

# Identifying the Factors Associated with the Decision to Get Vaccinated against COVID-19 among Staff in a Large Opioid Use Disorder Program

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## BACKGROUND

As global vaccination efforts are being accelerated to combat the COVID-19 pandemic, the World Health Organization has identified vaccine hesitancy as leading global public health threat. Healthcare workers play a key role in vaccine promotion, and vaccinated healthcare workers are more likely to recommend vaccination to others and to promote vaccine acceptance (Paterson et al., 2016). Vaccine hesitancy among this population will have a major impact on the success of public health campaigns to improve immunization.

Estimates indicated that:

- Vaccination rates across healthcare systems varied between 40%-75% with some estimates indicating that nearly half of all frontline healthcare workers remain unvaccinated (Kirzinger et al., 2021; Lee, 2021),
- Vaccine hesitancy was highest among Black healthcare workers and women (Kirzinger et al., 2021), and
- 35% of healthcare workers reported little confidence in the testing process, which is similar to vaccine skepticism among the general population (Wan et al., 2021).

Moreover, our review of current literature has revealed a paucity of data on vaccine attitudes among healthcare workers providing treatment for substance use disorders.

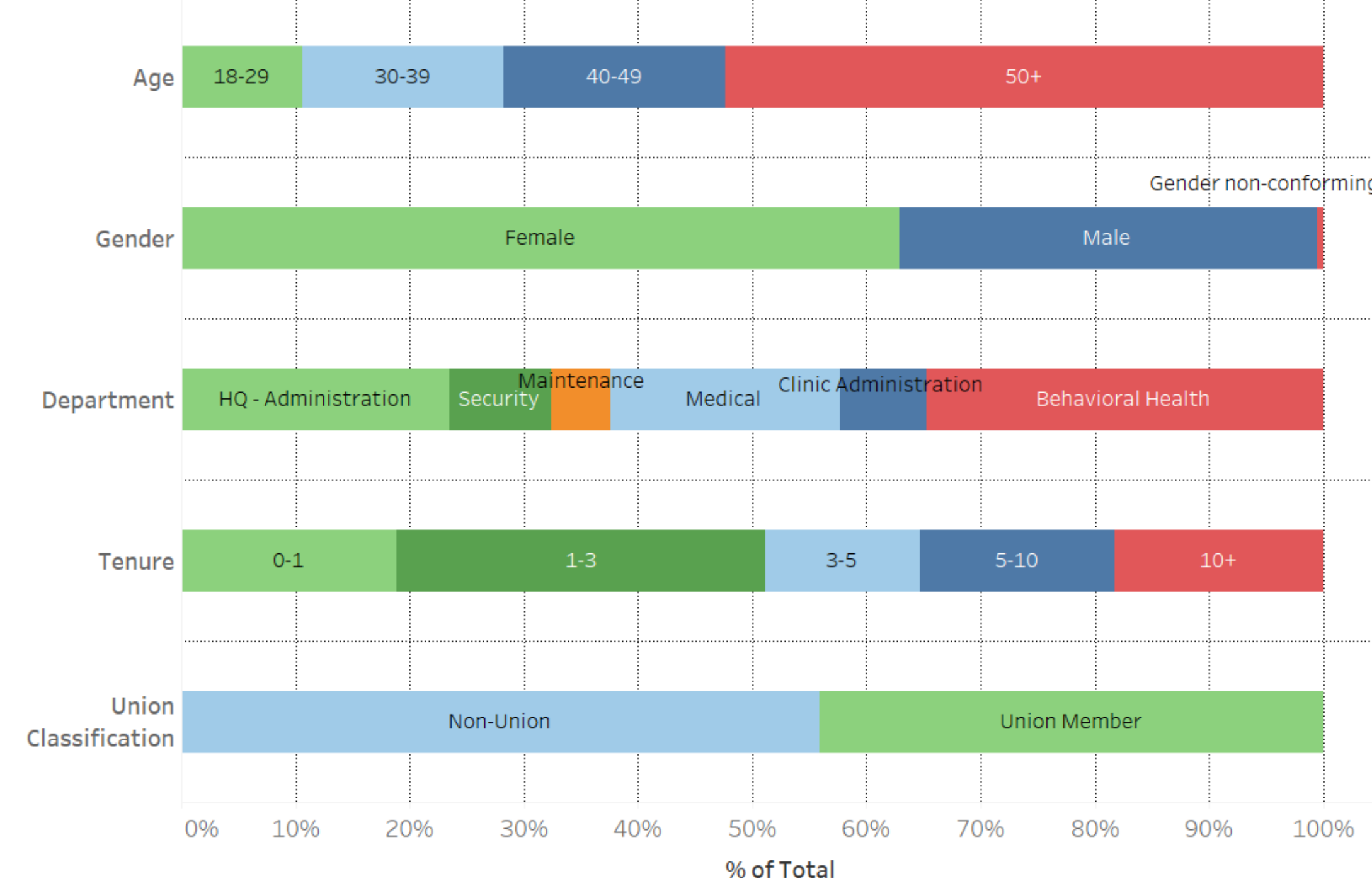
**Purpose of the study:** To examine the likelihood of vaccination among healthcare workers in an opioid treatment program (OTP).

