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Experiences and Needs of Supportive Housing Staff during the COVID-19 Public Health Emergency: Results of a Mixed-Methods Needs Assessment, New York City, February 2020 - December 2021

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Introduction

Congregate residential settings, including supportive housing programs, were significantly affected by the COVID-19 pandemic. While numerous reports have documented the impact of the pandemic on tenants and staff in settings such as long-term care facilities, jails, homeless shelters, and nursing homes,[1-5] there is a gap in the literature on its impact on supportive housing settings in the United States. Additionally, while much of the literature has focused on COVID-19 mortality and morbidity, less is known about how the disease and related response efforts have affected mental health and service utilization among supportive housing program tenants and staff.[6,7]

Several previous studies have identified increased stress during the pandemic among staff who worked with people experiencing homelessness or in supportive housing[8-11] as well as those who worked in adjacent fields, including nursing home staff and health care workers.[12-14] Elucidating the experience of supportive housing staff who worked during the COVID-19 public health emergency and learning from the challenges faced and solutions implemented are critical to support planning for future public health emergencies.

The New York City (NYC) Department of Health and Mental Hygiene (NYC Health Department), in collaboration with the NYC Human Resources Administration (HRA) and other groups, including the Supportive Housing Network of New York (SHNNY), conducted a needs assessment to explore experiences among staff working in NYC supportive housing programs during 2020-2021 and to identify best practices, resource gaps, and additional needs related to pandemic response and recovery in these settings.

Key points

- Supportive housing programs serving vulnerable populations were significantly affected by the COVID-19 pandemic.
- Supportive housing staff who participated in a mixed-methods needs assessment in November and December 2021 reported challenges during the pandemic that impacted COVID-19 prevention, access to resources and services, and mental well-being among their tenants. Staff also reported that they and their colleagues experienced personal and work-related stressors.
- Staff described strategies to coordinate on-site testing and vaccination; implement infection prevention and control measures; connect tenants to services, care, and benefits; and improve mental well-being.
- Continued collaboration and planning for public health emergencies by government agencies and supportive housing providers is key.

Background

Description of Supportive Housing in New York City

Supportive housing is an evidence-based housing model designed to address the needs of vulnerable populations, particularly individuals and families with complex social service and/or mental health needs, who have a history of homelessness or are at risk of experiencing homelessness. It combines subsidized, affordable housing with on-site and/or easily accessible support services to help tenants maintain stable, independent living. Examples of services offered, though not required, include case management and life skills development. Permanent supportive housing programs provide permanent, subsidized rental housing where tenants hold leases and pay no more than 30% of their income in rent.

There are typically two models for the setting of supportive housing: congregate (also known as single-site or place-based) and scattered-site.[15] In a congregate setting, all apartments are in the same building, and programs offer many services on-site. Tenants may share kitchens and/or common recreational rooms or other facilities. In scattered-site housing, units are in different community buildings owned by private landlords. Non-profit providers usually are responsible for the lease, with rent-stabilized units considering both the tenant and provider as co-tenants, and they provide services during visits to the tenant or at providers' offices.

The NYC Health Department holds contracts for more than 12,000 units of supportive housing, serving single individuals, families with children, and young adults; other city agencies, such as HRA, also contribute to provision of supportive housing in NYC. HRA's supportive housing portfolio – with some overlap with the NYC Health Department's portfolio – includes over 5,500 units for people living with HIV/AIDS, and an additional 10,500 units for single adults with histories of homelessness. City agencies manage contracts with community-based organizations to provide supportive services to tenants in housing programs. Though other supportive housing programs exist within NYC, the needs assessment described in this report is limited to permanent supportive housing programs that have contracts with the NYC Health Department and/or HRA.

Another important entity in the landscape of supportive housing in NYC is the non-profit organization Supportive Housing Network of New York (SHNNY). SHNNY represents a network of supportive housing developers and social service providers throughout New York State who work collectively to advocate for and support supportive housing across the state (www.shnny.org). SHNNY assisted with recruitment for the key informant interview portion of the needs assessment and provided consultation on project methods and themes.

COVID-19 Policies, Risk, and Response in Supportive Housing Settings in New York City

March 2020 marked a pivotal moment for supportive housing residential programs in NYC as they grappled with the onset of the COVID-19 pandemic. Faced with the unique challenges of congregate living arrangements, these programs had to swiftly implement tailored measures to protect both tenants and staff during a time when very little was known about the virus.

A New York State executive order, New York State on PAUSE, required all non-essential businesses to close in order to curb disease transmission, and lasted from March 22 to June 24, 2020.[16] As large gatherings were restricted and social distancing measures were enforced, supportive housing facilities faced restrictions on occupancy and services, which impacted day-to-day operations. In-person workforce reductions were also mandated, resulting in the transition of non-essential personnel to remote work and extended staff leave. Staff working on-site, including administrators, social service staff, and operations managers, had to familiarize themselves with topics that were previously outside of their scope of work, including clinical and medical concepts, isolation and quarantine, and infection prevention and control (IPC) practices. Supportive housing programs had to develop related protocols in a timely manner, often with limited resources and supplies.[17] In March 2020, HRA

made alternate options available to access public benefits and services with the intent to reduce face-to-face interactions, including telephonic and virtual appointments, web-based platforms to apply for public benefits, and drop boxes at HRA centers.[18] Similarly, NYC Health Department and HRA housing providers offered alternate options in providing case management and support services to tenants residing in permanent supportive housing.

