HELP USA

Building Better Lives

A Follow-up Assessment of Covid-19 Vaccine Demand & Access in HELP USA's New York City Single Adult Shelters

Ashwin Parulkar, Senior Research Specialist
HELP USA

Executive Summary

Since January 2021, HELP USA has been administering Covid-19 vaccines for shelter clients in coordination with the Department of Homeless Services and its contracted medical providers. This report is the second in a series of client surveys designed to better understand client vaccination rates, where clients are getting vaccinated, and issues related vaccine hesitancy. We believe it is imperative to fully understand how clients view the vaccine so we can tailor interventions to increase the rate of vaccination, which will protect clients and staff alike. Shelter clients have relatively easy access to vaccines, yet there remain significant barriers to achieving a high vaccination rate among shelter clients.

New York City is the only large city in the country that is legally required to provide shelter on demand. This legal requirement precludes the city from mandating vaccinations to reside in the system. Therefore, it is incumbent that city officials and non-profit partners quantify the number of clients who are vaccinated, understand vaccine hesitancy, and implement practices informed by clients that can increase the rate of vaccination. It is well documented that the COVID vaccine (to include boosters) drastically decreases COVID symptom severity and significantly decrease death from COVID.

In July, we released our first comprehensive vaccination analysis. We reported that most shelter clients were aware of vaccine availability in shelter (89%), but only 28% had received at least one dose of a vaccine in shelter, and only 24% of shelter clients were fully vaccinated.

In this report, with 539 respondents, we found that the vaccination rate in shelter is well below the general population with only 56% report being fully vaccinated. Even more concerning is the high number of vaccinated clients report receiving the vaccine outside of the shelter, and only 36% of clients report accessing the vaccine in shelter.

Based on the continued low percentage of clients accessing the vaccine in shelter and the low total number of vaccinated clients, we recommend the following:

- Increase both the volume & consistency of vaccines/boosters in the near-term to close the gap between people experiencing homelessness and general population vaccination rates. Tactics to do this include:
    - Partner with us to create and implement a *peer ambassador* program
    - Strategically align pods with peer ambassador program
- Continue consistent and frequent COVID testing in shelter

Daniel Farrell, LCSW
Senior Vice President

Introduction

In July 2021, HELP USA completed a baseline[1] study on vaccine demand and coverage among 587 clients who were interviewed between April and June across ten single adult shelters and two temporary hotels. The study found that 45% of clients had received the first dose of a two-dose Covid-19 vaccine and 24% had received the second dose of the two-dose vaccine or the single dose Johnson & Johnson vaccine (fully vaccinated). The share of clients that received at least one dose of a Covid-19 vaccine was 48%[2]. Low demand partially explained low vaccination rates. Just 36% had attempted to get vaccinated at HELP sites and 26% desired assistance to avail vaccines. The April-June survey briefly overlapped the period in which the government suspended, then resumed, the provision of the Johnson & Johnson (J&J) vaccine in shelters. In August 2021, Department of Homeless Services (DHS) announced that they would administer the Pfizer vaccine in New York City shelters and provide incentives - gift cards and metro cards –to encourage clients to get vaccinated.

This follow up survey was conducted in mid to late December 2021 among 539 HELP shelter clients in ten single adult shelters **(table 1)**.

Shelter	**share**	**sample (n)**
107	11.19%	60
Audubon	12.31%	66
BWC	8.77%	47
Clarke Thomas	13.62%	73
Creston	9.51%	51
Franklin	8.02%	43
HWC	4.66%	25
Keener	8.77%	47
Meyer *	1.49%	8
SEC	21.64%	116
Unknown location		3
	100%	**539**

Table 1*This shelter is not included in the comparative analysis throughout this study due to its small sample size

The objective of the follow-up December '21 survey was to measure progress from the baseline April-June'21 survey on levels of vaccine demand and coverage among HELP USA single adult shelter clients. This study also analyzes the impact that the August 2021 DHS announcement to provide the Pfizer vaccine in shelters had on vaccine coverage in the shelter system. In addition

[1] https://www.helpusa.org/wp-content/uploads/2021/11/A-Baseline-Assessment-of-Vaccine-Demand-Access-in-HELP-USA-NYC-Shelters-Oct-29-2021.pdf

[2] The CDC considers people who have received at least one dose (≥ 1 dose) as 'those who received at least one dose of COVID-19 vaccine, including those who received one dose of the single-shot J&J/Janssen COVID-19 vaccine.' This study relies on this definition for its calculation and discussion of rates of shelter clients that received at least one dose of COVID 19 vaccine. https://www.cdc.gov/coronavirus/2019-ncov/vaccines/reporting-vaccinations.html

to the survey data, this study also analyzes HELP USA's vaccine distribution database to ascertain trends in vaccine supply and access at its single adult shelters.

Shelter staff conducted the survey in December 2021. It comprised the following questions:

1. Are shelter residents aware that the Covid-19 vaccine is available at HELP shelter locations?
2. Have they attempted to access the Covid-19 vaccine at a HELP shelter location?
3. Have they received the first dose of the Covid-19 vaccine?
   3.b. Did they receive the first dose of the Covid-19 vaccine at a HELP shelter location?
4. Have they received the second dose of the Covid-19 vaccine?
   4.b. Did they receive the second dose of the Covid-19 vaccine at a HELP shelter location?
5. Would residents desire assistance from Help USA staff to avail the vaccine?

Main findings include:

(1) Shares of HELP shelter clients that received at least one dose of the Covid-19 vaccine and that were fully vaccinated increased significantly over between the April-June and December survey periods from 48% to 72% (≥1dose) and 24% to 56% (fully vaccinated). The share of clients that received at least one dose of the vaccine at HELP shelters improved from 28% in April-June to 35% in December (≥1 dose-help).

(2) However, client *attempts* to avail vaccines at shelters and on-site full vaccination rates remained virtually unchanged: in December, 38% of clients attempted to get vaccinated at their shelter and 22% were fully vaccinated at their shelters. Rates for these indicators, respectively, were 36% and 20% in the baseline April-June survey.

(3) Vaccines were administered in HELP shelters in higher volumes but more sporadically from January 25 – March 31 and more consistently but in lower volumes from August 1 – October 31 (November and December data is unavailable).

During the Jan-March'21 period, DHS had not yet secured the supply of vaccines to distribute to New York City shelters. A high volume of vaccines on fewer days during the Jan-March period is therefore explained by explicit coordination between HELP USA and DHS before widespread distribution of vaccines in New York City shelters may have been possible. The more consistent delivery of vaccines during the August to October period reflects DHS efforts to provide vaccines in shelters after officially authorizing the distribution of the Pfizer vaccine. However, the low daily average of vaccines provided in shelters during this time highlights the need to increase the number of vaccine administrator visits and improve coordination between DHS and shelter managing agencies.

- Vaccines were administered at least one day a week at HELP shelters in 34 out of 40 recorded weeks in the year (zero first and second doses were administered in 6 whole weeks).

- The median of the weekly average of administered first doses from January 25 – October 30, 2021, was 0.64. The median of the weekly average of administered second doses was 0.16. **(appendix 2, figure 3a)**

- An average 1.95 daily first doses and 1.14 daily second doses were provided to all HELP shelters from January 25, 2021, to October 31, 2021.

    - The period from January to March '21 recorded the highest volume of vaccines administered in shelters, when 4.77 daily first doses and 2.9 daily second doses were administered.

