Rapid replacement by non-vaccine pneumococcal serotypes may mitigate the impact of the pneumococcal conjugate vaccine on nasopharyngeal bacterial ecology

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Supplementary Table 1. Mixed effects model investigating factors associated with richness

Variable	Category	Change in mean square root of richness (95% CI)	p	Overall p
Age	Age(weeks)	-0.01 (-0.03, 0.01)	0.30	0.30
Group	Group 1			0.15
	Group 2	0.20 (-0.39, 0.78)	0.51	
	Group 3	0.54 (-0.01, 1.09)	0.05	
Period	0 - 9 weeks			<0.01
	11-17 weeks	0.75 (0.41, 1.10)	<0.01	
	19 - 27 weeks	0.82 (0.30, 1.34)	<0.01	
	29 - 52 weeks	0.78 (-0.24, 1.79)	0.13	
Siblings	0			0.04
	1-3	0.81 (0.01, 1.61)	0.048	
	>3	1.25 (0.28, 2.22)	0.01	
Mother's age	<20			<0.01
	20-34	-1.19 (-2.08, -0.30)	<0.01	
	>35 and above	-2.20 (-3.33, -1.07)	<0.01	
Breastfeeding	0			0.05
	1	0.05 (-0.38, 0.48)	0.82	
	2	-0.45 (-0.83, -0.07)	0.02	
	3	-2.04 (-4.68, 0.59)	0.13	

Supplementary Table 2. Mixed effects model investigating factors associated with Shannon diversity

Variable	Category	Change in Shannon diversity (95% CI)	p	Overall p
Age	Age(weeks)	-0.06 (-0.08, -0.03)	<0.01	<0.01
Group	Group 1			0.48
	Group 2	-0.06 (-0.21, 0.08)	0.40	
	Group 3	-0.09 (-0.23, 0.05)	0.22	
*Period	0 - 9 weeks			0.43
	11-17 weeks	-0.21 (-0.71, 0.28)	0.40	
	19 - 27 weeks	-0.40 (-0.98, 0.18)	0.18	
	29 - 52 weeks	0.16 (-0.41, 0.73)	0.58	
Travel	No			0.02
	Yes	0.11 (0.01, 0.21)	0.02	
Mother's age	<20			0.02
	20-34	-0.15 (-0.35, 0.06)	0.18	
	35 and above	-0.29 (-0.51, -0.07)	0.01	
Breastfeeding	0			0.04
	1	-0.02 (-0.19, 0.14)	0.78	
	2	-0.20 (-0.34, -0.05)	<0.01	
	3	-0.70 (-1.70, 0.31)	0.18	