As the availability of personal protective equipment (PPE) and COVID-19 testing resources expanded, testing, masking, isolation, and quarantine recommendations and requirements were introduced. These required supportive housing staff and administrators to coordinate access and navigate acceptance among both tenants and staff. City agencies and non-profit providers issued guidance and resources targeted for congregate settings to maintain IPC measures, social distancing, and continued access to care and benefits.[19,20]

In December 2020, the U. S. Food and Drug Administration issued the Emergency Use Authorization (EUA) for new COVID-19 vaccines.[21,22] Staff and tenants of congregate settings were considered a priority group for vaccination beginning in January 2021,[23,24] when supply was still limited. Citywide vaccination distribution was originally implemented through large City- and State-operated, appointment-based point-of-dispensing sites. On-site vaccination programs in residential congregate settings, coordinated through federal, state, and local government agencies, initially prioritized long-term care facilities. As vaccine supply stabilized, these efforts expanded to include other setting types, including shelters, residential substance use treatment facilities, and supportive housing sites. In late fall 2021, the NYC, New York State, and national governments issued vaccine mandates, which—though they were not specifically designed for supportive housing settings—applied to supportive housing staff in certain site types and roles.[25]

March 2020 marked a pivotal moment for supportive housing residential programs in New York City as they grappled with the onset of the COVID-19 pandemic.

Methods

This mixed-methods needs assessment included both qualitative and quantitative components. First, in fall 2020, NYC Health Department staff conducted listening sessions with key informants from NYC-based supportive housing programs and community organizations to identify themes related to supportive housing staff members' COVID-19 experiences. These themes were then used to develop a larger-scale online survey, which was distributed to supportive housing staff in fall 2021. Both components were conducted with a non-probability convenience sample.

Listening Sessions

Recruitment for listening sessions was facilitated by the non-profit organization SHNNY. Recruitment efforts focused on identifying supportive housing staff responsible for agency operations, administration, and supervising or providing direct services. We conducted the first listening session in October 2020 with a panel of supportive housing administrators and directors. The second listening session was conducted in December 2020 and comprised staff members involved in the provision of direct services. Both listening sessions were facilitated by NYC Health Department staff via Zoom and included notetaking. Participants provided permission for the session to be audio-recorded. We used a semi-structured interview format that focused on assessing the extent to which the following COVID-19-related challenges impacted staff and/or tenants including: (1) the availability of PPE; (2) COVID-19 screening and testing; (3) access to medical and social services; (4) hoteling/isolation; (5) mental health/substance use; (6) compliance with agency/city/state COVID-19 protocols; and (7) employee/workplace issues. We also explored if and how these issues were addressed by the supportive housing programs.

We reviewed the session notes and recordings from the listening sessions and summarized the data based on themes that were identified a priori in addition to those that emerged based on respondent input. The listening sessions were conducted before the widespread availability of COVID-19 vaccines; therefore, vaccination was not addressed during this phase of the study.

Survey

The results of the listening sessions, along with ongoing input from stakeholders from SHNNY, HRA, and the NYC Health Department, informed the development of an anonymous online survey for supportive housing staff, which included both multiple choice and open-text questions across several domains. The survey asked about perceived challenges among a wide range of topics; only those who answered "yes" for a topic were further queried about specific challenges and response strategies employed. Many of the questions asked respondents to describe challenges among their tenants. As we did not directly

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reach out to tenants, responses reflect staff members' perceptions of tenants' experiences.

We measured respondents' current mental health using validated screening questionnaires, the Generalized Anxiety Disorder (GAD)-2[26] and Patient Health Questionnaire (PHQ)-2, which measure anxiety and depressed mood, respectively.[27] Both instruments ask about the frequency of symptoms in the past two weeks and have been shown to have acceptable levels of sensitivity and specificity.[26,27]

The survey was programmed by NYC Health Department staff and administered using Alchemer, an online survey software program (Boulder, CO), and offered only in English. Colleagues at the NYC Health Department and HRA sent the survey link via email to the program directors for all NYC supportive housing programs (among approximately 80 supportive housing providers) that had existing contracts with either agency. In the email, we asked program directors to distribute the email with the survey link to staff working in their programs in specified titles. Participation was voluntary, and a $25 gift card incentive was provided to respondents. Survey data collection occurred in November and December 2021.

Analysis

For the quantitative portion of the survey, we conducted descriptive analysis of respondent characteristics and calculated basic frequencies for responses to most survey questions. Some analyses were stratified either by congregate versus scattered site program type, or by reported impact on tenants versus staff.

For some quantitative analyses, challenges reported by respondents were classified into broader categories by theme. In a process of consensus building, three study analysts independently reviewed the selections and categorized them. A fourth study analyst reviewed these results and acted as a tiebreaker when needed. An additional round of review was conducted until all four analysts agreed. The final categories comprised: reluctance, fear, or refusal; lack of clarity in messaging or guidance; lack of resources or access issues citywide; lack of resources or access issues at the supportive housing program level; and lack of resources or access issues at the person level.

We conducted all quantitative analyses using SAS Enterprise Guide, version 8.4 (Cary, NC.)

We performed a content analysis of the open-ended responses to questions on a variety of topics, including the challenges staff and tenants faced in getting tested and vaccinated, accessing benefits, caring for their own well-being and dealing with isolation, quarantine, and staffing shortages. We also examined strategies that staff used to manage these challenges. We assessed answers to quantify and understand their major themes. The frequency with which themes arose was used as a proxy for salience of these themes. Our findings are illustrated with examples of survey participant quotes, which have been edited for confidentiality and clarity.

Results

Study Respondents and Work Settings

The first listening session comprised 13 senior staff at supportive housing facilities (for example, chief executive/operating officers, senior vice presidents). The second listening session comprised 12 staff members involved in tenant services: six program managers and coordinators, two property managers, and four direct services staff, including a nurse, a wellness coach, and a case manager.

A total of 306 individuals completed the survey. Among survey respondents, 70% worked in congregate housing programs, 20% worked in scattered site programs, and 10% worked in both setting types; 45% of respondents were in program coordination or supervisory roles, 42% of respondents were in case management roles, and 13% were in other roles, including behavioral health and substance use counseling, social work, administration, and operations. More than half of respondents had worked in their current role for more than three years at the time of the survey, while 31% had been newly hired into their roles at some point during the pandemic. Additionally, 71% reported that their primary worksite was at a congregate residence, while 3% reported that they worked virtually from home only (Table 1).

