Supplementary Table 2-1 Factors associated with recommendation of HPV vaccine for routine vaccination

	PCPs who recommend HPV vaccine, n=408 (41.6%)	PCPs who do not recommend HPV vaccine, n=573 (58.4%)	Crude odds ratio (95% CI), n=981	p-value	Adjusted odds ratio (95% CI), n=977	p-value
Factors	n (%)	n (%)				
High scores on vaccination quiz (4-6 points)	248 (60.8)	263 (45.9)	1.83 (1.41-2.36)	< 0.001	2.17 (1.62-2.92)	< 0.001
Sex: male	319 (78.2)	420 (73.3)	1.31 (0.97-1.76)	0.08	1.37 (0.99-1.90)	0.056
Postgraduate year (y)						
3-5	44 (10.8)	48 (8.4)	Reference		Reference	
6-10	69 (16.9)	109 (19.0)	0.69 (0.42-1.15)	0.15	0.89 (0.47-1.68)	0.72
11-20	153 (37.5)	205 (35.8)	0.81 (0.51-1.29)	0.38	1.03 (0.53-1.99)	0.94
21-30	90 (22.1)	103 (18.0)	0.95 (0.58-1.57)	0.85	1.28 (0.64-2.53)	0.48
31-40	45 (11.0)	89 (15.5)	0.55 (0.32-0.95)	0.032	0.73 (0.36-1.48)	0.38
≥41	7 (1.7)	19 (3.3)	0.40 (0.15-1.05)	0.062	0.56 (0.19-1.62)	0.28
Position of any specialist qualification	347 (85.1)	497 (86.9)	0.86 (0.60-1.24)	0.41	0.79 (0.49-1.29)	0.35
Main practice category: primary care	281 (68.9)	416 (72.6)	0.84 (0.63-1.10)	0.21	0.79 (0.55-1.11)	0.18
Practice setting						
University hospital or general hospital	143 (33.8)	143 (25.1)	Reference		Reference	
Other hospital	101 (24.8)	219 (29.2)	0.68 (0.49-0.96)	0.03	0.69 (0.48-1.00)	0.048
Clinic	161 (39.5)	259 (45.4)	0.64 (0.47-0.87)	0.005	0.67 (0.46-0.98)	0.041
Others (e.g., University, research institution, government, and health organisation)	8 (2.0)	15 (2.6)	0.55 (0.23-1.34)	0.19	0.51 (0.20-1.31)	0.16
Providing daily paediatric medical service (≥10% of total patients)	95 (23.3)	188 (32.8)	0.62 (0.47-0.83)	0.001	0.50 (0.36-0.70)	< 0.001
Mainly working in an urban area $(\geq 50,000$ people as an administrative unit of the local government)	305 (74.9)	414 (72.4)	1.14 (0.85–1.52)	0.37	1.08 (0.78–1.47)	0.65
Experience as kindergarten or school physician	190 (46.6)	284 (49.6)	0.89 (0.69-1.14)	0.36	1.09 (0.80-1.49)	0.57
Experience raising children	296 (72.6)	425 (74.2)	0.92 (0.69-1.23)	0.57	0.79 (0.56-1.10)	0.16
Information resource						
Government	294 (72.1)	453 (79.1)	0.68 (0.51-0.92)	0.011	0.69 (0.50-0.96)	0.026
Academia	385 (94.4)	528 (92.2)	1.43 (0.85-2.40)	0.18	1.21 (0.63-2.35)	0.56
Commerce	113 (27.7)	170 (29.7)	0.91 (0.69-1.20)	0.5	0.91 (0.67-1.25)	0.56
Social network service or mailing list by individuals or group of medical service providers	136 (33.3)	163 (28.5)	1.26 (0.96-1.65)	0.1	1.33 (0.98–1.82)	0.071
None	7 (1.7)	12 (2.1)	0.82 (0.32-2.09)	0.67	0.82 (0.25-2.68)	0.74

PCPs, primary care physicians; HPV, human papillomavirus; CI, confidence interval