        - During the Jan-March period, vaccines were administered in few numbers of days but in high volumes that were preceded and followed by several consecutive 'zero' vaccine days (i.e., 87 first doses on Feb 23 were preceded by 24 'zero' vaccine days).

    - The daily averages during the August '21-October '21 period, after DHS authorized the Pfizer vaccine in shelters, equaled 1.4 and 0.39 doses respectively (below the long-run annual first and second dose averages).

        - However, the Aug-Oct'21 period was marked by a relatively higher number of days in which vaccines were administered. Vaccines were administered – in low volumes - at least one day each week in HELP shelters over 11 consecutive weeks throughout this period.

(4) A significantly high vaccination rate for a shelter in *specific months* (i) early in the provision of vaccines (January-March) and/or (ii) after the Pfizer vaccine became available in shelters (August-October) was associated with higher overall vaccination rates for that shelter (Keener and Clarke Thomas) in December. However, onsite vaccination rates varied. These successful shelters, in terms of overall vaccine rates, are both single men's shelters on Ward's Island.

The shelter that had significantly higher rates of clients that received at least one dose of vaccine in October and that were fully vaccinated in November also registered the highest rates in these overall categories in the December survey (Keener).

- 38% of Keener residents in the December 2021 survey reported receiving their first doses in October and second doses in November, respectively.
- However, the share of clients that received vaccines at Keener itself was also proportional to low April-June and December sample rates in these categories.

The shelter with higher rates of clients that received at least one dose and that were fully vaccinated between January and March 2021 also registered higher onsite vaccination rates compared to other shelters (*Clarke Thomas*).

- Clarke Thomas's full vaccination rates were also higher than other shelters in August, just after Pfizer became available at these sites.
- 24% of Clarke Thomas residents received their first dose in March.

The shelter with comparatively high overall ≥1 dose (59%), full vaccination (42%) and *onsite* vaccination rates (39% and 31%, respectively) in the April-June survey registered declines in each indicator in December, with exception to their full vaccination rate (51%) *(SEC*).

- The variation in overall and on-site vaccination rates of Wards Islands men's shelters tells us that significantly high overall and onsite vaccination rates are associated with accessing vaccines at two critical times – (i) the initial roll-out in January and, (ii) in August, after the Pfizer vaccine was made available in shelters (Clarke Thomas).

- High overall vaccination rates alongside low on-site vaccination rates is associated with success of availing vaccines in August (Keener). Although the Pfizer vaccine was officially provided in shelters at this time (Keener), a high share of this shelter's clients potentially availed the vaccine from other sites.

- Lastly, a shelter's early access to vaccines – in February and March – does not itself ensure higher vaccine rates over time (SEC). Declines are even possible if efforts are not made to repeat early successes.

(5) Limited and infrequent on-site availability of vaccines in women's shelters, Franklin and HWC, may have reduced demand among clients. In these shelters, attempts to avail the vaccine declined significantly between the April-June and December surveys.

(6) Nearly half (49%) of respondents reported witnessing an increase in vaccine administrator visits to their sites since August 2021. However, nearly two-thirds (63%) of clients reported that vaccine visits had no influence on their decision to get vaccinated or remain unvaccinated; 19% of clients reported that vaccine visits convinced them to get vaccinated.

Key recommendations for DHS based on findings:

*(1) Fund vaccine peer support grou*ps *in New York City shelters. A dedicated program for vaccine awareness led by clients can be a vital on-site resource to encourage vaccine demand and increase coverage rates in locations with highly mobile populations.*

The on-site vaccination pattern of HELP USA shelter clients, in which a high *volume* of vaccines are administered at faster rates in winter and early spring compared to later periods throughout the year, matches the vaccination pattern in the general New York City population[3].

[3] https://www1.nyc.gov/site/doh/covid/covid-19-data-vaccines.page#trends ; see also appendix figures 1a and 2a

However, *overall vaccination rates* of shelter clients, while rising, substantially trail the NYC adult population **(table 2**) while on-*site vaccination rates* have either marginally improved (≥1 dose-help) or remained stagnant (fully vaccinated-help). In this context, dedicated peer support groups may help increase both the *volume* of vaccines administered in shelters and *coverage* rates. Currently, the potentially high levels of mobility of clients in and out of these spaces poses a challenge to achieving both goals simultaneously. 38% of clients in surveyed HELP shelters are 9-month stayers (having resided in their shelters for at least 270 days) (**appendix, figure 4a).**[4] There is a potentially high level of mobility in the remaining population.

(2) ensure consistent weekly vaccine administrator visits and that incentives are coordinated at a high level to shelter staff and clients. Peer support groups (recommendation 1) could also facilitate these objectives.

In this regard, this study recommends that DHS work with shelter providers to:

(i) understand why the increase in visits by vaccine administrators after August did not translate into consistent delivery of a high volume of vaccines across HELP shelters, and

(ii) utilize such information to devise an adequate program of incentives to achieve greater impact in each stage of vaccine administration, including the now additional and increasingly urgent booster dose.

[4] The percentage of 9-month stayers in men's shelters ranges from 35% (Clarke Thomas) to 52% (SEC) and non-existent (0%) in women's shelters

Vaccine Demand & Access: Dec'21 findings in context of baseline indicators

survey periods	Attempt (%)	≥1dose (%)	≥dose1@help (%)	Fully vaccinated (%)	Fully vaccinated @help (%)	assist (%)	boost (%)
April-June'21 (baseline) (n=587)	36.12	48.21	28.11	24.19	19.76	26.24	--
December'21 (follow-up) (n=530-536)	37.78	72.6	34.71	55.85	21.66	33.4	11.34
NYC adult pop (diff, CI)				83.7% (27.85, 23.68-32.10) *			
difference (Conf Int)	1.66(-3.98-7.31)	**24.39(18.7-29.8)**	**6.6(1.16-12.01)**	**31.66(26.07-36.97)**	1.9(-2.84-6.68)	**7.16(1.8-12.49)**	n.a.

*diff & CI between Dec'21 full vac and NYC adult population

differences in bold indicates significance (p<0.05)

Table 2: vaccine demand and coverage indicators (April-June '21 & Dec'21 surveys)

age group	attempt (%)	≥dose1(%)	≥dose-1h (%)	dose2(%)	dose2-h (%)	assist (%)	boost (%)
18 to 24	24.24	60.6	11.76	41.17	5.88	35.29	15.15
25 to 34	39.1	67.57	29.73	53.2	20.91	31.53	3.63
35 to 44	33.67	68.68	32.65	52.52	18.18	24.24	11.22
45 to 54	37.61	78.30	39.81	61.68	24.3	32.11	9.52
55 to 64	45.45	77.97	48.76	60.17	29.41	41	16.38
65+	33.33	77.27	17.77	64.44	24.44	35.55	20.93
Total (n=511)	37.78	72.8	34.62	56.64	22.37	33.08	11.49

Table 3: vaccine demand and coverage indicators by age group (December '21 survey)

The high level of awareness among clients that vaccines are available at HELP shelters alongside low demand for vaccines at these sites (attempt and assist rates) is a pattern that has remained stable between the April-June'21 and December '21 surveys. In December, 93% of clients reported being aware that vaccines were available at HELP sites (a 4% increase from April-June). Only 38% claimed that they had attempted to get vaccinated at these locations (a 1% increase) (**table 2**).