Table 1. Supportive Housing Staff Survey Respondent and Worksite Characteristics, New York City, 2020-2021 (N=306)

Source: Supportive Housing COVID-19 Needs Assessment Survey, 2021

	N	%
Job title		
Program coordinator, director, supervisor	139	45.4
Case manager	128	41.8
Counselors, specialists, nurses, or social workers	23	7.5
Executives or administration	10	3.3
Other	6	2.0
Time in current role		
<1 year	49	16.0
1-2 years	100	32.7
3-5 years	79	25.8
6-10 years	40	13.1
>10 years	38	12.4
Hired during pandemic	94	30.7
Primary worksite		
On-site at congregate residence	216	70.6
On-site at an administrative office	54	17.7
In-person at non-congregate setting	22	7.2
Hybrid setting (home and office/on-site)	6	2.0
At home or virtual only	8	2.6

In terms of tenant population, 79% of respondents worked with programs serving adult tenants, 77% worked in programs serving individuals with mental health conditions, 71% worked with programs serving individuals with substance use disorders, 44% worked for programs serving justice-impacted populations, and 33% worked for programs serving individuals living with HIV/AIDS (categories not mutually exclusive) (Appendix).

COVID-19 Testing

Testing-related concerns identified in the listening sessions related to lack of resources, lack of knowledge or understanding about how testing works and how to interpret results, and concerns about the testing experience, including discomfort with the test itself and concerns among staff and tenants about leaving their homes and possibly contracting the virus during testing.

In the survey, 38% of respondents reported COVID-19 testing-related challenges among both tenants and staff. Among these, the most frequently reported challenges were categorized as reluctance, fear, or refusal (88%), which included fear among tenants of the testing process itself and fear of becoming infected if testing required leaving home and/or taking public transportation (Table 2). Sixty percent of survey respondents

reported challenges related to a lack of clarity in messaging or guidance, including confusion about testing recommendations, test types, and results.

In their open-ended responses, 35 survey respondents discussed the resources required for COVID-19 testing for their program; they said that they needed expanded access to testing, especially on-site testing, increased support for incentives, assistance with logistical issues and expenses such as transportation to off-site testing and staff to conduct testing, as well as more information and training related to testing. When asked about resources to help counter challenges classified as reluctance, fear, and refusal of testing, one survey respondent said, "For individuals that struggled with mobility or the fear of leaving residence, it would be helpful if there were more resources for clients […to] have on-site testing more frequently." Another respondent also highlighted the need to consider the complex medical histories of their tenants and the importance of tailored strategies to help address their concerns: "More testing […] scheduled with staff trained to work with people who are unsure, possibly paranoid, mentally ill, medically ill, and [who are] prepared to answer questions related to the vaccine and testing."

Respondents - both in the listening sessions and to the survey - highlighted effective solutions to testing-related challenges including coordination with city agencies to organize on-site testing and providing their tenants with information about the tests. Many programs also provided transportation to testing sites, and/or offered incentives for testing.

Table 2. Supportive housing staff-reported challenges to uptake of COVID-19 interventions among supportive housing residents and staff by intervention type and type of challenge, New York City, 2020-2021 (N=306)*

Source: Supportive Housing COVID-19 Needs Assessment Survey, 2021

	Intervention Type					
	Testing** (N=117)	Isolation and quarantine (N=113)	Vaccination: tenants (N=152)	Vaccination: staff (N=108)	Other prevention and safety***: tenants (N=191)	Other prevention and safety***: staff (N=61)
	%	%	%	%	%	%
Any challenges reported	38	37	50	35	62	20
Type of challenge among those who reported any challenge**						
Reluctance, fear, or refusal	88	89	97	93	99	92
Lack of clarity in messaging or guidance	60	.	.	.	36	25
Challenges with resources or access citywide	24	29	9	7	.	.
Challenges with resources or access at the program level	2	61	.	4	.	.
Challenges with resources or access at the client or respondent level	30	5	14	.	.	3

*Proportions are not mutually exclusive
**Questions combined tenants and staff
***Prevent and safety measures include masking and social distancing
****Reported challenges were classified into broader categories

More frequent ⟷ Less frequent; Not applicable

COVID-19 Prevention and Safety Recommendations

Tenants

A majority (62%) of survey respondents reported that they had observed challenges in tenants' adherence to COVID-19-related prevention and safety recommendations, including masking and social distancing. Of these respondents who reported challenges, 99% reported challenges categorized as reluctance, fear, or refusal (Table 2); this included improper adherence (for example, wearing masks incorrectly) and tenants who were either unable or unwilling to adhere to recommendations (Appendix). During the listening sessions, participants emphasized that some tenants experienced cognitive and psychological challenges that affected their understanding of the importance of following COVID-19 protocols. Among those who reported challenges in tenants' adherence to COVID-19-related prevention and safety recommendations, over one-third (36%) indicated difficulties with a lack of clarity in messaging or guidance (Table 2).

Survey respondents told us that programs employed many strategies to improve tenant adherence to prevention and safety guidelines. Nearly all (98%) of those with at least one challenge reported that their programs offered tenants masks and issued verbal reminders to follow recommendations (Appendix). Most programs posted signs to remind tenants to adhere to guidelines or used signs and/or physical markers to help with social distancing. Nearly two-thirds made changes to visitor policies. Listening session participants spoke to the importance of staff modeling behavior for tenants; one listening session participant described how their facility encouraged masking by featuring pictures of tenants wearing their masks on a wall in the building. In the open-ended section of the survey, 40 respondents articulated a need for specific resources related to COVID-19 prevention for tenants. They needed more education on COVID-19 risks and prevention, increased access to masks and hand sanitizer, and more on-site services to support efforts to decrease the spread of COVID-19. They also reported needing increases in funding to incentivize tenants to comply with COVID-19 prevention protocols.

