.197	-0.311	-0.350	<b>-</b> 0.306***	1.135***	1.150***
YEAR (ref: 2003): 2008	[0.146, 1.650]	[0.153, 1.658]	[-0.031, 1.029]	[-0.819, 0.425]	[-0.800, 0.179]	[-1.507, 0.807]	[-0.519, -0.093]	[0.505, 1.765]	[0.522, 1.779]
	1.469***	1.461***	0.489*	-0.851***	-0.036	-1.238 <sup>**</sup>	-0.284**	1.092***	1.138***
YEAR (ref: 2003): 2013	[0.726, 2.212]	[0.716, 2.207]	[-0.034, 1.013]	[-1.468, -0.234]	[-0.517, 0.446]	[-2.391, -0.084]	[-0.503, -0.064]	[0.480, 1.704]	[0.543, 1.733]
	1.745***	1.874***	0.674**	<b>-</b> 0.759**	-0.153	-1.744***	-0.372***	1.288***	1.287***
YEAR (ref: 2003): 2018	[0.917, 2.572]	[1.022, 2.726]	[0.117, 1.231]	[-1.427, -0.091]	[-0.669, 0.363]	[-2.894, -0.594]	[-0.601, -0.144]	[0.519, 2.058]	[0.518, 2.056]
	-5.197***	<b>-</b> 4.898***	2.076***	-4.455***	<b>-</b> 2.101***	2.123**	1.270***	1.540**	1.500**
Constant	[-6.400, -3.994]	[-6.061, -3.736]	[1.189, 2.964]	[-5.818, -3.092]	[-2.943, -1.259]	[0.111, 4.135]	[0.854, 1.686]	[0.273, 2.808]	[0.238, 2.761]
	0.024	0.027	0.389***	0.640***	0.365***	0.216**	-1.507***	0.057	0.057
Multilevel variance parameter: Level 1	[-0.040, 0.087]	[-0.038, 0.092]	[0.190, 0.587]	[0.282, 0.997]	[0.193, 0.538]	[0.007, 0.426]	[-1.738, -1.276]	[-0.072, 0.187]	[-0.072, 0.186]
Multilevel variance parameter: Residual						1.554*** [1.495, 1.614]	0.190*** [0.136, 0.244]		
Observations (Level 2)	2514	2514	3552	3528	3552	3620	3975	4979	4979
Observations (Level 1)	111	111	112	112	112	112	112	113	113
Akaike Information Criterion	2613.206	2616.454	3449.379	2094.164	3846.725	21688.628	12916.658	1912.315	1910.708
Prob. $> X^2$	< 0.001	< 0.001	<0.001	<0.001	<0.001	< 0.001	<0.001	<0.001	<0.001

Non-polio full immunisation		immunisation				Antena	tal care	Child survival	
South West	-	Interaction	• • •	At private	At public	No. of	No. of tetanus	Exposure	Total
	Full model	model (EXPxAGE)	At home	facility	facility	antenatal care visits	injections	decompositio n	exposure
EXP_CHI	-0.060 [-0.144, 0.024]								
EXPxAGE		-0.002 <sup>*</sup> [-0.004, 0.000]							
EXP_PREG			0.055 [-0.013, 0.122]	-0.003 [-0.059, 0.052]	-0.033 [-0.087, 0.022]	-0.069 [-0.206, 0.069]	0.034*** [0.009, 0.058]		
EXP_PREG_nod (date approximation)								-0.021 [-0.145, 0.102]	
EXP_CHI_nod (date approximation)								0.018 [-0.103, 0.139]	
EXP_TOT_nod (total exposure, date approximation)									-0.001 [-0.103, 0.101]
CHI_AGE	0.083*** [0.050, 0.117]	0.056*** [0.035, 0.077]						0.035 <sup>*</sup> [-0.001, 0.071]	0.035 <sup>*</sup> [-0.001, 0.071]
CHI_AGE2	-0.001** [-0.001, -0.000]							0.000 [-0.001, 0.000]	0.000 [-0.001, 0.000]
CHI_ORD	-0.087** [-0.156, -0.017]	-0.087** [-0.157, -0.018]						-0.369*** [-0.468, -0.271]	-0.367*** [-0.466, -0.269]
CHI_SEX	-0.006 [-0.182, 0.171]	-0.002						0.213	0.212
	0.039***	0.039***	-0.064***	0.034***	0.011*			-0.023**	-0.022**
MOT_ANC	[0.024, 0.054]	[0.024, 0.054]	[-0.078, -0.049]		[-0.000, 0.022]				[-0.044, -0.000]