In December , clients aged 18 to 24 (n=34) had significantly lower on-site vaccination rates than other age groups -- 76% (x=26) of this group were residents of women's shelters. Conversely, clients aged 55 to 64 were more likely to attempt to avail vaccines at their shelters and to receive at least one dose of the vaccine – two-thirds (66%) of these clients were male residents of Ward's islands shelters (Clark Thomas, Keener and Creston) **(table 3).**

At the still low total demand level, the rates of HELP shelter residents that received at least one dose and that were fully vaccinated between the April-June baseline and December follow up survey periods increased significantly-- from 48% to 65% (≥1 dose) and 24% to 56% (fully vaccinated).

However, baseline and current HELP USA single adult shelter client vaccination rates are far lower than vaccination rates in the general New York City adult population, in which 84% were fully vaccinated in late December 2021 (**table 2**). The increase in the overall client vaccination rates largely occurred outside of the HELP shelter system: there was no significant change in the low *on-site* full vaccination rates from June (20%) to December (22%).

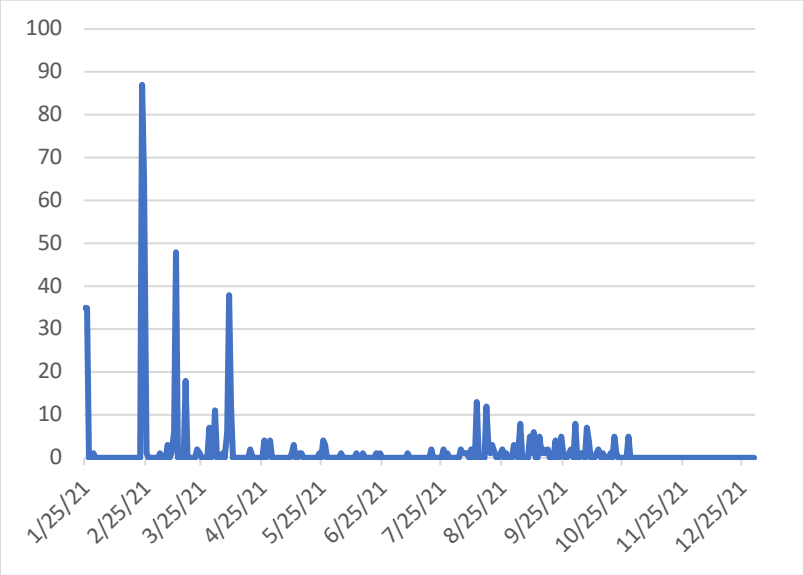

Figure 1: Daily administered first doses at HELP shelters (Jan 25 – Dec 31, 2021)

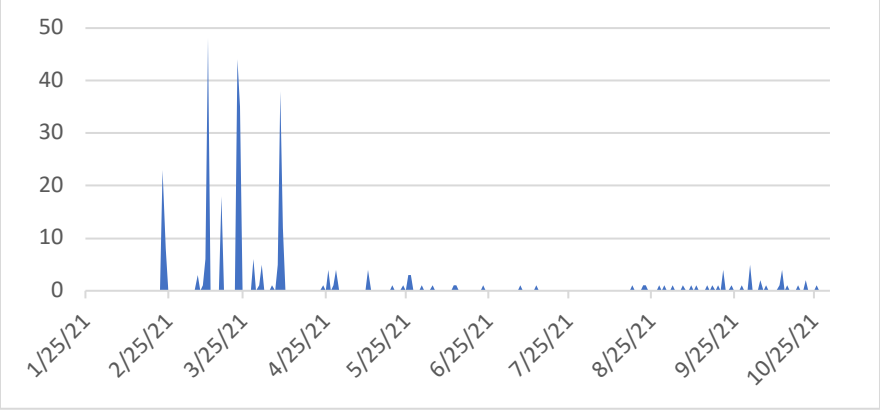

Figure 2: Daily administered second doses administered at HELP shelters (Jan 25 – Dec 31, 2021)

Why do on-site vaccination rates continue to be low? Since vaccines became available in HELP shelters on January 25, 2021, an average 1.95 first doses and 1.14 second doses per day were provided through October 31. Average daily 4.77 first doses and 2.9 second doses were provided between January 25-March 31. These figures dropped to 1.4 and 0.39 in the August'21-

October'21, just after DHS authorized the administration of the Pfizer vaccine in shelters (**figures 1 & 2**).

During the Jan-March period, DHS had not yet secured the supply of vaccines to distribute to New York City shelters. A high volume of vaccines on fewer days during the Jan-March period is therefore explained by coordination between HELP USA and DHS before widespread distribution of vaccines in New York City shelters may have been possible. The more consistent delivery of vaccines during the August to October period reflects DHS efforts to provide vaccines and administrators after officially authorizing the distribution of the Pfizer vaccine.

risk -->	**baseline-vax, potential risk -->**	**baseline -->**	**mid cap -->**	**capacity**
		BWC	Keener (+*from baseline*)	Clarke Thomas (+ *from mid-cap*)
	SEC (- from cap)			
	Franklin (- from baseline)	Audubon (+ *from b-v, pot risk*)		
	HWC (- from baseline)	Creston (+from b-v, pot risk)		
	Shelter 107(+ from risk)			

Table 3: Shelter movement across risk, baseline, and capacity categories between baseline (April-June'21) and follow up (December '21)

The baseline April-June vaccine survey established *risk, baseline,* and *capacity s*helter categories that were derived from a comparative analysis of proportions of vaccine access and coverage indicators (**listed in table 2**) between specific shelters' and the survey sample. Shelters that performed at pace with the sample survey rate for most indicators were deemed *baseline* shelters. Their success rates were comparable to sample survey rates – i.e., they did not differ at statistically significant levels. Shelters that performed better than the sample rate for multiple indicators, particularly vaccination rate categories, were labeled *capacity* shelters (p-values<0.05). Shelters that fared worse than the survey sample rate, according to these parameters, were at *risk.*

Based on this framework, five shelters improved in multiple indicators between June and December in relation to both surveys **(table 3).** They experienced categorical progress (i.e., from baseline to mid-capacity). For example,

- In the December survey, Clarke Thomas, a men's shelter on Wards Island, performed better than the sample rate in each category, except *full vaccination* (59%, at pace with the sample rate, 55%) **(figure9)**. The rate of

its clients that were fully vaccinated at HELP shelters improved significantly, from 29% to 39%, compared to sample rates 20% and 22% **(figure 10)**. This shelter has therefore progressed from *mid-capacity to capacity* status.

- 107, a men's shelter in Manhattan, moved from a *risk* to *baseline with potential risk* status because it improved significantly from April-June to December in comparison to baseline and follow up survey rates in the following categories: client *attempts* to get vaccinated at their shelters and *≥1dose, ≥dose1-help,* and *full vaccination-help* rates (**figures 5,7,8 &10**) It is possible that this shelter's progress was due to a change in leadership at this site.

Three shelters declined in multiple indicators in comparison to June and December sample rates (**table 3**). In this context, they registered categorical declines between these two periods (i.e., from capacity to baseline). For example,

- SEC, a men's shelter on Wards Island, was the June survey's strongest performer. It registered the highest ≥dose1 (59%) and full vaccination(31%) rates relative to April-June sample rates (28%) and (20%). It is now a *baseline-vaccine with potential* risk shelter. In the December survey, this shelter performed worse than the sample rate in attempt, dose1, dose1-help, dose2, and dose2-help categories (**figures 7-10)**

Shelters improved (under conditions in which clients accessed vaccines at other sites, *potentially* after these services were not consistently available in their shelter. In this regard, 'capacity' can also refer to the ability of residents to find services when they are not available to them at their locations, though this is not an ideal situation.