Program staff

Only 20% of survey respondents reported observing challenges in following prevention and safety recommendations among their colleagues. Among those who did report issues, the most commonly reported were classified as reluctance, fear, or refusal (92%). Programs posted signs with prevention and safety-related recommendations for staff as reminders, offered masks, and conducted trainings. Twenty survey respondents discussed the resources needed for COVID-19 prevention among staff in their open-ended responses; they said they needed more education and safety precautions from their agencies and other sources, and incentives and consequences for following and breaking COVID-19 prevention protocols. Some listening session participants also reported that their colleagues' lack of compliance with protocols could be stressful for them and others.

One theme identified in the listening sessions was that facilities experienced shortages of PPE, particularly masks, at the start of the pandemic but that the availability of supplies had improved over time. Costs associated with PPE and other supplies (for example, thermometers, hand sanitizer) were unanticipated and were described as a likely future challenge in the absence of a clear reimbursement mechanism.

Infection Prevention and Control Education

More than half (55%) of survey respondents reported ever having received training specific to infection prevention and control (IPC). A majority (63%) of these respondents held titles such as program coordinators, directors, or supervisors. The most common training topics covered were hand hygiene (91%), PPE (85%), modes of transmission of infection (82%), and transmission-based precautions (80%). A few of these topics were also among the most common topics that respondents stated they would like to receive more training on, including: transmission-based precautions (41%), environmental cleaning (32%), modes of transmission (32%), and testing/screening (31%). When asked about their comfort level with communicating COVID-19 and/or IPC

recommendations to tenants and other staff, a little more than half (52%) reported being extremely or very comfortable, 33% were moderately comfortable, and 16% were either a little comfortable or not comfortable at all. Reported changes in staff comfort level with communicating COVID-19 and/or IPC recommendations to tenants and other staff between the start of the pandemic to when they were surveyed were reported as follows: 33% reported their comfort level increased a lot, 23% reported their comfort level increased a little, and 36% reported that their comfort level stayed the same.

Isolation and Quarantine

More than one-third of survey respondents (37%) reported that their programs had experienced difficulties with isolation and quarantine among tenants. Among those respondents, the most common theme identified was related to reluctance, fear, or refusal (89%) (Table 2). Eighty-one percent of respondents who reported isolation and quarantine difficulties reported that tenants did not want or were unable to isolate or quarantine (Appendix). Respondents also reported issues with isolation and quarantine resources or access at the program-level (61%) (Table 2), including a lack of adequate space on-site, lack of resources to support social distancing, and challenges providing services to tenants who were in isolation or quarantine. Among those reporting difficulty with tenant isolation and quarantine, more than a quarter (29%) reported issues with resources or access citywide, including prohibitive eligibility criteria for citywide COVID-19 isolation and quarantine hotels and a general lack of off-site isolation and quarantine options. As one respondent told us, "We needed a better referral system and more quarantine hotels, particularly when, due to COVID-19, supportive housing programs have reduced/limited the number of staff at worksites."

In response to these challenges, respondents told us that they provided many services virtually to those who were isolating or quarantining on-site (74%), and more than half delivered food to their tenants (58%). However, a smaller proportion were able to use vacant rooms (21%) or repurpose rooms (19%) for isolation and quarantine purposes. Only 37% reported they were able to refer tenants to citywide COVID-19 hotels to isolate or quarantine. Twenty-two percent reported that they limited placement of new tenants into open units to facilitate on-site isolation and quarantine. Among the 39 respondents who provided open-ended answers regarding resource needs related to isolation and quarantine, we identified three major themes: the need for better policies and expert support, (including protocols to protect staff from infection such as the ability to work from home, the ability to enforce existing protocols, and outreach from medical experts to tenants to provide information), more support for mental health among both staff and tenants, and more resources to support individuals in isolation or quarantine. For the latter, the most common resource needs identified were designated space on-site for isolation and quarantine, support for tenants in isolation and quarantine on-site and off-site, and resources for staff to coordinate transportation and the continuance of services such as food and medication delivery and laundry pickup.

COVID-19 Vaccination

Tenants

Half of survey respondents reported that their programs had experienced challenges in supporting tenants getting vaccinated against COVID-19. Of these, nearly all (97%) said that this was due to vaccine reluctance, fear, or refusal (Table 2). Among respondents reporting vaccine hesitancy or refusal, the most frequently reported reasons for this were concerns about vaccine safety (91%), vaccine effectiveness (67%), and the potential short and long-term effects of vaccination (69% and 48%, respectively) (Appendix). Many reported that tenants who were reluctant to receive the vaccine didn't think it was important (48%) or wanted to see how the vaccine would affect others first (72%). Forty percent reported that some tenants didn't think they needed the vaccine due to a prior COVID-19 infection. To combat the reluctance surrounding vaccines, 80% of respondents who experienced this challenge reported that their programs had provided tenants with vaccine information. Eighty-five percent of those who worked

for congregate programs said their programs arranged for on-site vaccinations, compared with 40% of staff working at a scattered-site program having reported this intervention. Nearly half (49%) provided incentives for vaccination. Thirty-three respondents used the open-ended option to articulate a need for resources to counter the hesitancy and anxiety experienced by their tenants which led them to delay or decline COVID vaccination. Staff asked for more tenant-focused education and encouragement around the issue and emphasized the effectiveness of the sharing of narratives – especially from peers – around people's own vaccine decision making. This tailored education and personal encouragement were named as necessary to meeting the challenge of vaccine hesitancy among tenants, who respondents felt did not have trust in the medical system. As one respondent put it, "some sort of trauma-informed messaging [is needed] for people who are already skeptical of medical providers for good reasons but can still emphasize why vaccination is important." Staff also requested more support for on-site vaccination, more support for incentives for vaccination, and for the implementation of vaccine mandates to address vaccine reluctance and refusal among their tenants.