**Methodology:** A brief online survey was administered anonymously to 272 employees at START's 7 medication assistance treatment programs in Brooklyn and Manhattan from January 4-19, 2021. The survey included questions on sociodemographic characteristics, and statements about the likelihood of getting vaccinated and perceived importance of various factors for decision-making (e.g.: vaccine safety, effectiveness, recommendations from experts).

**Data Analysis:** We used Python for descriptive and bivariate analysis. The 5-point scale for the item assessing likelihood of getting vaccinated from (1) "extremely unlikely" to (5) "extremely likely" was dichotomized so that scores 1-3 were recoded as (0) unlikely or unsure about getting a vaccine and scores 4-5 were recoded into (1) likely to get a vaccine. We examined decision-related factors to describe the importance of various factors in the decision to get vaccinated. Chi-square tests examined the associations between vaccination likelihood and sociodemographic characteristics.

## RESULTS

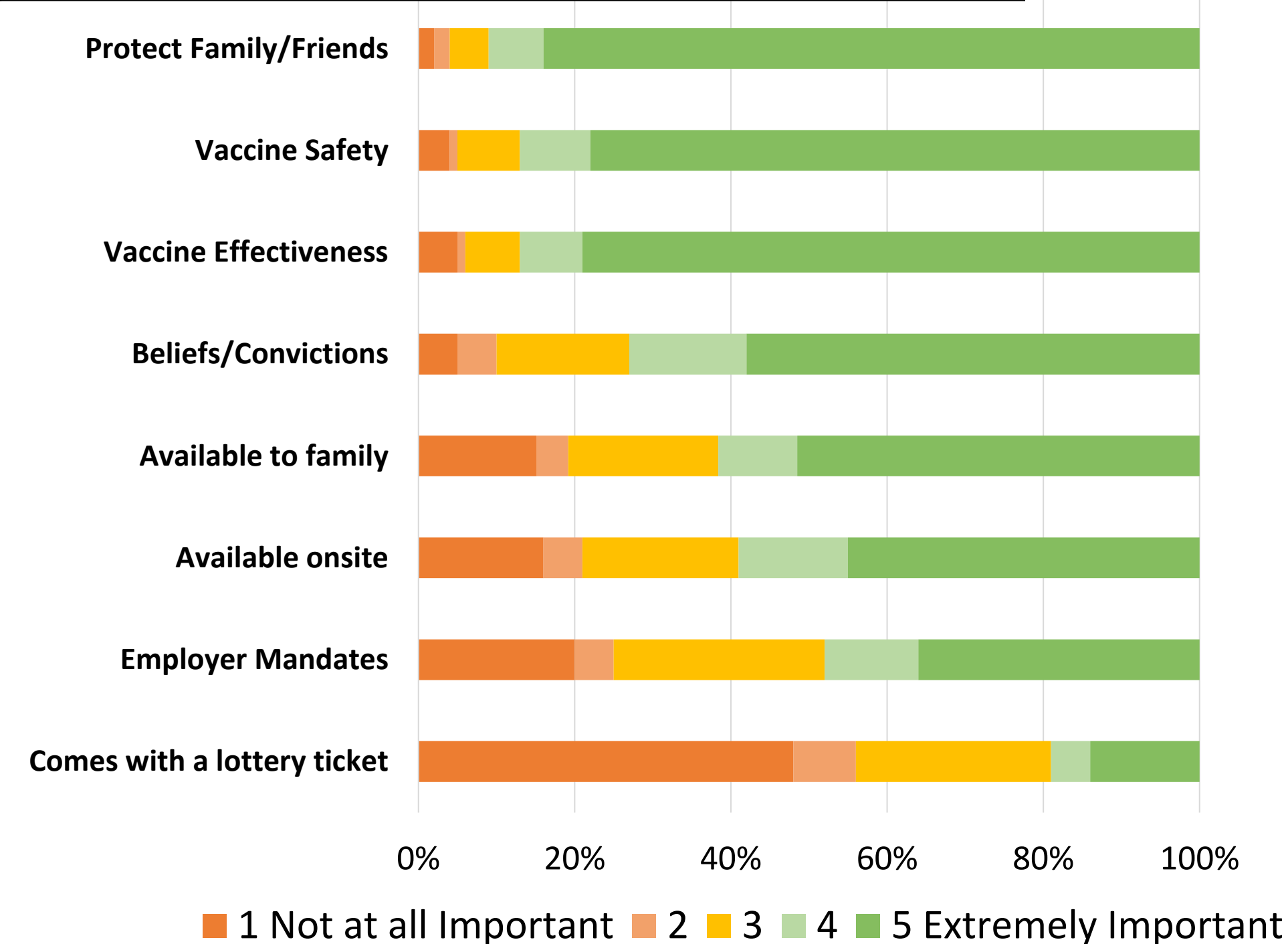
### Demographic Characteristics (n = 170)