Shelter comparisons across major indicators: assessments from baseline (April-June to December) and between other shelters (December)

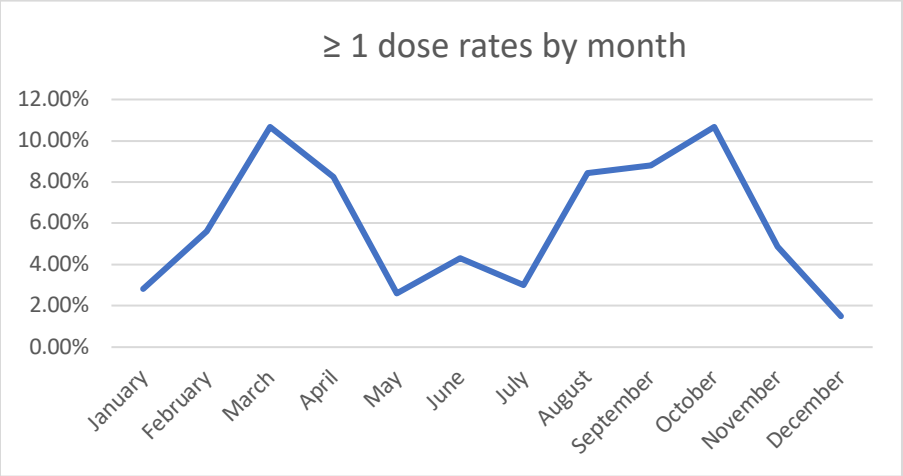

Figure 3: per month share of clients who received at least one dose of the Covid-19 vaccine

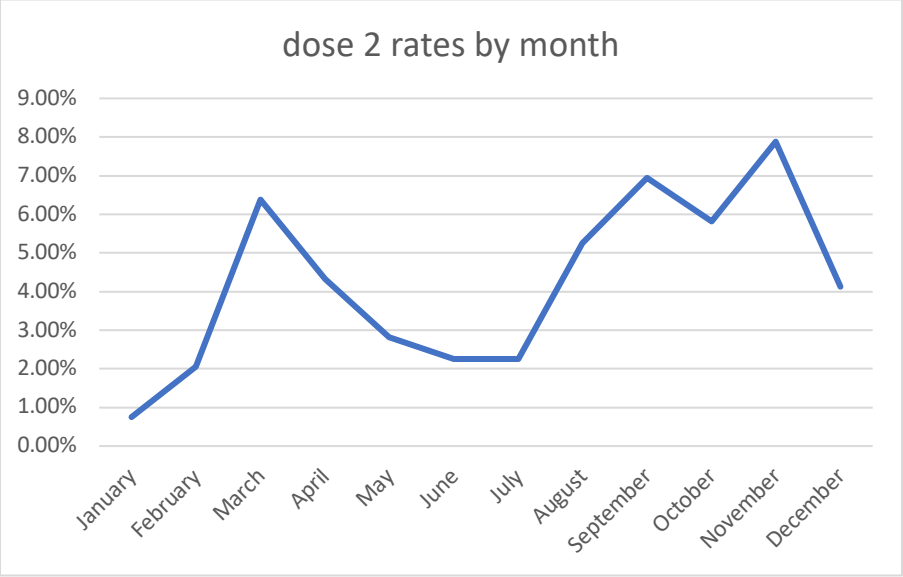

Figure 4: per month share of clients who received the second dose of the Covid-19 vaccine

The Jan'21 – March '21 period, before the J&J moratorium, and the July'21-October'21 period, just after DHS authorized the provision of the Pfizer vaccine, were the most active periods in which clients became vaccinated **(figures 3&4**). Vaccines were administered in shelters more frequently in March, but inconsistently though in high volume in a few days in February '21 (i.e., this month had three consecutive weeks of 'zero' vaccine days) (**figures 1&2**).

Clarke Thomas had significantly higher overall vaccination rates in the Jan-March period compared to other shelters in the December '21 survey -- 24% of its residents received their first dose in March. A significant share of Clarke Thomas clients availed vaccines at their sites early, which partly explains why their on-site vaccination rates were comparatively higher than other shelters in December '21. This shelter also had higher full vaccination rates in August relative to other shelters.

The share of residents at Keener that received at least one dose in October '21 and that were fully vaccinated in November '21 were significantly higher than other shelters, which contributed to their higher overall vaccination rates compared to other shelters in December '21. 38% of Keener residents in the December 2021 survey reported receiving their first doses in October and second doses in November, respectively. Keener's *attempt* rate is also significantly high.

Additionally, chi square tests of independency revealed dependent relationships between levels of attempts, dose-1, dose1-help, dose2 and dose2-help, respectively, and specific shelter sites (p-values <0.05). It is important to examine these distributions further in context of vaccine demand (attempt and desire for assistance rates) and coverage (vaccine rates).

Vaccine demand

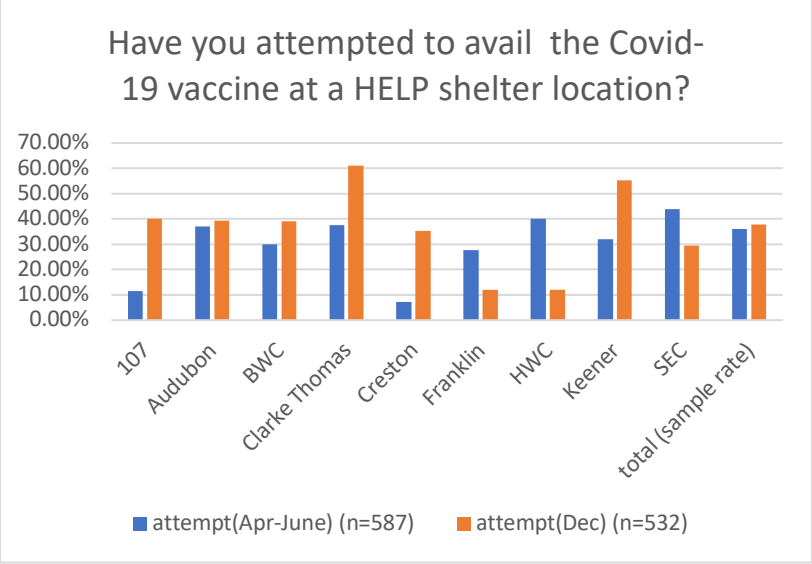

Figure 5: Shares of clients that attempted to avail the Covid-19 vaccine at a HELP shelter