Program staff

Thirty-five percent of respondents reported that their programs had faced challenges in getting their staff vaccinated against COVID-19. Similar to observations for tenants, nearly all of these respondents (93%) reported reluctance, fear, or refusal as a barrier to vaccination for their colleagues. Concerns about vaccine safety (85%), the potential short and long-term effects (63% and 77%, respectively), and effectiveness (53%) were the most commonly reported reasons for this hesitancy. Thirty-nine percent reported that staff had provided religious reasons for not getting vaccinated, and 32% reported that colleagues were hesitant or refusing due to a prior COVID-19 infection (Appendix).

Respondents who reported vaccine hesitancy/refusal among staff members told us that their programs responded by enforcing vaccine mandates (69%). The majority also reported that programs had tried to encourage vaccination by providing information on the vaccines and coordinating on-site vaccination for their staff. More than two-thirds offered incentives to those who received the vaccine.

Health Care Access

Nearly half of respondents (47%) stated that tenants in their programs had difficulty accessing medical or mental health care during the pandemic. Of the challenges reported, the most common fell into the category of issues with resources or access citywide (85%), including tenants' providers offices being closed or inaccessible and tenants not having a regular health care

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provider prior to the pandemic (Table 3). Among respondents who reported any difficulties with accessing health care, many (67%) reported perceived fear among tenants of becoming infected with COVID-19 upon receiving health care or other services (Appendix). Other reported challenges included issues related to accessing telehealth (for example, lack of familiarity with the technology, lack of the needed equipment or Wi-Fi, and lack of private space for telehealth visits). A listening session participant told us that the need to purchase equipment to support telehealth services for tenants represented an unexpected expense for which funds had not been previously set aside.

Respondents informed us that their programs met these challenges by providing technical assistance for telehealth appointments (65%), facilitating telehealth visits (55%) and purchasing phones or laptops (46%). In the open-ended section of the survey, respondents articulated specific resources they felt they needed to increase access to health care for tenants during the pandemic; these needs were related to availability of technology (Wi-Fi, devices, private space, funding for technology and telehealth, and support and training), more availability of health care services (including on-site services) and support to connect tenants to those services. As one respondent wrote, "The pandemic really highlighted how many of our clients don't have access to needed technology, which was a real barrier for many of our residents. Funding for things like building-wide Wi-Fi or phones for residents would be helpful."

Resident Access to Benefits and Food

Seventy-two percent of survey respondents reported that their tenants had experienced difficulties in managing their finances or accessing benefits during the pandemic. Among those reporting challenges, 71% observed that tenants had difficulties paying rent and 66% reported difficulties accessing benefits (Appendix). Half reported that tenants had difficulties navigating online portals for benefits. Staff reported that they employed numerous strategies to support their tenants, including helping them with online portals (81%), helping them access COVID-specific benefits (78%), and creating financial management plans (66%). Sixty-six respondents used the open-ended questions to describe the resources they needed to address the difficulties their tenants had in managing their finances or access to benefits and entitlements. They needed supportive, clear communication from city and state entitlement agencies to walk tenants through complex administrative processes, and/or additional staff to provide this support to tenants themselves; support for increasing resident education (specifically financial literacy) and technology such as tax preparation programs; they needed the benefits application and recertification processes to

"The pandemic really highlighted how many of our clients don't have access to needed technology, which was a real barrier for many of our residents. Funding for things like building-wide Wi-Fi or phones for residents would be helpful."

be simplified and made more accessible; and they needed funding specific to meeting their tenants' needs regarding access to benefits and direct funding assistance to meet basic and social needs.

Thirty-eight percent of respondents reported that their tenants had experienced challenges in accessing food during the pandemic. Of these, 96% reported challenges categorized as resource or access issues at the tenant level and 78% categorized as challenges at the citywide level (Table 3), which included tenants being unable to afford food or that food was unavailable or that tenants couldn't or didn't want to leave their homes to get food (Appendix). Among staff that reported these challenges, 88% said that their programs responded by utilizing meal delivery programs or food pantries, and 60% had staff deliver meals directly to tenants. Nineteen respondents named resources that were needed to address challenges related to food in the open-ended responses: more wide-spread availability of food distribution services, and more food-specific funding. One respondent reported "I think the 311 food delivery was really excellent at meeting clients' needs during this crisis, especially for those in quarantine. Faster response for deliveries [for] people in quarantine would help, our organization purchased food supplies to last people the three days until their first deliveries could arrive."

Mental Health and Well-being

Tenants

Survey respondents (62%) observed an increase in loneliness or isolation among tenants during the pandemic (Appendix). A higher proportion of staff who worked for congregate-only programs reported this concern than their scattered site counterparts (65% vs. 47%). Programs transitioned from promoting social interaction to social distancing, and this shift was difficult for tenants. Among those that observed an increase in loneliness or isolation, the most commonly reported experiences were restrictions on visitation, social gatherings, and the use of common space (65%), tenant withdrawal (62%), and a lack of space for socially distanced

Table 3. Supportive housing staff-reported challenges to the impacts of COVID-19 among supportive housing tenants by impact type and type of challenge, New York City, 2020-2021 (N=306)*

Source: Supportive Housing COVID-19 Needs Assessment Survey, 2021

	Access to health care (N=144) %	Finances or access to benefits (N=220) %	Access to food (N=116) %
Any challenges reported	47	72	38
Type of challenge**			
Reluctance, fear, or refusal	67	.	.
Lack of clarity in messaging or guidance	15	51	.
Challenges with resources or access citywide	85	77	78
Challenges with resources or access at the program level	73	.	1
Challenges with resources or access at the client or respondent level	79	73	96

*Proportions are not mutually exclusive
** Reported challenges were classified into broader categories.

More frequent ← → Less frequent Not applicable

events (52%). Staff members reported working to improve the mental health and well-being of tenants. Seventy-one percent told us that program staff conducted one-on-one visits with tenants, and about half facilitated social interactions via phone or online.

