

Per-protocol analyses

Table S1. Socio-demographic characteristics of recruited participants aged ≥ 60 years in Nanning City,

China (n=214)

Variables	All	Standard- of-care	Pay-it- forward	P value
	(n=214)	(n=110)	(n=104)	
Sex				
Male	91 (42.5)	45 (40.9)	46 (44.2)	0.724
Female	123 (57.5)	65 (59.1)	58 (55.8)	
Age (Year)				
60-65	63 (29.4)	34 (30.9)	29 (27.9)	0.339
66-70	64 (29.9)	28 (25.5)	36 (34.6)	
≥71	87 (40.7)	48 (43.6)	39 (37.5)	
Marital status				
Married	175 (81.8)	85 (77.3)	90 (86.5)	0.115
Unmarried/Divorced/widowed	39 (18.2)	25 (22.7)	14 (13.5)	
Occupation				
Farmer	33 (15.4)	22 (20)	11 (10.6)	0.162
Retired	156 (72.9)	76 (69.1)	80 (76.9)	
Others	25 (11.7)	12 (10.9)	13 (12.5)	
Monthly income (US\$)				
[0,276)	64 (29.9)	41 (37.3)	23 (22.1)	0.015
[276,414)	56 (26.2)	30 (27.3)	26 (25)	
[414,690)	46 (21.5)	23 (20.9)	23 (22.1)	
≥690	48 (22.4)	16 (14.5)	32 (30.8)	
Living status				
Living with spouse	149 (69.6)	68 (61.8)	81 (77.9)	0.016
Living without spouses	65 (30.4)	42 (38.2)	23 (22.1)	
Area of residence				
Urban	99 (46.3)	47 (42.7)	52 (50)	0.353
Rural	115 (53.7)	63 (57.3)	52 (50)	
Distance of residence from the vaccination site				
Within 1km	76 (35.5)	34 (30.9)	42 (40.4)	0.278
[1-3) km	69 (32.2)	36 (32.7)	33 (31.7)	
≥3km	69 (32.2)	40 (36.4)	29 (27.9)	
Smoking in the last 6 months				
No	182 (85)	96 (87.3)	86 (82.7)	0.455
Yes	32 (15)	14 (12.7)	18 (17.3)	
Drinking in the last 6 months				
No	157 (73.4)	82 (74.5)	75 (72.1)	0.805

Yes	57 (26.6)	28 (25.5)	29 (27.9)	
Chronic disease				
No	67 (31.3)	38 (34.5)	29 (27.9)	0.367
Yes	147 (68.7)	72 (65.5)	75 (72.1)	
Educational level				
High school and above	98 (45.8)	55 (50)	43 (41.3)	0.257
Middle school and below	116 (54.2)	55 (50)	61 (58.7)	

Table S2. Multivariate logistic regression of PPSV-23 vaccination uptake in two groups (n = 214)

Group	Pneumococcal vaccine		
	Vaccination n(%)	cOR (95 CI)	aOR (95 CI)
Standard-of-care	15(13.6)	1	1
Pay-it-forward	73(70.2)	14.90 (7.68, 30.60)	16.30 (7.94, 35.80)
P value		<i>p</i> < 0.001	<i>p</i> < 0.001

For adjusted OR, the model adjusted for age, sex, area of residence, marital status, educational level, occupation, monthly income, living situation, and distance of residence from vaccination site.

Table S3 Multivariate logistic regression of influenza vaccination uptake in two groups (n = 214)

Group	Influenza vaccine		
	Vaccination n(%)	cOR (95 CI)	aOR (95 CI)
Standard-of-care	19 (17.3)	1	1
Pay-it-forward	33 (31.7)	2.23 (1.18, 4.30)	2.42 (1.23, 4.91)
P value		<i>p</i> =0.015	<i>p</i> =0.012

For adjusted OR, the model adjusted for age, sex, area of residence, marital status, educational level, occupation, monthly income, living situation, and distance of residence from vaccination site.