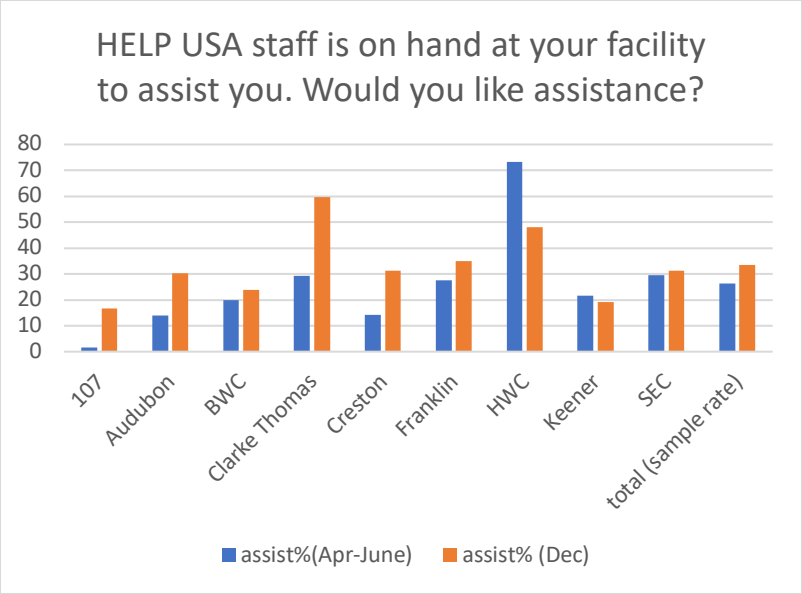

Figure 6: Share of clients that desire assistance to avail the vaccine from HELP USA social service staff

Clients in six out of nine shelters attempted to access vaccines at their shelters at higher rates in December compared to June -- and at significant rates in Clarke Thomas, Keener and 107 (**figure 5**). *Attempt* rates in Franklin and SEC shelters declined significantly from June to December. It is possible that the early relative success in accessing vaccines in Clarke Thomas and Keener also increased demand for vaccines in their shelters. Even when these shelters did not have the capacity to meet client needs, clients may have tried to seek the vaccine elsewhere. Conversely, limited and infrequent on-site vaccine provision in women's shelters, Franklin and HWC, may have curbed demand for this service in these locations – their on-site attempts declined from April-June to December.

The desire for assistance improved significantly in shelters that had previously trailed other sites in the baseline survey (107 and Audubon) **(figure 6)**. Social service staff at 107 noted that clients began asking about vaccines and related information after recent vaccine administrator visits, indicating a possible increased demand for on-site assistance. In the December survey, Clarke Thomas had the highest share of residents that desired assistance. This indicates that early and prolonged on-site vaccination success rates (**figure 8)** may have also positively influenced a level of increasing and continuous demand.

Vaccine coverage

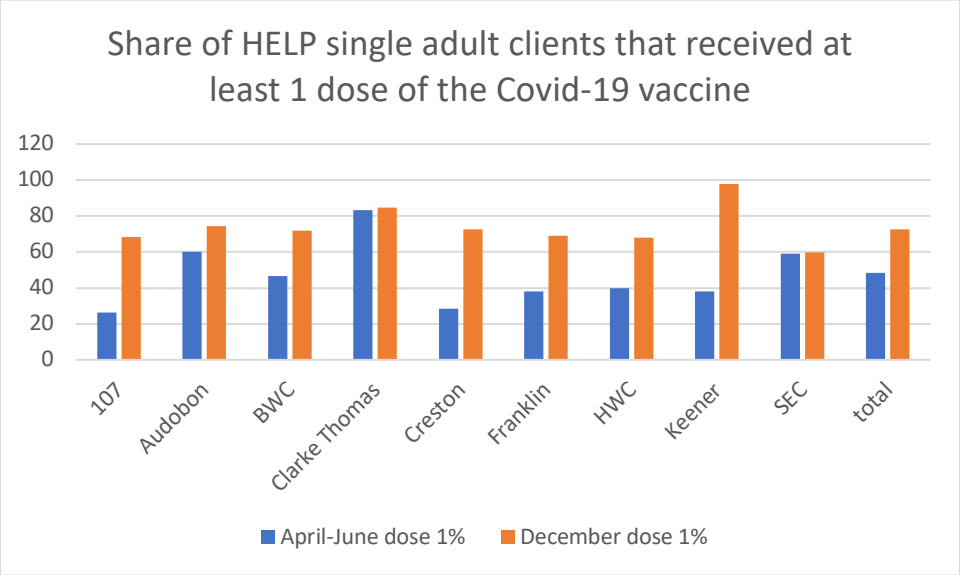

Figure 7: Share of clients that received at least one dose of the Covid-19 vaccine

The 24.39% increase in the rate of HELP single adult shelters that received at least one dose of the vaccine from June to December is nearly a shared story: 8 of 9 surveyed shelters improved in this category over this period (**figure 7**).

All HELP single adult shelters' experienced increases in full vaccination rates between June and December, resulting in an overall 32% increase (**figure 9**). Clarke Thomas significantly outperformed the April-June and December sample survey rates and other shelters in the December survey in rates of clients that received at least one dose at shelters and that were fully vaccinated at shelters (**figures 8 & 10**). Clients at HWC and Franklin received vaccinations at their sites at significantly low rates (**figures 8&10).**

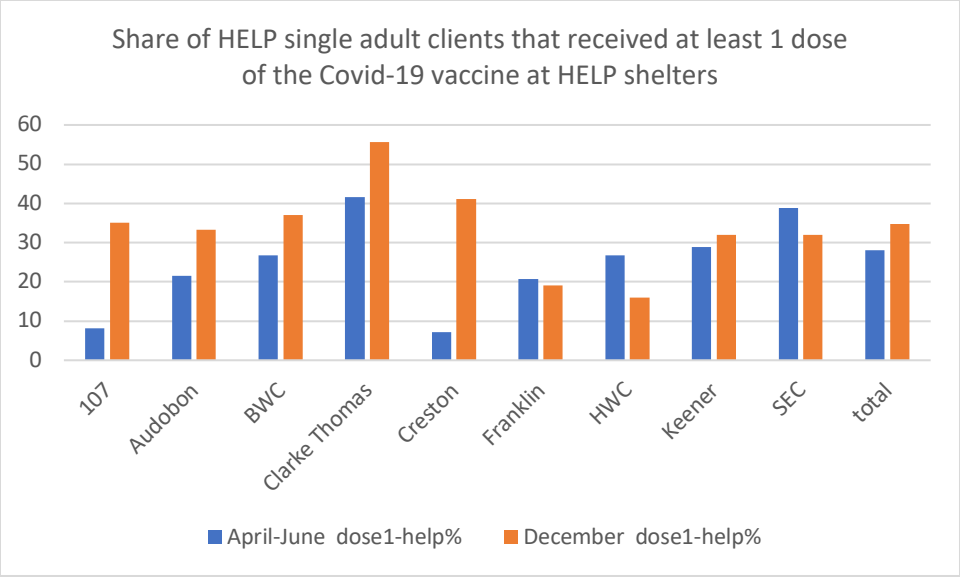

Figure 8: Share of clients that received the first dose of the Covid-19 vaccine at a HELP shelter

Keener's full vaccination rate vastly improved in comparison to the sample rates of both survey periods **(figure 9)**. Other shelters improved in proportion to the April-June and December sample rates while 107 improved at a rate that remained significantly below the sample rate. Residents of potential risk shelters (i.e., HWC) appear to have chartered other courses to secure vaccines, evidenced by differences between their overall vaccine and on-site vaccine rates (**figures 7&8).**

