

Objective

To measure the frequency and nature of influenza vaccination communication between healthcare providers and adults for both seasonal and 2009 influenza A(H1N1) vaccination.

Background

Annual influenza vaccination is the most effective means of preventing influenza and minimizing preventable healthcare utilization, productivity losses and absenteeism in work settings, and morbidity and mortality associated with influenza.

The existence of two vaccines - seasonal and pandemic - created the potential for confusion and misinformation among consumers during the 2009-2010 vaccination season.

Influenza vaccination-related communication between consumers and healthcare providers had considerable promise to reassure consumers about the benefits, safety and targeting of seasonal and pandemic vaccine and facilitate vaccine uptake among targeted adults.

Methods and Measures

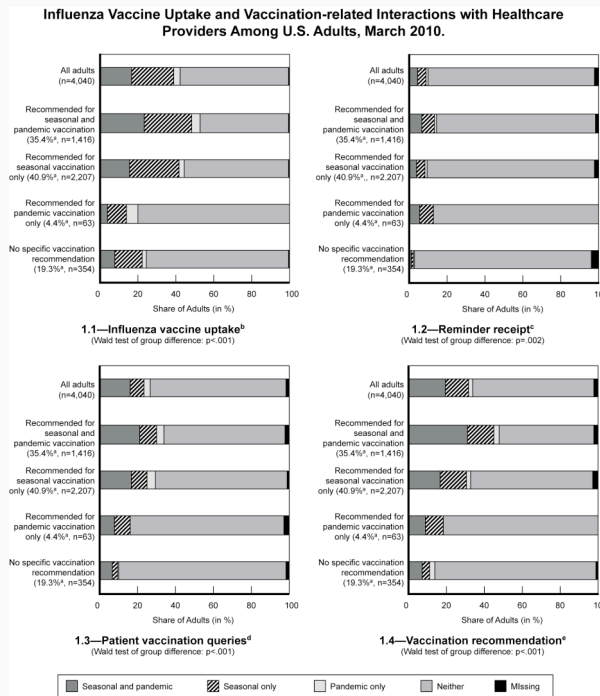
Internet-based survey fielded between March 4 and March 24, 2010 to adult members of Knowledge Networks' KnowledgePanel, a nationally representative survey panel that uses probability-based sampling to recruit "online" and "offline" households.

- N=4,040 adults (Completion rate: 73.5%).
- Oversample of older adults and ethnic minorities.
- Estimations weighted to be nationally representative.
- Rich information about influenza-related knowledge, attitudes, beliefs and behaviors as well as individual risk factors, characteristics determining membership in a priority or recommendation group and socio-demographic characteristics.

Measures of contact with healthcare providers and influenza-related provider communication include

- Self-reported doctor visits during the Fall and Winter.
- Self-reported receipt of influenza vaccination reminders for seasonal and/or pandemic vaccination.
- Self-reported occurrence of patient queries regarding seasonal and/or pandemic vaccination.
- Self-reported receipt of provider-based recommendations regarding seasonal and/or pandemic vaccination.

Results



^aWeighted share of adults in recommendation group.
^bWeighted prevalence rates of different influenza vaccinations based on self-reports.
^cWeighted share of adults reporting receipt of an influenza vaccination reminder from a healthcare provider.
^dWeighted share of adults reporting to have asked their doctor about getting a flu vaccine.
^eWeighted share of adults reporting that a healthcare provider recommended that they get a flu vaccine.

