

Appendix 3 (as submitted by author). Characteristics of excluded studies reporting an influenza immunization campaign in a hospital setting

Study	Country	*Study Design	Intervention Campaign Components					Results	Other Campaign Details
			Education / Promotion	Improve Access	Legislation/ Regulation	Measure/ Feedback	Role Models		
Qureshi 2004 (18)	UK	CSS	×					28% immunized	Local media releases
†Leitmeyer 2006 (19)	Germany	ITS	×					2001-02: 21% uptake 2003-04: 26% uptake	ITS not enough observation points
†O'Reilly 2005 (20)	Ireland	CSS	×					3.4 – 17.6% immunized	General and targeted publicity methods
Chittaro 2009 (21)	Italy	ITS		×				Before: 10.4% uptake After (2005): 36.6% After (2006): 23.3%	Public health doctors visited wards to provide vaccine; "Avian flu crisis" in 2005 may have affected rates
Piccirillo 2006 (22)	USA	CSS		×				50% immunized	
Pur 2005 (23)	USA	PO		×				Clinic: 1 vaccine per 2.5 mins/vaccinator Cart: 1 vaccine per 3.0 mins/ vaccinator	1-day vaccination drill: 3 hrs of large vaccination clinics; 8 hrs of mobile carts
Adal 1996 (24)	USA	ITS		×				Graph showed increased uptake	Observation points shown graphically
Jones 1999 (25)	Australia	PO		×				24% immunized	
O'Rorke 2003 (26)	Ireland	CSS		×				17.5% immunized	
Lee 2007 (27)	Singapore	BnA		×				Pre: 56.8% immunized Post: 66.4% immunized	
Yang 2007 (28)	Singapore	PO		×				56.8% immunized	Exercise for pandemic influenza
Yassi 1991 (29)	Canada	PO		×				6-11% immunized	
Polgreen 2008 (30)	USA	BnA			×			Mean rate change: 12%	Declination statements
Smithers 2003 (31)	Australia	PO					×	54% immunized	Immunization coordinator designated
‡Fedson 1996 (32)	USA	ITS					×	1986: 24% immunized 1993: 63% immunized	ITS not enough observation points
Primus 2009 (33)	USA	BnA	×	×				2006: 9% 2008: 44%	Roving clinics and education
de Juanes 2004 (34)	Spain	ITS	×	×				2001-02: 15.9% 2002-03: 21.4% 2003-04: 40.4%	ITS not enough observation points
Norton 2008 (35)	Canada	PO	×	×				78% immunized	Multiple clinics and mobile vaccine carts
Traeger 2006 (36)	USA	PO	×	×				72.8% immunized	Radio broadcast; Immunization workshop; CDC recommendations
Shah 2008 (37)	USA	BnA	×	×				Pre: 32% immunized Post: 67% immunized	Originally set up as a program to increase uptake among parents