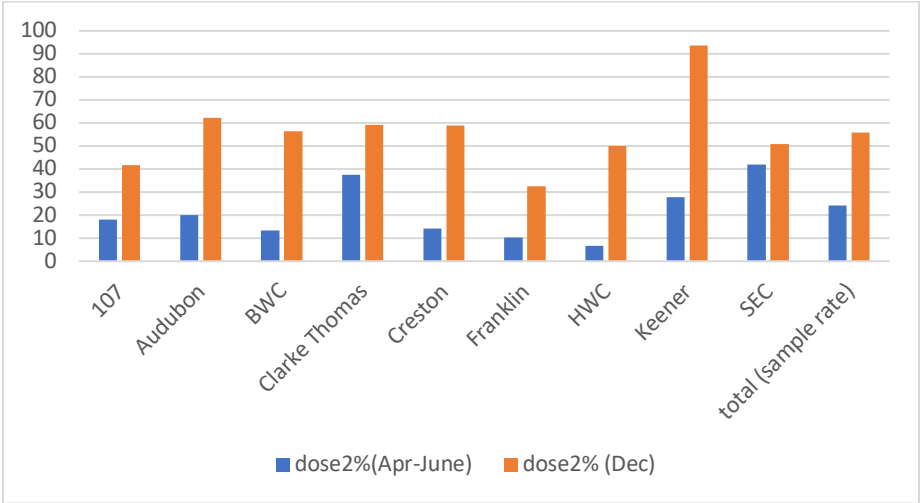

Figure 9: Share of fully vaccinated shelter clients

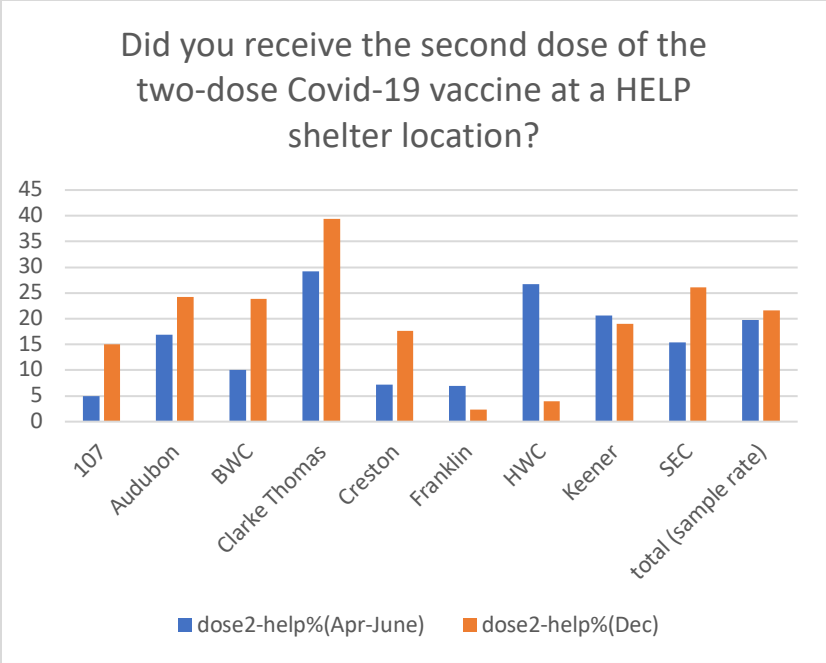

Figure 10: Share of clients that received the second dose of the Covid-19 vaccine at a HELP shelter

Impact of vaccine administrator visits & incentives on client decisions to get vaccinated

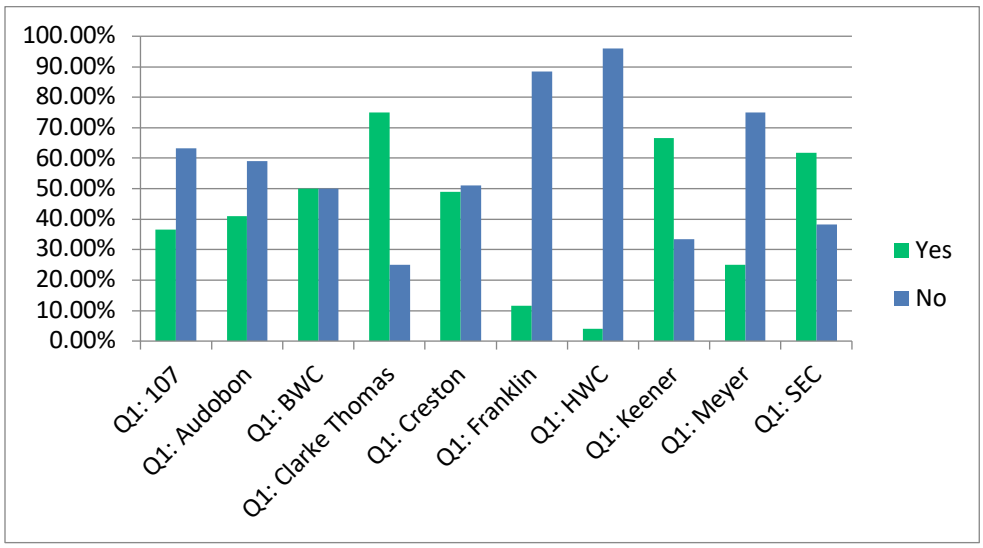

Figure 11: share of clients that reported witnessing an increase in vaccine administrator visits to their shelter

49% of respondents reported witnessing an increase in vaccine administrator visits to their sites beginning in August, after the Pfizer vaccine was introduced in shelters. The rate of doses administered in HELP shelters also increased between June-July and August-September: 1.5 first doses per day were administered at HELP shelter locations in August and September, respectively. In July and June 0.19 and 0.16 vaccines were administered per day at shelters.

Clarke Thomas and Keener, registered the highest rate of clients that reported witnessing an increased number of administrators visits to their shelters (75% and 67%), with shelter 107 following, at 61% (**figure11)**. Single women shelters like HWC, with decreased on-site vaccination rates but increased overall vaccination rates, witnessed visits at much lower rates.

19% (x=101) of clients reported that vaccinator visits convinced them to get vaccinated. 63% (x=332) reported that these visits had no influence on the decision to get vaccinated or remain unvaccinated.

Shelters where clients reported that administrator visits had no impact included sites with (i) increased overall and onsite vaccination rates from their April-June baselines that remain at pace with both sample survey vaccination rates (i.e., BWC, a baseline shelter) and (ii) declining vaccination rates (i.e., SEC)

Incentive 1 – gift cards after receiving at least one dose

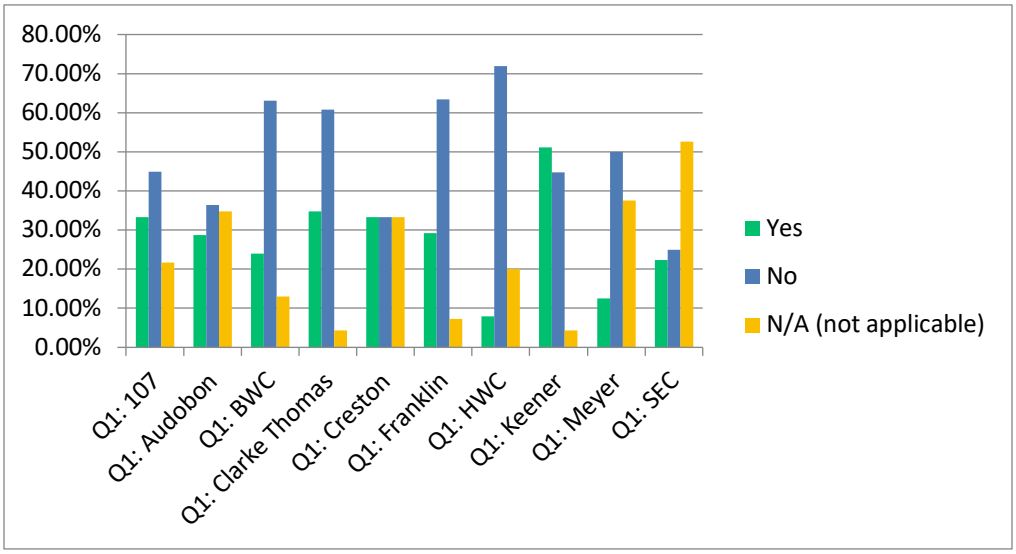

Figure 12: share of clients that received incentive after receiving at least one dose

29% of clients reported that they had received the gift card incentive after receiving at least one dose of vaccine. 45% did not receive the incentive (26% reported not applicable, which includes unvaccinated residents).