We asked survey respondents what they thought the best strategies were for alleviating the loneliness and isolation that tenants experienced due to COVID-19 restrictions. Among the 146 responses to this question, we identified five main themes: checking in and providing or facilitating health care or social services; creating modified programming and activities; policy-related changes; food delivery or changes to food services; and providing devices and technical assistance. Seventy respondents used the open-ended option to describe resources they needed to address challenges to tenants' well-being. These needs overlapped with the strategies that respondents said help alleviate the isolation and loneliness tenants were experiencing and included: the need for devices and technology, resources to support events and programming, resources to support tenants' health and mental health, and administrative changes like expanded visitation policies. A listening session participant told us that their facility offered activities that could take place outdoors in smaller groups (for example, trips to the park). Survey respondents described the novel approaches they used to maintain the mental health and well-being of their tenants. As one respondent told us, "We drastically increased the frequency of our contact with our residents, including calling everyone daily at the beginning of the pandemic. This helped our isolated clients remain connected." Another respondent described that they held "indoor activities like door BINGO and we celebrated birthdays by delivering cupcakes to residents and singing happy birthday from the hallways - this cheered them up."

Program staff

Nearly all (92%) survey respondents reported that they had observed mental health or well-being challenges among themselves or their colleagues (Appendix). We learned from the listening sessions that staff experienced low morale due to a combination of both personal and work-related stressors. Eighty-seven percent of all survey respondents experienced fear of COVID-19 infection or of infecting others, 84% reported increased stress or burnout, and 75% experienced fear while commuting. Just over half also reported having experienced personal loss (57%), childcare issues (56%), and problems maintaining a work-life balance during the pandemic (52%). When asked about their current mental health over the last two weeks (using the GAD-2 and PHQ-2), 28% of respondents screened positive for possible Generalized Anxiety Disorder and 17% for possible depression. One in five respondents reported facing stigma or discrimination related to working in a high-risk setting during the pandemic.

"We drastically increased the frequency of our contact with our residents, including calling everyone daily at the beginning of the pandemic. This helped our isolated clients remain connected."

Respondents reported that programs tried to address these issues by offering remote work options (68%), flexibility in schedules (65%), and workshops (42%). Sixty-three respondents described the resources they needed or wanted to improve staff well-being in the open-ended responses, indicating: more flexible scheduling, remote work, and increased paid time off; higher pay, hazard pay, and incentives for working during the pandemic; increased access to emotional support and counseling services; and more support enforcing safety standards such as social distancing. As one respondent recommended, it was important for staff to focus on "Reconnecting the client to the 'new normal' and staff to the 'client's new reality', and 'our collective reality as humans'."

Substance Use

Nearly half of all survey respondents (47%) perceived that substance use among their tenants had increased during the COVID-19 PAUSE lockdown period (Appendix). Ninety-two percent of the respondents who reported this perception also told us that substance use either remained the same or even increased further upon the easing of lockdown restrictions (June 2020 to the date of the survey, November - December 2021). Respondents who reported an increase in either substance use or overdoses among their tenants told us that their programs responded to this increase by connecting their tenants to off-site (79%) and on-site (44%) substance use counseling. More than 60% also provided training and resources around naloxone (also known by the brand name Narcan); this was more commonly reported among congregate providers than scattered-site providers (69% vs. 38%). Some programs also limited visitors in an attempt to reduce substance use. Fifty respondents answered open-ended questions about which resources were needed to address increased rates of substance use and overdoses. They said they needed more services to be made available (such as substance use counseling, general mental health services, peer counseling, and on-site services), more training or supplies such as naloxone, more resources (for example, staff) to provide on-site substance use counseling and space to provide these services, and legal or policy solutions such as changes to visitor limits.

Staffing Shortages

More than half (53%) of respondents reported that their program had experienced staffing shortages during the pandemic. Many reported that they attempted to hire more staff through various means, but some still felt understaffed and overworked. Many (118) respondents mentioned in the open-ended section of the survey one or more strategies that their site used to address staffing shortages. They said that hiring increases; changes to hiring requirements; increased workloads among existing staff; increased teamwork, mutual support, and efficiency; and bonuses, incentives, and benefits to remaining staff were strategies their agencies used to address staffing shortages. One respondent described their pandemic response as: "Collaborative efforts to ensure all staff on duty had supports in place to accomplish the work at hand. We utilized a team effort, with all hands on-deck approach."

Discussion

This study highlights the great degree of care that supportive housing staff provided for program tenants throughout the first year and a half of the COVID-19 pandemic. Despite numerous challenges faced by supportive housing program staff, study participants across roles and site types reported finding ways to continue to provide services, care, and support for tenants in their programs.

Summary of findings

Supportive housing tenants often have underlying health conditions that make them more susceptible to COVID-19 complications.[28] Given this, and the high transmissibility of COVID-19 in congregate settings,[1-5,19] supportive housing providers were asked to rapidly implement and maintain rigorous infection control measures and follow isolation and quarantine guidance with limited resources, sometimes having to directly support tenants who were COVID-positive or exposed. Staff complemented generalized education and information with individualized support to address the reluctance, fear, or refusal surrounding the adoption of COVID-19 interventions. Similar to the findings of another study of supportive housing providers, they increased and enhanced staff interaction with tenants to help address concerns related to isolation, mental health impacts, and restrictions on movement and community-oriented programming.[11] Staff also worked to maintain tenants' access to physical and behavioral health care services via the adoption of telehealth or virtual visits to make care more accessible,[7] though these adaptations also created or exacerbated barriers such as access to electronic devices, access to reliable Wi-Fi, and familiarity with technology.

