



Identification of factors that may contribute to vaccine hesitancy in high-risk members of a Commercial Health Plan

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Scan for comprehensive results

BACKGROUND¹⁻⁵

- Adult immunization is essential for reducing illness and death, yet vaccination rates among at-risk adults remain low
- Adults aged 50+ with chronic conditions face barriers such as cost, limited access, mistrust, misinformation, and low provider engagement
- Little is known about mechanisms best suited to engage commercial health plan members, especially preventive vaccination, especially in a constantly changing healthcare environment
- To improve vaccine equity and public health, it's critical to address both structural and behavioral challenges through targeted, effective strategies

OBJECTIVES

Primary Objective:

- Identify barriers to vaccination among commercially insured, at-risk adults

Secondary Objectives:

- Evaluate how sociodemographic factors influence vaccine uptake
- Compare access to vaccination via pharmacies versus primary care settings

METHODS

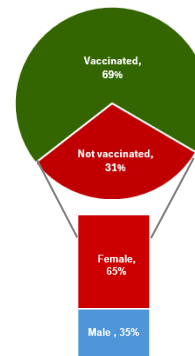
- Data Sources: Blue KC data warehouse (4/24 through 3/25), Experian (containing consumer information), and SMS member survey
- Survey was created by study team and intended to gain insights into vaccination beliefs/barriers, requiring enrollment by phone (during two-week period, starting 07/25)
- Design: Retrospective observational cohort study examining differences in demographics, neighborhood disadvantage, and vaccine use (vaccinated vs unvaccinated)
- Population: 50+ with ≥1 chronic condition (high risk)
- Analysis: All data were categorical and reported as counts (%)s. Differences between groups were analyzed using Minitab v20.2 with Chi-square or Two-proportion testing with two-tailed alpha=0.05

RESULTS

Table 1. Demographics/likelihood of response by comm. mechanisms

	Not vaccinated (%)	Diff (95% CI)	P value
Sex			
Female	455/1348 (33.8)	6.6 (2.7 to 10.4)	0.001
Male	244/896 (27.2)		
	Not vaccinated n=699 (%)	Vaccinated n=1545 (%)	
Age group			
Young	180 (25.8)	367 (23.8)	0.285
Middle-aged	294 (42)	625 (40.4)	
Baby boomer/older	163 (23.3)	419 (27.1)	
NA	62 (8.9)	134 (8.7)	
Family Status			
Subscriber only	230 (32.9)	520 (33.7)	0.726
Subscriber + Dependent(s)	469 (67.1)	1025 (66.3)	
Likely to Very Likely Response to SMS text message			
Email	377 (53.9)	734 (47.5)	0.005
Mailing	357 (51.1)	796 (51.5)	0.844
	259 (37.1)	525 (34)	0.157
Response concordance			
All Likely to Very Likely	123 (17.6)	208 (13.5)	0.037
All Unlikely to Very Unlikely	151 (21.6)	343 (22.2)	
Mixed Likely and Unlikely	425 (60.8)	994 (64.3)	

Figure 1. Proportion of subscribers vaccinated



RESULTS (continued)

- Of n=101 members phoned, none enrolled
- About 70% of calls went to voice mail with number given for enrollment in txt messaging, when answered reasons for not participating being concerns of scam, too busy, hostile to insurance
- Of the n=28,122 pharmacy claims for a vaccine, all were administered by a pharmacy suggesting it's the most common administration location (not shown)

DISCUSSION

- The Experian dataset suggests a large gap in vaccination of at-risk patients with females twice as likely as males to not be vaccinated
- This gap was similar across age groups and family status (Table 1), and risk factors (Figure 1)
- Potential Key Strategies to Raise Adult Vaccination Rates
- Address both access and trust barriers.
- Use reminder/recall systems (Text with caller ID)
- Implement :Pharmacy-led vaccination programs
- Culturally tailored outreach in high-deprivation areas
- Strengthen collaboration among payers, providers, and pharmacies to close gaps for adults 50+ with chronic conditions.

Future Directions

- Expand partnerships with retail pharmacies, the frontline of adult vaccination.
- Integrate payer data with pharmacy outreach to enhance vaccine education
- Improve adherence/Increase access for at-risk populations

CONCLUSION

- One in three patients at high risk of morbidity are not vaccinated across various risk factors
- While text messaging is the most likely communication method accepted by members, more predictable and accepted mechanisms are needed

Figure 2. Proportion of patients vaccinated by risk factor