Shelters that received the gift card at significantly higher rates (i.e., Keener) also had higher *overall* vaccination rates (dose1) than, but comparable *on-site vaccination rates* to other shelters.

First dose incentives appear to have gendered differences. Sites that were more likely to *not* receive this incentive were

(i) a men's shelter with significantly higher ≥ 1 dose and full vaccination rates compared to other shelters (Clarke Thomas, *a capacity* shelter)and

(ii) a woman's shelter with comparable vaccination rates to the December survey's sample rates (BWC, a *baseline* shelter). Residents of this shelter were also more likely to report that the promise of the incentive did not impact their decision to get the first dose.

Overall, 34% of clients reported that the promise of the incentive did not impact their decision to get vaccinated; only 15% reported that the incentive significantly impacted their decision to get vaccinated (a great deal or a lot)[5]. 4% reported that the incentive impacted their decision a moderate amount, and 6% said it impacted their decision a little (41.7% reported not applicable).

Incentive 2 – metro card and gift cards for receiving the second dose

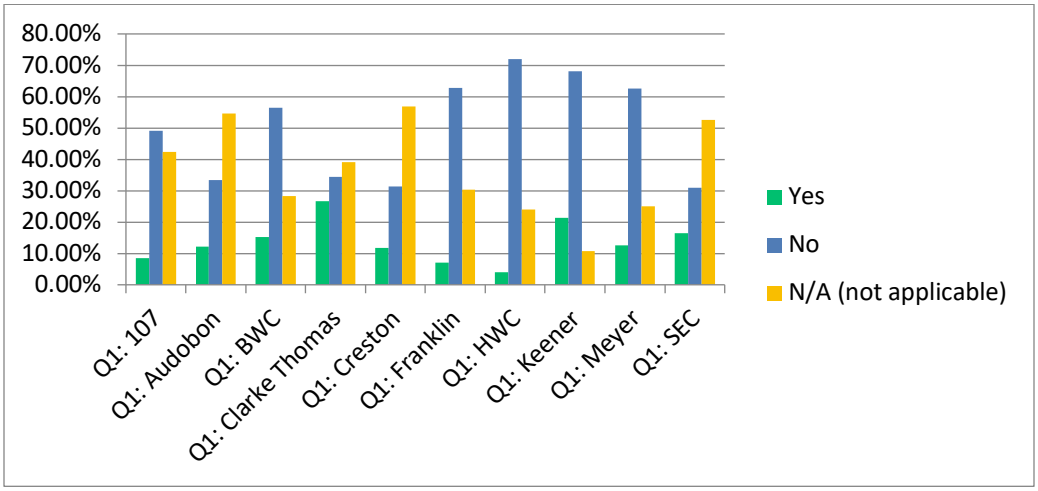

Figure 13: share of clients that received incentive after dose 2, by shelter

[5] Consistent with population level findings. See: https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2787782?guestAccessKey=c2307512-1d94-4cd3-b2ed-113be151b813&utm_source=For_The_Media&utm_medium=referral&utm_campaign=ftm_links&utm_content=tfl&utm_term=010422 and https://www.advisory.com/daily-briefing/2021/09/01/vaccine-incentives

15% of clients reported that they received a gift card and metro card after becoming fully vaccinated. The shelter with significantly higher *onsite* full vaccination rates also received the second incentive at higher rates than others (Clarke Thomas).

The shelter that also had significantly higher *overall* full vaccination rates had higher rates of clients that did not receive this incentive (Keener). BWC, a baseline shelter, also had significantly high levels of residents that did not receive this incentive.

Only 9% of respondents reported that the promise of the gift card and metro card influenced their decision to get vaccinated a great deal or a lot, compared to 32% that reported that this incentive had no influence on them (1% reported the incentive influenced them a moderate amount, 5 percent a little, and 53% reported not applicable).

Women's shelter BWC, with low on-site dose 2 rates, had significantly higher rates of residents that were positively influenced by the promise of incentive 2 to get the vaccine. Given that residents in this shelter were more likely not to receive the incentive, the motivating influence of the promise of the incentive could mean that clients sought vaccines at other sites and these sites did not provide incentives. However, this study also acknowledges that the small sample size of BWC may limit the applicability of this claim. Residents in capacity and mid-capacity shelters Clarke Thomas and Keener were more likely to have residents that reported that the incentive did not impact their decision to get vaccinated.

Conclusions & Recommendations

(1) Fund and coordinate vaccine peer support groups in New York City shelters. A dedicated on-site program for vaccine awareness can be a vital on-site resource to encourage vaccine demand and increase coverage rates in locations with highly mobile populations.

The finding that overall vaccination rates increased significantly between the spring and winter survey periods while on-site vaccination rates stagnated indicates that clients are availing services outside the shelter system to address this critical need. Ensuring consistent and widespread administration of vaccines at shelter locations remains a priority.

The on-site vaccination pattern of HELP USA shelter clients, in which a high *volume* of vaccines are administered at faster rates in winter and early spring compared to later periods throughout the year, matches the vaccination pattern in the general New York City population[6].

However, because (i) *overall vaccination rates* of shelter clients, while rising, substantially trail the adult NYC population **(table 2**) and (ii) on-*site vaccination rates* remain stagnant, dedicated peer support groups may help increase the *volume* of vaccines administered in shelters and *coverage* rates. Currently, the potentially high levels mobility of clients in and out of these spaces poses a challenge to achieving both goals simultaneously. 38% of clients in surveyed HELP

[6] https://www1.nyc.gov/site/doh/covid/covid-19-data-vaccines.page#trends ; see also appendix figures 1a and 2a

shelters are 9-month stayers (having resided in their shelters for at least 270 days) **(appendix, figure 4a).** There is a potentially high level of mobility in the remaining population.

(1) *prioritize coordination with shelter managing agencies to effectively distribute resources that DHS has made available for the vaccine program.*

For example, DHS should ensure vaccine administrator visits are consistent and incentives are effectively marketed and communicated to shelter staff and clients. In this regard, peer support groups (recommendation 1) could also facilitate these objectives.

The finding that half of respondents reported witnessing an increase in vaccine administrator visits after August while nearly two-thirds (63%) of clients reported that vaccine visits had no influence on their decision to get vaccinated or remain unvaccinated indicates the need to understand the extent to which low on-site vaccine rates are due to problems in government coordination with shelter providers.