For interventions designed to reduce COVID-19 transmission and risk (for example, testing, isolation/quarantine, vaccination, and general prevention and safety measures), reluctance, fear, or refusal were the main drivers of the challenges that staff faced in implementation. One strategy that programs implemented to overcome these and other access barriers was bringing services on-site. Program administrators coordinated with government agencies and other groups to bring COVID-19 testing and vaccination on-site at many locations; coordinated incentives, education, and other interventions to support uptake of services; and adapted existing space and services to accommodate on-site isolation and quarantine. Additionally, staff highlighted the need for tailored education and messaging, delivered through trusted messengers including nurses and peers, and more robust guidance to address the reluctance, fear, and refusal of many tenants. They told us that guidance should reflect the diverse perspectives and needs of specific audiences and that frontline staff need access to timely and relevant recommendations, resources, and information.

Despite numerous challenges faced by supportive housing program staff, study participants across roles and site types reported finding ways to continue to provide services, care, and support for tenants in their programs.

As the pandemic progressed, various government agencies implemented changes in isolation and quarantine recommendations, testing protocols, and vaccination requirements, but supportive housing programs often had to interpret guidance documents that didn't explicitly describe supportive housing settings and/or only partially answered their most pressing questions. The gradual lifting of restrictions by June 2021 in NYC was welcomed but also introduced added confusion for those programs who were still required by their agencies to follow stricter recommendations.

This study revealed that supportive housing staff continued to support their tenants while navigating their own COVID-19-related struggles. From ongoing risk of exposure while providing essential services as frontline staff to experiencing the consequences of the pandemic in both professional and personal settings, supportive housing staff were highly impacted throughout. In the initial months of the pandemic, widespread illness and mandatory isolation and quarantine forced some employees to stay home. However, some supportive housing staff continued to work in person or didn't have the option of remote work. Due to the demands and constraints of the pandemic, many respondents reported having to take on increased workloads, as staffing shortages were widely reported in this survey. Supportive housing staff took on this additional work burden even as they faced their own pandemic-related life stressors, the stigma associated with their work in a high-risk setting, and symptoms of depression and generalized anxiety disorder. This finding is consistent with COVID-19 pandemic-related studies among supportive housing staff in Canada, which reported on work-related trauma and stressors that staff experienced[8,29] and a decline in their mental health.[9] Similarly, a systematic review found that the heavy workloads and unsafe working conditions during COVID-19, as well as a lack of social support, were associated with an increased risk for post-traumatic stress symptoms among health care workers.[12] Even in the face of these challenges, however, respondents in this study spoke of how they came together as a team to help tenants during the pandemic, and many offered potential solutions to address staffing shortages and poor mental well-being.

This study included an exploration of staff perceptions of substance use among tenants, and many respondents observed an increase in substance use among their tenants, particularly during PAUSE. We learned from the listening sessions that this may be explained in part by the fact that these behaviors were happening more often at the facility and were therefore more likely to be noticed, whereas, prior to the pandemic, tenants were more likely to use substances outside of the facility. Although staff's awareness of substance use provided an opportunity to

This study revealed that supportive housing staff continued to support their tenants while navigating their own COVID-19-related struggles.

address it, not all facilities had staff who were qualified to do so. This highlights the importance of having trained staff on-site to address this need.

This needs assessment found that many supportive housing tenants experienced issues with the availability or accessibility of food and benefits. Many supportive housing programs began delivering meals directly to their tenants, which ensured that they could maintain food security while also building social connections to improve mental well-being. Respondents told us that their tenants had difficulty navigating online portals, managing their finances, and understanding COVID-19-specific benefits. Staff guided their tenants through these processes to help maintain access to their government benefits or apply for new ones. Staff reported that consistent messaging from government agencies would help reduce confusion.

Finally, while this survey described struggles faced by supportive housing tenants and program staff during the pandemic, many of these challenges – fear of COVID and reluctance to adopt many of the associated interventions; access to health care, food, and benefits; and, issues with mental health and well-being – were not unique to these groups. Health Opinion Polls (HOP) conducted by the NYC Health Department in March and April 2020 found that adult New Yorkers expressed confusion surrounding COVID-19 testing guidelines and were experiencing high levels of anxiety, depression, and loneliness related to COVID.[30] HOP respondents also reported food insecurity and difficulties paying rent and bills[30] as well as concerns regarding the COVID-19 vaccine that led them to either hesitate or decide not to receive it.[31] The leading concerns reported by HOP respondents – waiting to learn more about the COVID-19 vaccine and concerns about the speed of its development – were also some of the top concerns reported by respondents in the supportive housing survey, both for staff and tenants.[31]

Limitations and Strengths

Our needs assessment had some limitations. First, as an anonymous, voluntary convenience sample, our results may not be generalizable to all NYC supportive housing programs, their staff, or their tenants. We did not collect information on the specific supportive housing program(s) that a staff member worked for and cannot determine whether some programs may have been disproportionately represented among our respondents. We did not have information on the total number of eligible staff members or the total number working in each title. We did, however, find that in our sample, 75% reported working in congregate housing programs and 25% reported working with scattered-site programs, which reflects the supportive housing portfolio managed by the Health Department and HRA.[32] Another potential limitation is that because this needs assessment was conducted by government

[M]any of these challenges… were not unique to these groups. Health Opinion Polls… found that adult New Yorkers expressed confusion surrounding COVID-19 testing guidelines and were experiencing high levels of anxiety, depression, and loneliness related to COVID.

agencies and distributed by supportive housing providers, participants may have been reluctant to answer honestly about the performance of the NYC Health Department, HRA, or their program in responding to COVID-19. To mitigate this concern, the survey was administered anonymously and, as stated previously, did not ask respondents to name their employer. However, due to the anonymous nature of the online survey, there is the possibility that participants from the listening sessions may have also responded to the survey. We also did not collect data on respondent demographics.

Additionally, our questions generally asked about experiences during the entire COVID-19 pandemic timeframe prior to survey administration, therefore, answers may not reflect the most recent experiences of respondents, or due to recall bias, may not accurately reflect experiences from earlier in the pandemic. Because the listening sessions were held before the emergency use authorization for the COVID-19 vaccines, this topic was not addressed in the listening sessions; however, we were able to use key stakeholder input later to inform the vaccine-related content for the survey.