Occurrence of communication conditional on a healthcare provider visit

Table: Occurrence of any doctor visit, vaccine uptake and vaccination-related communication among U.S. adults, March 2010, n=4,040

All adults (N=4,040)	Full sample		Seasonal and pandemic		Seasonal only		Pandemic only	
	N	Weighted % (95% CI)	N	Weighted % (95% CI)	N	Weighted % (95% CI)	N	Weighted % (95% CI)
Unweighted N	4,040	---	1,416	---	2,207	---	63	---
Weighted % (95% CI)	---	---	35.4 (32.7;38.1)	---	40.9 (38.2;43.5)	---	4.4 (3.1;5.7)	---
Doctor visit between Sept. 2009 and Jan. 2010	2,846	61.9 (59.1;64.7)	1,095	73.3 (69.0;77.6)	1,556	64.0 (60.3;67.7)	29	50 (22;62)
One or more visits	1,154	27.5 (24.7;30.2)	303	26.2 (21.9;30.5)	632	25.2 (21.5;28.9)	34	53 (38;68)
Missing	40	0.6 (0.3;0.9)	18	0.5 (0.2;0.5)	19	0.8 (0.3;1.4)	0	---
Subsample with at least one doctor visit between Sept. 2009 and Jan. 2010 (N=2,846)	2,846	---	1,095	---	1,556	---	29	---
Unweighted N	2,846	---	1,095	---	1,556	---	29	---
Weighted % (95% CI)	---	---	---	---	---	---	---	---
Vaccinated for	624	20.2 (17.5;22.9)	277	24.8 (20.0;29.6)	328	18.9 (15.7;22.1)	2	6 (0;15)
Seasonal and pandemic	890	27.8 (24.9;30.7)	320	26.9 (22.0;31.7)	538	33.5 (29.2;37.7)	2	4 (0;10)
Seasonal only	71	2.4 (2.1;4.8)	25	3.9 (2.1;5.6)	26	2.5 (0.4;4.7)	2	10 (0;23)
Pandemic only	1,250	48.1 (44.6;51.5)	453	43.4 (37.9;48.9)	663	45.0 (40.2;49.8)	23	80 (64;96)
Neither	11	0.5 (0.0;0.9)	10	1.1 (0.0;2.2)	1	0.0 (0.0;0.0)	0	---
Missing	---	---	---	---	---	---	---	---
Asked doctor about getting vaccinated for	710	22.9 (20.1;25.8)	296	25.8 (21.0;30.6)	392	22.9 (13.9;31.9)	4	17 (1;33)
Seasonal and pandemic	357	10.2 (8.3;12.1)	166	11.3 (8.3;14.4)	181	10.3 (7.7;12.9)	2	18 (0;39)
Seasonal only	141	4.5 (3.2;5.9)	55	4.2 (2.5;5.8)	85	6.4 (3.7;9.1)	0	---
Pandemic only	1,572	60.7 (57.4;64.0)	554	56.6 (51.2;62.0)	859	58.9 (54.3;63.4)	23	65 (43;88)
Neither	66	1.6 (0.9;2.4)	24	2.0 (0.6;3.5)	39	1.6 (0.8;2.4)	0	---
Missing	---	---	---	---	---	---	---	---
Received healthcare provider recommendation for	999	16.6 (14.4;18.8)	232	16.8 (12.4;20.3)	350	19.6 (16.3;22.9)	5	19 (1;38)
Seasonal and pandemic	58	2.5 (1.2;3.7)	23	2.5 (0.6;4.5)	31	2.9 (0.7;5.0)	0	---
Seasonal only	1,265	52.5 (49.1;55.9)	409	42.9 (37.4;48.5)	714	53.2 (48.5;57.8)	19	61 (40;83)
Pandemic only	77	2.0 (1.2;2.8)	25	1.6 (0.6;2.6)	51	3.0 (1.4;4.6)	0	---
Neither	---	---	---	---	---	---	---	---
Missing	---	---	---	---	---	---	---	---

Discussion

Main findings:

- Low population prevalence of communication between consumers and healthcare providers regarding both seasonal and 2009 influenza A(H1N1) vaccination.
- Low prevalence of communication between consumers and healthcare providers even conditional on occurrence of a healthcare provider visit during the Fall or Winter of 2009/2010.
- Relatively poor targeting of provider communication efforts to specific recommendation or priority groups.

Limitations:

- Generalizability to "regular" influenza seasons.
- Representativeness of the sample.
- Imperfect recall of study subjects.