	0.042*	0.042*	-0.040*	0.054***	-0.013	0.068	0.002	0.012	0.012
MOT_EDM	[-0.004, 0.088]	[-0.004, 0.088]	[-0.082, 0.003]	[0.016, 0.091]	[-0.049, 0.023]	[-0.024, 0.160]	[-0.015, 0.019]	[-0.058, 0.082]	[-0.058, 0.082]
MOT_EDF	-0.031 [-0.080, 0.018]	-0.031	-0.015	-0.001	0.018	0.034	0.008	0.003	0.002
	2.962***	2.953***	-1.082***	[-0.041, 0.038] 0.072	0.973***	2.383***	0.582***	[-0.070, 0.075]	[-0.070, 0.074]
MOT_AWE	[2.589, 3.336]	[2.580, 3.327]		[-0.142, 0.286]		[1.878, 2.889]	[0.488, 0.675]		
MOT_AGE	0.031***	0.031***	-0.006	-0.005	0.011*	0.012	0.002	-0.012	-0.012
WO1_AGE	[0.011, 0.051]	[0.011, 0.051]	[-0.020, 0.008]		[-0.001, 0.023]	[-0.016, 0.041]	[-0.003, 0.006]	[-0.041, 0.018]	[-0.042, 0.017]
HH_RUR	-0.242 <sup>*</sup>	-0.243 <sup>*</sup>	0.028	-0.455 <sup>***</sup>	0.333***	0.423	-0.006	0.038	0.044
	[-0.489, 0.006]	[-0.490, 0.005]		[-0.668, -0.242]		[-0.286, 1.133]		[-0.304, 0.380]	[-0.297, 0.385]
HH_REL (ref: Catholic): Other	-0.095	-0.098	-0.232	0.171	-0.032	0.380	0.053	-0.180	-0.180
Christian	[-0.593, 0.403] -0.402	[-0.596, 0.400] -0.402	-0.261	[-0.186, 0.529] 0.213	-0.042	0.431	0.098	[-0.859, 0.500] 0.080	[-0.859, 0.499] 0.082
HH_REL (ref: Catholic): Islam	[-0.919, 0.115]		[-0.718, 0.195]		[-0.412, 0.328]		[-0.040, 0.235]	[-0.642, 0.803]	[-0.640, 0.804]
	-0.218	-0.228	0.404	-0.846	0.350	1.704	-0.393*	0.124	0.112
HH_REL (ref: Catholic): Traditionalist			[-0.674, 1.481]			[-3.022, 6.429]	[-0.803, 0.017]		[-2.061, 2.285]
	0.994	0.992	0.337	0.000	1.628	0.461	1.825	0.000	0.000
HH_REL (ref: Catholic): Other	[-3.233, 5.221]	[-3.182, 5.167]	[-2.751, 3.425]	[0.000, 0.000]	[-1.684, 4.939]	[-12.702,	[-2.055, 5.705]	[0.000, 0.000]	[0.000, 0.000]
	-0.720	-0.713	1.513***	-0.523	-2.137***	13.625] 0.000	0.000	0.993	1.003
HH_ETH (ref: Ekoi): Fulani	[-1.789, 0.349] -0.224	[-1.784, 0.359] -0.227	[0.758, 2.268] 0.613 <sup>*</sup>	[-1.340, 0.294] -0.986***	[-3.144, -1.131] 0.418	[0.000, 0.000] 2.791**	[0.000, 0.000] 0.594**	[-1.064, 3.050] 0.383	[-1.053, 3.060] 0.381
HH_ETH (ref: Ekoi): Hausa				-0.960 [-1.735, -0.237]		[0.122, 5.461]	[0.121, 1.067]		[-0.869, 1.631]
	1.109	1.115	-0.264	0.026	0.257	3.338**	0.499**	-0.060	-0.068
HH_ETH (ref: Ekoi): Ibibio	[-0.248, 2.466]	-	[-1.248, 0.720]		[-0.618, 1.132]	[0.715, 5.961]	[0.045, 0.952]	[-1.552, 1.433]	[-1.560, 1.423]
HH_ETH (ref: Ekoi): lgala	0.685	0.694	-0.676	0.647	-0.081	3.470***	0.776***	0.000	0.000
_	[-0.655, 2.024]	[-0.645, 2.032]	[-1.738, 0.385]	-	[-1.019, 0.857]	[1.030, 5.910]	[0.247, 1.305]	[0.000, 0.000]	[0.000, 0.000]
HH_ETH (ref: Ekoi): lgbo	0.521**	0.531**	-1.501***	0.786***	0.009	4.918***	0.908***	-0.024	-0.020
_ , , , ,	[0.014, 1.028]	[0.025, 1.038]	[-2.066, -0.936]	. , .	[-0.366, 0.384]	[2.881, 6.955]	[0.502, 1.315]	[-0.650, 0.603]	[-0.647, 0.606]
HH_ETH (ref: Ekoi): ljaw / lzon	-0.625	-0.638	0.804	-0.273	-1.925**	2.087	0.107	0.497	0.505
	[-2.141, 0.891]			[-1.215, 0.668]				[-0.809, 1.804]	[-0.801, 1.811]