Another limitation of this analysis is that our survey asked staff about their perceptions of challenges faced by tenants, which may not reflect the beliefs and experiences of the tenants themselves. Additional research eliciting tenants' views and experiences would be invaluable to identify needs or best practices for future emergencies.[11] Questions regarding substance use and overdose also reflect staff perceptions and may not accurately assess the actual number of overdoses or frequency of substance use. Finally the end of the survey collection period coincided with the beginning of a surge in COVID-19 cases in NYC related to the Omicron variant, a highly-transmissible SARS-CoV-2 variant which at its peak in NYC had an estimated 7-day average case count of nearly 44,000 per day.[33,34] Therefore, our findings do not reflect the experiences of respondents during or after that surge.

Finally, in this needs assessment, we did not directly address issues pertaining to the intersection of race and ethnicity with housing stability or their relationship with both direct and indirect COVID-19 outcomes. We also did not collect data on the race and ethnicity of our participants or their tenants. This is an important limitation, given that racial and ethnic minority groups are disproportionately impacted by both COVID-19[35-38] and homelessness [39] due to historic and continuing structural racism in the U. S., including policies such as redlining and mass incarceration.[40] The NYC Department of Homeless Services reported in 2023 that Black and Latino individuals comprised the majority of adults in shelters.[41] Similar trends exist within supportive housing programs in NYC.[42] Among New York/New York III Supportive Housing residents, 53% were Black non-Latino and 29% were Latino.[43] The same structural and systemic issues of racism also contributed to the disproportionately higher rates of COVID-19 infections, hospitalizations, and deaths among Black and Latino communities in the U.S. [35-38]

A strength of this project was its mixed-methods approach. This allowed for a multidimensional exploration and understanding of the experiences and needs of supportive housing staff and tenants during the pandemic. We solicited stakeholder feedback throughout, and development of each step was iterative and informed by previous steps. An additional strength is the diversity of staff roles and work setting types represented among respondents. Findings from this study have been and can continue to be used to inform planning, preparedness, and response to both COVID-19 and future pandemics.

Implications and recommendations

The results of this mixed-methods assessment provide important insights into the experiences of NYC-based supportive housing staff during the first year and a half of the COVID-19 pandemic. These findings highlight challenges, best practices, and resource needs that can be incorporated into current City, State, and program-level COVID-19 response plans for supportive housing and into preparedness plans for future public health emergencies. Based on these results, our recommendations for government agencies, non-profit organizations, and supportive housing programs include the following:

Preparedness

- Plan for multiple phases of future public health emergencies. Planning should explicitly include funding and availability of resources, support for staff through periods of shortages and burnout, and tools for helping staff and tenants navigate long-term crises.
- Develop and maintain capacity for providing on-site services (for example, testing, vaccination) in residential congregate settings.
- Include a diverse set of stakeholders in emergency planning – this includes supportive housing providers, staff, and tenants – in addition to government agencies, medical providers, and social service providers.
- Communicate with tenants who resided in supportive housing during the COVID-19 pandemic to learn from their lived experiences and incorporate these into emergency plans.
- Incorporate means to maintain tenants' access to food, benefits, physical and mental health care, and other social services.
- Identify and make available resources to support isolation and quarantine and to maintain services for tenants in isolation or quarantine both on- and off-site.
- Ensure the availability of and funding for critical supplies (for example, PPE, cleaning materials, technological resources). This funding should extend beyond the emergency phase and into the maintenance phase.
- Provide ongoing and enhanced training in IPC concepts and preparedness to staff at all levels.
- Prioritize the mental health and well-being of both tenants and staff during emergencies. For tenants, this may include increasing social connections, maintaining access to providers, and counseling. For staff, this may include allowing for flexibility in location or hours, additional compensation, and counseling.
- Acknowledge and address structural inequities as a foundational part of the emergency planning and response process.

Messaging

- Prioritize and tailor public health education and messaging for successful implementation among program leadership and staff, and among tenants with diverse needs and levels of health literacy.
- Ensure that messaging from government agencies and public health experts is clear, consistent, inclusive, and trauma informed.
- Include a diverse set of stakeholders in development of public health education materials and messaging – this includes supportive housing providers, staff, and tenants.
- Utilize peer-based health education as an effective strategy for both tenants and staff.
- Provide live presentations and information sessions (in person or through online platforms) as a supplement to written educational materials. This is an effective method for providing recommendations, guidance, IPC, and other training during a public health emergency; these may be needed on an ongoing basis depending on the duration of the emergency.

Relationships

- Foster trusted relationships between government agencies and supportive housing providers before, during, and after public health emergencies to establish forums for discussing preparedness, identifying potential and experienced challenges, and developing creative solutions to address barriers.
- Cultivate trust between tenants and supportive housing staff through community supports, activities, education, etc., to promote health and recovery.
- Establish partnerships between government agencies and supportive housing providers to tap into and share expertise and experience in emergency management planning and practices.
- Create mechanisms for supportive housing providers to hear from other providers to share best practices and problem-solve on common challenges.

"Care, Community, Action: A Mental Health Plan for NYC" lays out a framework for improving the health and well-being of New Yorkers living with Serious Mental Illness (SMI) including New Yorkers living in supportive housing. The plan will work to expand rehabilitative supports, including clubhouses, education, and employment, for people with SMI in order to combat social isolation and low levels of social support and ensure that people living with SMI, including those in supportive housing, are part of a wider community. In addition, the plan aims to reduce the risk of death and improve quality of life for people who use drugs by ensuring widespread naloxone availability; operating peer-led nonfatal overdose response services; and supporting comprehensive prevention, harm reduction, treatment, and recovery services. https://www.nyc.gov/assets/doh/care-community-action-mental-health-plan/index.html

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