Supplementary Table 2-2 Factors associated with recommendation of HPV vaccine for voluntary vaccination

	PCPs who recommend HPV vaccine, n=216 (22.0%)	PCPs who do not recommend HPV vaccine, n=765 (78.0%)	Crude odds ratio (95% CI), n=981	p-value	Adjusted odds ratio (95% CI), n=977	p-value
Factors	n (%)	n (%)				
High scores on vaccination quiz (4-6 points)	131 (60.6)	380 (49.7)	1.56 (1.15-2.12)	0.005	1.88 (1.32-2.67)	< 0.001
Sex: male	174 (80.6)	565 (73.9)	1.47 (1.01-2.13)	0.045	1.67 (1.12-2.49)	0.012
Postgraduate year (y)						
3-5	24 (11.1)	68 (8.9)	Reference		Reference	
6-10	30 (13.9)	148 (19.4)	0.57 (0.31-1.06)	0.074	0.81 (0.37-1.75)	0.59
11-20	87 (40.3)	271 (35.4)	0.91 (0.54-1.54)	0.72	1.40 (0.63-3.08)	0.41
21-30	52 (24.1)	141 (18.4)	1.04 (0.59-1.84)	0.88	1.73 (0.77-3.88)	0.19
31-40	21 (9.7)	113 (14.8)	0.53 (0.27-1.02)	0.056	0.84 (0.36-1.98)	0.69
≥41	2 (0.9)	24 (3.1)	0.24 (0.05-1.02)	0.062	0.38 (0.07-1.89)	0.24
Position of any specialist qualification	184 (85.2)	660 (86.4)	0.91 (0.59-1.39)	0.65	0.74 (0.40-1.35)	0.32
Main practice category: primary care	148 (68.5)	549 (71.7)	0.86 (0.62-1.19)	0.35	0.84 (0.55-1.27)	0.4
Practice setting						
University hospital or general hospital	81 (37.5)	200 (26.3)	Reference		Reference	
Other hospital	53 (24.5)	201 (26.4)	0.65 (0.44-0.97)	0.03	0.69 (0.45-1.06)	0.091
Clinic	77 (35.7)	343 (45.0)	0.55 (0.39-0.79)	0.001	0.67 (0.43-1.04)	0.075
Others (e.g., University, research institution, government, and health organisation)	5 (2.3)	18 (2.4)	0.69 (0.25-1.91)	0.47	0.63 (0.21–1.84)	0.4
Providing daily paediatric medical service (≥10% of total patients)	43 (19.9)	240 (31.4)	0.54 (0.38-0.78)	0.001	0.52 (0.34-0.78)	0.002
Mainly working in an urban area (≥50,000 people as an administrative unit of the local government)	171 (80.0)	547 (71.6)	1.59 (1.10–2.30)	0.014	1.42 (0.95–2.11)	0.084
Experience as kindergarten or school physician	87 (40.3)	387 (50.6)	0.66 (0.48-0.90)	0.008	0.79 (0.55-1.14)	0.21
Experience raising children	153 (70.8)	568 (74.3)	0.84 (0.60-1.18)	0.32	0.67 (0.45-1.00)	0.049
Information resource						
Government	155 (71.8)	592 (77.4)	0.74 (0.53-1.04)	0.087	0.80 (0.55-1.16)	0.24
Academia	202 (93.5)	711 (92.9)	1.10 (0.60-2.01)	0.77	0.94 (0.44-2.04)	0.88
Commerce	60 (27.8)	223 (29.2)	0.93 (0.67-1.31)	0.69	0.91 (0.63-1.32)	0.62
Social network service or mailing list by individuals or group of medical service providers	79 (36.6)	220 (28.8)	1.43 (1.04–1.96)	0.028	1.56 (1.09–2.24)	0.016
None	4 (1.9)	15 (2.0)	0.94 (0.31-2.87)	0.92	0.84 (0.21-3.40)	0.81

PCPs, primary care physicians; HPV, human papillomavirus; CI, confidence interval