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Begue 1998 (38)	USA	BnA	×	×				Pre: 21% immunized Post: 38% immunized	Addressed concerns highlighted by baseline survey
†Bryant 2004 (39)	USA	CSS	×	×				Median 43% uptake	Network provided educational materials as requested
Wells 2008 (40)	USA	BnA	×	×				Pre: 39% immunized Post: 48% immunized	Peer vaccination; Reviewed literature for campaign ideas
Girasek 1990 (41)	USA	BnA	×	×				Pre: 9- 11% immunized Post: 30-36% immunized	Buttons for immunized HCWs; Literature review on staff compliance
Smedley 2002 (42)	UK	ITS	×	×				1995: 2.0% immunized 1999: 4.5% immunized	ITS not enough observation points
Carman 2000 (43)	UK	CRCT	×	×				49.8% immunized	
Lopes 2008 (44)	Brazil	ITS	×	×				2004: 6% immunized 2007: 48.5% immunized	ITS not enough observation points
Takayanagi 2007 (45)	Brazil	ITS	×	×				2003 (intervention): 34% 2005: 12.8%	ITS not enough observation points
Wicker 2007 (46)	Germany	PO	×	×				35.8% immunized	
Watanakunakorn 1993 (47)	USA	BnA	×	×				1990: 18.1% immunized 1991: 30.2% immunized	
Hall 1998 (48)	USA	BnA	×	×				Pre: 34-55% immunized Post: 100% immunized	Emailed reminders; Infection Control Fair
Sartor 2004 (49)	France	ITS	×	×				1998: 6% immunized 2002: 32% immunized	ITS not enough observation points
Chamoux 2006 (50)	France	BnA	×	×				Pre: 4.8% immunized Post: 12.6% immunized	
Elorza 2002 (51)	Spain	PO	×	×				12.7-14.7% immunized	
Norton 2008 (35)	Canada	PO	×	×				78% immunized nurses	
Jacomo 2001 (52)	France	PO	×	×				36% immunized	
Stewart 2002 (53)	Australia	BnA	×		×			Pre: 19% completed status report; Post: 42% of new HCWs completed report	Employees required to complete a vaccination status report ; New employees introduced to immunization guidelines
Stubbe 2007 (54)	USA	PO		×	×			75% immunized	2-3 day emergency drill; Special task force
Nichol 1997 (55)	USA	CSS		×	×			67.4% intended uptake	
Cyrnow 2008 (56)	USA	BnA			×		×	20% immunized in 2 hrs	2-hour emergency drill
Gornick 2007 (57)	USA	BnA	×	×	×			Pre: 50% immunized Post: 60% immunized	Free luncheon for flu shot Q&A
Nafziger 1994 (60)	USA	PO	×	×			×	51% of internal medicine residents immunized	Free vaccine provided at Health Fair Memo from chairman of department

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Ballestas 2009 (61)	Australia	BnA	×	×					
Nicholson 2009 (62)	USA	BnA	×	×			Before: 45% immunized After: 65% immunized	Trained flu coordinators for each unit to be responsible for contacting their workers	
Chance 2005 (63)	USA	BnA	×	×			Pre: 15-33% immunized Post: 55% immunized	"I have had my flu vaccine" sticker	
Shannon 1993 (64)	USA	BnA	×	×			Pre: 5% immunized Post: 44% immunized		
‡Mehta 2008 (65)	USA	CSS	×	×			Higher rates for areas with mobile carts		
Dunais 2006 (66)	France	BnA	×	×			Pre: 7% immunized Post: 35% immunized		
†Garcia de Codes Ilario 2004 (67)	Spain	BnA	×	×			Pre: 20.2% immunized Post: 38.0% immunized		
Ofstead 2008 (68)	USA	CSS	×	×			64.5% intended uptake		
Samms 2004 (69)	USA	BnA	×	×			Pre: ~30% immunized Post: 47% immunized	Nurse champions trained to educate; Peer vaccination; Corporate goal of 50% uptake	
†Gazmararian 2007 (70)	USA	CSS	×	×	×	×	Mean 41% immunized	Managers compared rates to other groups	
McCullers 2006 (71)	USA	ITS	×	×		×	44.7% immunized	ITS not enough observation points	
Kuntz 2008 (72)	USA	BnA	×	×		×	Pre: 41% immunized Post: 51% immunized	6-day pandemic influenza drill; 'I got it' stickers; Peer vaccination	
Ribner 2008 (73)	USA	BnA	×	×	×	×	Pre: 43% immunized Post: 67% immunized	Initiated task force; Announced 65% goal	
Hood 2009 (74)	USA	ITS	×	×	×	×	Pre: 77% immunized Post: 84% immunized	Did not describe study population and did not report ascertainment of vaccine status	
†Polgreen 2008 (75)	USA	CSS	×	×	×	×	41-60% immunized	Survey of immunization practices	
‡Polgreen 2009 (76)	USA	CSS	×	×	×	×	Use of declination forms associated with 12.6% increase	Cross sectional survey of influenza campaign activities	

*Study designs: PO (Post-Only), ITS (Interrupted Time Series), BnA (1-group Before and After), CSS (Cross-Sectional Study)

†Interventions were not implemented by all participating organizations

‡Interventions were not implemented concurrently

Post-only, cross-sectional, before-and-after studies were excluded based on study design. Reasons for excluding specific interrupted time series studies are provided under the "other study details" column. Full references provided in Appendix 5