

Physicians' Human Papillomavirus Vaccine Recommendations, 2009 and 2011

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Appendix A

U.S. physicians' demographic, practice, and patient characteristics; knowledge; perceived issues/barriers; and vaccine practices, 2009 and 2011

	2009 (n=1008) ^a n (%)	2011 (n=928) n (%)	p-value ^b
DEMOGRAPHIC CHARACTERISTICS			
Provider specialty			
Pediatrics	287 (28.5)	322 (34.7)	
Family physician	499 (49.5)	406 (43.8)	0.009
Obstetrics/gynecology	222 (22.0)	200 (21.6)	
Age, years			
25-39	239 (23.7)	180 (19.4)	
40-49	327 (32.4)	338 (36.4)	0.04
50-65	422 (41.9)	383 (41.3)	
Gender			
Male	528 (52.4)	455 (49.0)	0.13
Female	466 (46.2)	461 (49.7)	
Race			
White/Caucasian	737 (73.1)	665 (71.7)	0.55
Other	252 (25.0)	242 (26.1)	
Ethnicity			
Hispanic or Latino	62 (6.2)	54 (5.8)	0.80
Not Hispanic or Latino	920 (91.3)	841 (90.6)	
PRACTICE CHARACTERISTICS			
Number of physicians			
1	170 (16.9)	186 (20.0)	
2-15	695 (68.9)	633 (68.2)	0.06
≥16	132 (13.1)	96 (10.3)	
Number of specialties			
Single	702 (69.6)	676 (72.8)	
Multiple	248 (24.6)	207 (22.3)	0.15
Other	43 (4.3)	28 (3.0)	
Type			
Private practice	728 (72.2)	662 (71.3)	0.72
Other	267 (26.5)	252 (27.2)	

	2009 (n=1008) ^a n (%)	2011 (n=928) n (%)	p-value ^b
Arrangement			
Full/part-owner physician practice	472 (46.8)	455 (49.0)	0.27
Other	522 (51.8)	455 (49.0)	
Number of patients/day			
0-19	258 (25.6)	274 (29.5)	
20-29	500 (49.6)	465 (50.1)	0.03
≥30	232 (23.0)	173 (18.6)	
Location			
Urban	289 (28.7)	250 (26.9)	
Suburban	506 (50.2)	491 (52.9)	0.51
Rural	182 (18.1)	153 (16.5)	
Other	7 (0.7)	9 (1.0)	
Region			
Northeast	194 (19.3)	192 (20.7)	
Midwest	247 (24.5)	219 (23.6)	0.74
South	334 (33.1)	315 (33.9)	
West	210 (20.8)	180 (19.4)	
Vaccines for Children provider			
Yes	405 (40.2)	436 (47.0)	
No	475 (47.1)	371 (40.0)	0.005
Don't know	112 (11.1)	101 (10.9)	
Refer uninsured patients for vaccine			
No or not applicable	466 (46.2)	515 (55.5)	<0.001
Yes, to federally qualified health center/health department/other	542 (53.8)	413 (44.5)	
Refer underinsured patients for vaccine			
No or not applicable	489 (48.5)	518 (55.8)	0.001
Yes, to federally qualified health center/health department/other	519 (51.5)	410 (44.2)	
PATIENT CHARACTERISTICS			
Patient payment method			
Private insurance, % of patients			
0-50	427 (42.4)	413 (44.5)	0.37
51-100	527 (52.3)	469 (50.5)	
Patient race (majority)			
Non-Hispanic white	735 (72.9)	647 (69.7)	0.09
Other	256 (25.4)	268 (28.9)	
HPV knowledge^c			
Low	380 (37.7)	346 (37.3)	0.98
High	628 (62.3)	573 (61.7)	
Perceived issues/barriers^d related to HPV vaccination			
Overall			
Low	347 (34.4)	298 (32.1)	
Medium	281 (27.9)	303 (32.7)	0.09
High	357 (35.4)	313 (33.7)	
Individual (% somewhat/strongly agree is an issue/barrier^d)			
Vaccine safety	719 (71.3)	160 (17.2)	<0.001

	2009 (n=1008)^a	2011 (n=928)	
	n (%)	n (%)	p-value^b
Vaccine efficacy	715 (70.9)	145 (15.6)	<0.001
Discussing sexuality/sexually transmitted infections	669 (66.4)	104 (11.2)	<0.001
Teens practicing riskier sexual behaviors	476 (47.2)	109 (11.7)	<0.001
Administering new vaccine with limited track record of safety	527 (52.3)	324 (34.9)	<0.001
Adding another vaccine to schedule	372 (36.9)	236 (25.4)	<0.001
Lack of information about vaccine	210 (20.8)	135 (14.5)	<0.001
Up-front cost of purchasing vaccine	531 (52.7)	421 (45.4)	<0.001
Cost of stocking vaccine	509 (50.5)	387 (41.7)	<0.001
Lack of adequate reimbursement	519 (51.5)	443 (47.7)	0.06
Some insurance does not cover vaccine	651 (64.6)	573 (61.7)	0.12
Time to discuss vaccination with patients/parents	272 (27.0)	200 (21.6)	0.004
Difficulty ensuring series completion	434 (43.1)	327 (35.2)	<0.001
Vaccine not required for school	295 (29.3)	296 (31.9)	0.28
VACCINE PRACTICES			
Strategies to ensure HPV vaccine completion			
0	121 (12.0)	151 (16.3)	
1	163 (16.2)	194 (20.9)	<0.001
≥2	662 (65.7)	540 (58.2)	

Note: Boldface indicates significance, $p < 0.05$. Percentages may not sum to 100% due to missing data.

^a Five surveys were received after the data collection period in 2009; thus, 1008 surveys were included in the analyses.

^b p -values reflect analyses that compare study years, rather than categories within each variable.

^c Low knowledge=0–4 correct responses in 2009 and 0–7 correct responses in 2011. High knowledge=5–6 correct responses in 2009 and 8–10 correct responses in 2011.

^d The term “issue” was used in 2009; the term “barrier” was used in 2011.

HPV, human papillomavirus