### Likelihood of Vaccination



### Important Factors in Vaccination Decision



### Likelihood of COVID-19 Vaccination by Demographic Characteristics (n = 170)

	COVID-19 Vaccination					
	Total (n=170)		Likely (n=68, 40%)		Unsure/Unlikely (n=102, 60%)	
	n	(%)	n	(%)	n	(%)
<b>Age</b> (M, SD, min-max)	(49.1,12.5,22-77)		(51.5,12.7,25-72)		(47.5,12.2,22-77)	
18-29	18	10.6	6	33.3	12	66.7
30-39	30	17.6	11	36.7	19	63.3
40-49	33	19.4	9	27.3	24	72.7
50+	89	52.4	42	47.2	47	52.8
<b>Gender</b>						
Male	62	36.5	29	46.8	33	53.2
Female	107	62.9	38	35.5	69	64.5
Other	1	0.01	1	100.0	0	0.0
<b>Years in position</b>						
0-1	32	18.8	12	37.5	20	62.5
1-3	55	32.4	21	38.2	34	61.8
3-5	23	13.5	11	47.8	12	52.2
5-10	29	17.1	10	34.5	19	65.5
10+	31	18.2	14	45.2	17	54.8
<b>Functional Unit</b>						
Medical	34	20.0	15	44.1	19	55.9
Behavioral Health	59	34.7	27	45.8	32	54.2
Administration	40	23.5	15	37.5	25	62.5
Clinic Administration	13	7.6	3	23.1	10	76.9
Security	15	8.8	4	26.7	11	73.3
Maintenance	9	5.3	4	44.4	5	55.6
<b>Union Classification</b>						
Non-Union	95	55.9	40	42.1	55	57.9
Union Member	75	44.1	28	37.3	47	62.7

\* p < .05; \*\* p < .01; \*\*\* p < .001

No statistically significant differences were found, except that a greater percentage of staff ages 50+ years indicated being likely to get a COVID vaccine compared to staff <50 years (47% vs. 32%, respectively, p < .05).

## CONCLUSIONS

We sought to understand attitudes toward COVID vaccination among staff providing treatment for opioid use disorders. Results of our survey found that:

- Overall, only 40% of staff indicated being likely to get vaccinated,
- A greater percentage of staff 50 years of age or older indicated being likely to get vaccinated compared to younger staff, and
- While more than 40% of medical and behavioral health staff reported being likely to get vaccinated, this percentage was not statistically significant compared to the other groups.
- Among the factors we assessed, the majority reported that protecting one's family and friends and vaccine safety and effectiveness were extremely important in decisions to get vaccinated.

Given that national public health efforts prioritize the OTP healthcare workforce and patients, it is critical to examine factors that are likely to impact decisions to get vaccinated among the OTP healthcare workforce.

### References:

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Paterson, P., Meurice, F., Stanberry, L. R., Glismann, S., Rosenthal, S. L., & Larson, H. J. (2016). Vaccine hesitancy and healthcare providers. *Vaccine*, 34(52), 6700–6706. <https://doi.org/10.1016/j.vaccine.2016.10.042>

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