This study recommends that DHS work with shelter providers to:

(iii) understand these dynamics in both shelters with relatively high on-site vaccination rates (i.e., Clarke Thomas) and shelters that experienced a decline in on-site vaccination rates (i.e., women's shelters, Franklin and HWC) and

(iv) utilize such information to devise an adequate program of vaccine administrator visits, so that policies regarding the vaccines, such as incentives, can have a greater impact, on each dose of the vaccine, including the now additional and increasingly urgent booster dose.

Appendix 1: HELP USA Vaccine Dashboard Data - first and second doses administered at HELP USA shelters (cumulative)

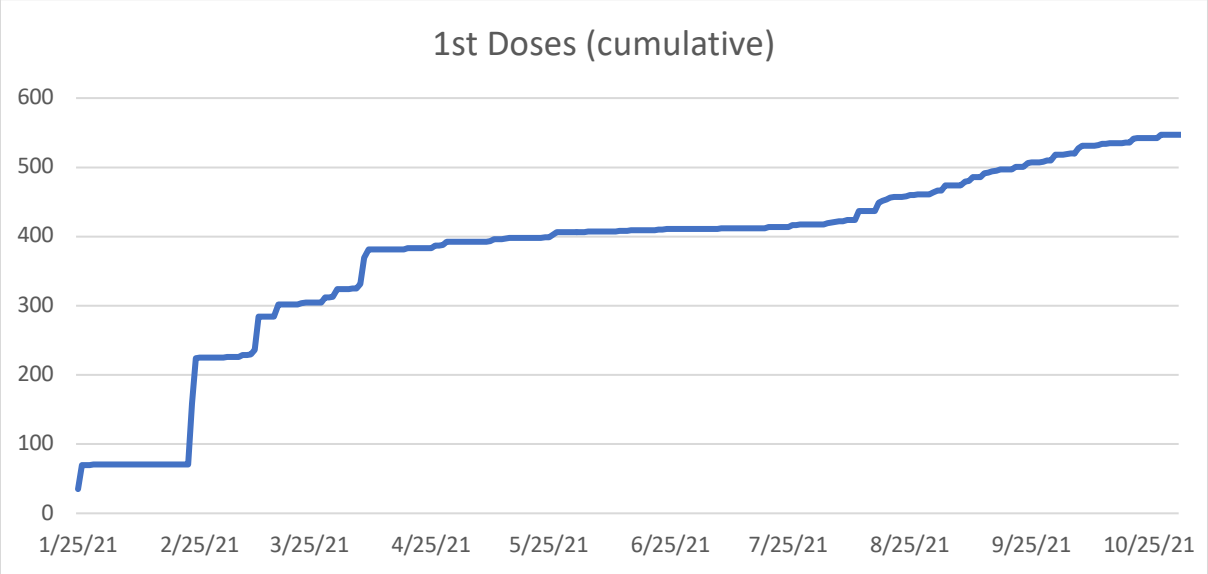

Figure 1a: cumulative first doses administered at HELP USA single adult shelters, source: HELP USA vaccine administration dashboard

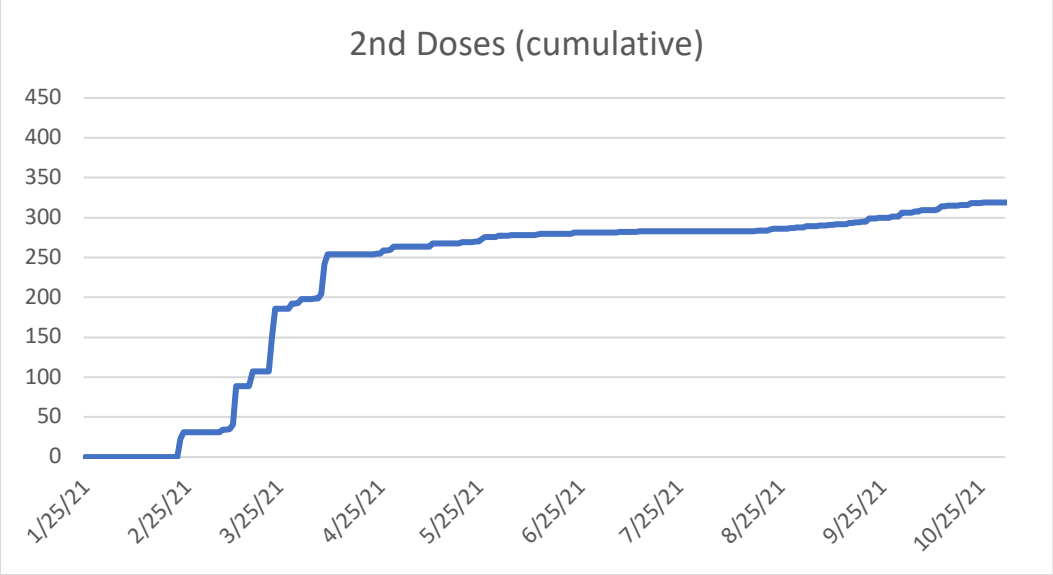

Figure 2a: cumulative second doses administered at HELP USA single adult shelters, source: HELP USA vaccine administration dashboard

Appendix 2: HELP USA Vaccine Dashboard Data – weekly average of vaccines administered in HELP USA shelters

week	dose 1	dose 2	week	dose 1	dose 2	week	dose 1	dose 2
1/25-1/31	10.1	0	**5/24-5/29**	1.14	1	**9/26-10/2**	1.57	0.86
2/1-2/7	0	0	**5/30-6/5**	0.14	0.29	**10/3-10/9**	1.86	0.43
2/8-2/14	0	0	**6/6-6/12**	0.14	0.14	**10/10-10/16**	0.57	0.86
2/15-2/21	0	0	**6/13-6/19**	0.14	0.14	**10/17-10/23**	1	0.43
2/22-2/28	22	4.4	**6/20-6/26**	0.29	0.14	**10/24-10/30**	0.71	0.14
3/1-3/7	0.14	0	**6/27-7/3**	0	0			
3/8-3/14	8.3	8.3	**7/4-7/10**	0.14	0.14			
3/15-3/21	2.57	2.57	**7/11-7/17**	0	0.14			
3/22-3/28	0.43	11.3	**7/18-7/24**	0.29	0			
3/29-4/4	2.71	1.71	**7/25-7/31**	0.5	0			
4/5-4/11	8.1	8	**8/1-8/7**	0.7	0			
4/12-4/18	0	0	**8/8-8/14**	2.14	0			
4/19-4/25	0.29	0.17	**8/15-8/21**	2.86	0.14			
4/26-5/2	1.3	1.3	**8/22-8/28**	0.57	0.43			
5/3-5/9	0	0	**8/29-9/4**	1.86	0.29			
5/10-5/16	0.86	0.57	**9/5-9/11**	1.71	0.43			
5/17-5/23	0	0.14	**9/12-9/18**	1.57	0.29			
5/24-5/29	1.14	1	**9/19-9/25**	1.43	0.86			
5/17-5/23	0	0.14	**10/24-10/30**	0.71	0.14			

Figure 3a: weekly average of vaccines administered in HELP shelters, source: HELP vaccine administration da

Appendix Two: 9-month stayers in HELP USA shelters (data source: CARES)

Shelter	9-month stayer (%)
107	40%
Audubon	14%
BWC	0
Clarke Thomas	35%
Creston	40%
Franklin	0%
HWC	0%
Keener	51%
SEC	53%
total	38%

Figure 4a: percentage of clients identified as 9-month stayers (Jan'21-June'21 average), source: CARES