HH_ETH (ref: Ekoi): Kanuri / Beriberi	2.769	2.780	1.245	0.00.0	1.406	2.783	0.080	0.000	0.000
	[-0.166, 5.704]	[-0.149, 5.710] 1.775 <sup>*</sup>	[-1.500, 3.990] -0.566	[0.000, 0.000]	0.530	1.717	0.661 <sup>*</sup>	-0.015	[0.000, 0.000] -0.011
HH_ETH (ref: Ekoi): Tiv				-0.236 [-1.545, 1.068]					
	0.289*	0.294*	-0.244*	-0.118	0.341***	5.612***	0.944***	0.438**	0.440**
HH_ETH (ref: Ekoi): Yoruba				[-0.361, 0.126]		[3.766, 7.457]		[0.030, 0.846]	[0.032, 0.848]
	-	_	-	_	•	•	-	-	-

HH_ETH (ref: Ekoi): Other	0.000 [0.000, 0.000] -0.011	0.000 [0.000, 0.000] -0.011	0.000 [0.000, 0.000] 0.031	0.000 [0.000, 0.000] -0.020	0.000 [0.000, 0.000] -0.008	4.747*** [2.737, 6.757] -0.136***	0.845*** [0.439, 1.250] 0.002	0.000 [0.000, 0.000] 0.499***	0.000 [0.000, 0.000] 0.498***
HH_SIZ	[-0.058, 0.036]	[-0.059, 0.036]	[-0.010, 0.071]	[-0.056, 0.016]	[-0.042, 0.026]	[-0.238, -0.035]	[-0.014, 0.018]	[0.399, 0.599]	[0.398, 0.598]
	0.142***	0.142***	-0.154***	0.066****	0.059***	0.298***	0.040***	-0.012	-0.011
HH_WEA	[0.090, 0.195]	[0.089, 0.195]	[-0.203, -0.105]	[0.024, 0.108]	[0.019, 0.099]	[0.193, 0.403]	[0.022, 0.058]	[-0.088, 0.064]	[-0.087, 0.064]
	-0.257	-0.252	-0.027	-0.356 <sup>*</sup>	0.338	-1.254 <sup>**</sup>	-0.181**	-0.084	-0.065
YEAR (ref: 2003): 2008	[-0.891, 0.378]	[-0.889, 0.385]	[-0.516, 0.461]	[-0.754, 0.041]	[-0.086, 0.763]	[-2.220, -0.288]	[-0.337, -0.024]	[-0.845, 0.677]	[-0.823, 0.694]
	-0.749**	-0.726**	0.236	-0.495**	0.258	-0.078	-0.261***	0.140	0.174
YEAR (ref: 2003): 2013	[-1.390, -0.108]	[-1.368, -0.084]	[-0.256, 0.728]	[-0.891, -0.100]	[-0.165, 0.681]	[-1.055, 0.898]	[-0.415, -0.107]	[-0.628, 0.908]	[-0.584, 0.933]
	-0.694**	-0.656 <sup>*</sup>	-0.072	-0.716***	0.709***	-3.705***	-0.425***	0.159	0.149
YEAR (ref: 2003): 2018	[-1.384, -0.003]	[-1.349, 0.037]	[-0.595, 0.452]	[-1.140, -0.292]	[0.265, 1.153]	[-4.735, -2.674]	[-0.602, -0.247]	[-0.675, 0.993]	[-0.684, 0.982]
	-4.520 <sup>***</sup>	<b>-</b> 4.319***	1.438***	-1.088***	-2.422***	3.280***	0.345	1.871***	1.849***
Constant	[-5.602, -3.439]	[-5.373, -3.265]	[0.624, 2.252]	[-1.786, -0.390]	[-3.131, -1.714]	[0.838, 5.722]	[-0.119, 0.808]	[0.540, 3.202]	[0.520, 3.178]
	0.255***	0.257***	0.479***	0.357***	0.543***	0.483***	-1.886 <sup>***</sup>	0.027	0.026
Multilevel variance parameter: Level 1	[0.097, 0.414]	[0.098, 0.416]	[0.264, 0.694]	[0.207, 0.506]	[0.342, 0.744]	[0.285, 0.681]	[-2.158, -1.614]	[-0.106, 0.161]	[-0.107, 0.158]
Multilevel variance parameter:						1.786***	0.023		
Residual						[1.756, 1.816]	[-0.039, 0.086]		
Level 1 Observations (child)	3196	3196	4373	4368	4373	4513	4946	6002	6002
Level 2 Observations (LGA)  Akaike Information Criterion	121 3244.008	121 3246.792	121 3803.166	121 5074.963	121 5338.697	121 29126.36	121 14392.094	121 1819.029	121 1817.343
Prob. > X <sup>2</sup>	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

95% confidence intervals in brackets

<sup>\*</sup> p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01