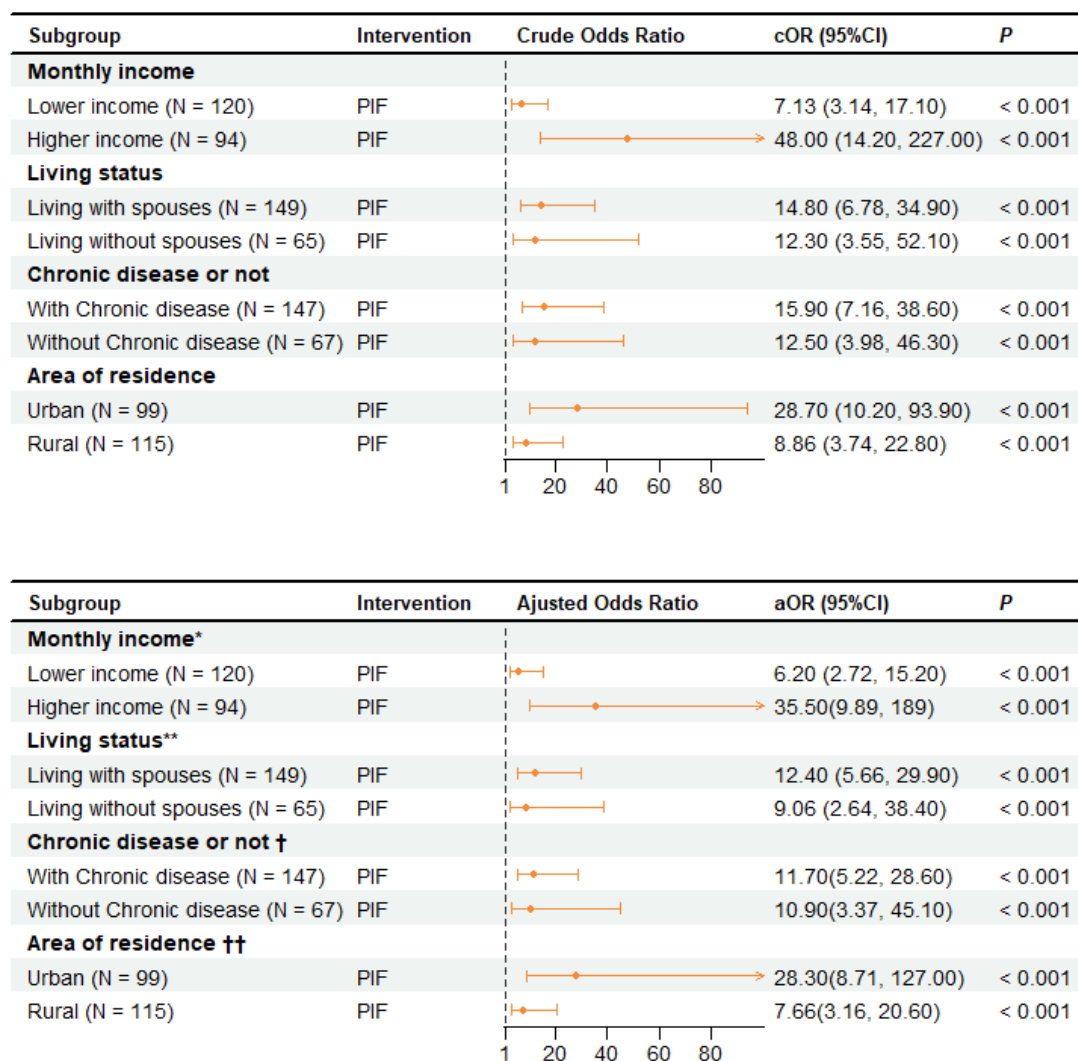


Figure S1. Multivariate logistic regression of PPSV-23 vaccination uptake in the two groups (stratified analysis, n=214).

Note: PIF: Pay-it-forward. Reference: Standard-of-care. *For adjusted OR, the model adjusted for age, sex, area of residence, marital status, educational level, occupation, living situation, and distance of residence from the vaccination site. **For adjusted OR, the model adjusted for age, sex, area of residence, educational level, occupation, monthly income, and distance of residence from the vaccination site. †For adjusted OR, the model adjusted for age, sex, marital status, area of residence, educational level, occupation, monthly income, living situation, and distance

of residence from the vaccination site. ††For adjusted OR, the model adjusted for age, sex, marital status, educational level, occupation, monthly income, living situation, and distance of residence from the vaccination site.

Table S4 Successful pneumococcal vaccination referral to others (n=214)

Group	Total	PPSV-23 referral success		<i>P</i> value
		No	Yes	
Standard-of-care	110(51.4)	98 (89.1)	12 (10.9)	0.336
Pay-it-forward	104(48.6)	87 (83.7)	17 (16.3)	