Availability and Accessibility of Mental Health Services in New York City

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About This Research Report

In this report, the research team provides findings from a project that aims to assess the needs for mental health services in New York City by compiling data on mental health providers and conducting interviews with diverse stakeholders. The project will inform stakeholders about how the city government can strategically and effectively improve current system factors that influence mental health care access, particularly for underserved populations.

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Summary

Mental health services are critical components of public health infrastructure that provide essential supports to people living with psychiatric disorders. In a typical year, about 20 percent of people will have a psychiatric disorder, and about 5 percent will experience serious psychological distress, indicating a potentially serious mental illness. Nationally, the use of mental health services is low; in a national survey conducted by the Substance Abuse and Mental Health Services Administration, only 66 percent of people with a serious mental illness had received mental health services in the past year. Moreover, the use of care is not equitably distributed. In the United States as a whole and in New York City (NYC), non-Hispanic white individuals are more likely to use mental health services than non-Hispanic black or Hispanic individuals. Adding to these underlying challenges, the coronavirus disease 2019 (COVID-19) pandemic has disrupted established patterns of care.

To advance policy strategy for addressing gaps in the mental health services system, the NYC Mayor's Office of Community Mental Health and the Mayor's Office for Economic Opportunity contracted with the RAND Corporation to investigate the availability and accessibility of mental health services in NYC. City policymakers were particularly interested in the safety net of mental health treatment services for publicly insured and uninsured patients, many of whom have serious functional impairments as well as complex medical and social needs. The RAND research team used two complementary approaches to address these issues. First, the team conducted interviews with a broad group of professionals and patients in the mental health system to identify barriers to care and potential strategies for improving access and availability. The professionals included public-sector mental health providers, academic policy experts, and city policymakers. Second, the team investigated geographic variations in the availability of mental health services across the city by compiling and mapping data on the geographic locations and service characteristics of mental health treatment facilities in NYC.

Professionals' Perspectives on the Availability of Mental Health Care

Two major themes related to barriers to expanding mental health services were identified from the interviews: workforce shortages and the integration of services. Workforce shortages were identified as a foundational issue; as one professional informant said, "I don't think we can talk about behavioral health without talking about workforce first." Informants noted that, although there are many mental health providers in NYC, some do not take Medicaid or other forms of insurance, which creates a workforce shortage that is specific to people who cannot pay out of pocket for their treatment. Shortages were identified as particularly acute for care for patients who do not speak English. Informants emphasized that, although the workforce shortage

preceded the COVID-19 pandemic, it has been worsened by the increase in demand for services and a decrease in the number of providers.

Informants also highlighted challenges in integrating the diverse services needed by people with serious mental illness to live securely in the community. Informants focused on barriers that occur when patients are receiving services from multiple sources, such as homeless services and mental health care, or when they move from one setting to another, such as after discharge from jail. As one informant said, "We need more communication; it feels like we are very disjointed, and we need to figure out how to coordinate more. . . . Patients that jump around from one facility to another, we need to be able to communicate better for that."

Patient Perspectives on the Accessibility of Mental Health Care

Patients also reported challenges stemming from workforce shortages, such as long wait times for appointments and a lack of integration among providers. In addition, patients described barriers within their communities or families that prevented them from initiating care until they became adults, despite experiencing mental health problems from early adolescence. For others, initial contact with treatment was through a crisis that resulted in a psychiatric hospitalization. Patients described difficulties in finding information on how to seek services, difficulties with the process of navigating systems to access services, and problems connecting with a provider who they felt would understand them. During the pandemic, patients experienced more difficulties in finding care, which they attributed to exacerbated workforce issues. Some used telehealth to access services during the pandemic and felt that the quality of care was not as high as when they received care in person.

Mapping Mental Health Facilities

Mapping mental health facilities enables policymakers and other stakeholders to identify areas of the city that lack adequate mental health services for the local population. The RAND team sought to build a mapping tool that pulls information about mental health treatment facilities into a single data set and maps their locations and characteristics. The team combined three publicly accessible listings of mental health treatment facilities, resulting in a consolidated database of 1,724 facilities. The consolidated database was used to map mental health facilities across NYC neighborhoods, which were defined using Neighborhood Tabulation Areas (NTAs), a geographic unit commonly used by the NYC Department of City Planning. Information on the NTA populations, which was drawn from the U.S. Census Bureau and other data sources, was used to identify areas with needs for specific types of services.

The consolidated data set can be used to identify areas of the city with relatively low access to specific types of services. For example, the RAND team identified areas of the city where the number of facilities that accept Medicaid is low across multiple continuous NTAs, indicating a broad area with low geographic access to care for people who rely on Medicaid for their health

insurance coverage. Notably, there are NTAs with no facilities in the Bronx, Queens, and Staten Island. Conversely, Manhattan and Brooklyn have no NTAs without at least one facility. Areas with groups of NTAs with few or no facilities are found in the northern and northeastern sections of the Bronx and in eastern sections of Queens. NTAs with high proportions of Medicaid-eligible populations and low numbers of treatment facilities are found in northern sections of the Bronx and southern sections of Brooklyn. We also used the data set to identify NTAs with high numbers of people who speak Spanish with low proficiency in English and low numbers of mental health treatment facilities that provide services in Spanish. Groups of NTAs meeting this description were found in Northern Queens, along the border of Brooklyn and Queens, and in the South Bronx.

Conclusions and Recommendations

The challenges that NYC faces in ensuring that all New Yorkers have access to mental health care are not unique. The challenges that were identified by providers—workforce shortages and a lack of integration of care—are long-standing national issues that have been at the forefront of policy discussions for many years. Similarly, the descriptions that our patient informants gave of their searches for care echo issues that have been voiced by people receiving public mental health services. All of these issues have been exacerbated during the pandemic.

Using the results of our qualitative interviews and our investigation of mental health treatment facility data, we offer the following recommendations:

- Focus on short- and long-term workforce issues: The city should support ongoing efforts to increase clinical training in mental health fields, expand the role of peers in providing services, and improve wages and benefits for workers in mental health facilities. However, the city should not expect hiring and retention of staff to fully address limits on the capacity of the service system. Additional strategies to improve capacity by increasing efficiency—such as the use of care managers to reduce no-shows to clinic appointments and to improve treatment follow-up, task-shifting (i.e., enabling care to be provided by nonclinical community-based service providers), and the deployment of technology, including telehealth and internet-based communication—should be considered. Different payment models can help achieve these goals.
- Continue developing a data system: The data compiled for this study provide an initial view of underserved areas in the city, but that view can be made more valuable to policymakers by integrating additional data, validating certain data elements, and updating facility data over time. The current data set is a foundation for the development of a system that can serve multiple functions for stakeholders inside and outside city government. In the future, additional data can be added to the system to enhance its value. The city should consider including additional variables from the Patient Characteristics Survey and the Community Health Survey, census data on the uninsured population, information on school-based mental health services, data that could be collected directly from facilities, and additional data from Medicaid, such as clinic financing reports.

- **Develop a telehealth strategy:** The role of telehealth in mental health care is in flux because of the pandemic, and policies that will shape this role after the pandemic are yet to be finalized. Our findings revealed both positive and negative aspects of telehealth for people receiving public mental health services. The technology has the potential to improve the capacity for care, but many are concerned about quality. The city can play a role in addressing quality-of-care issues by working with state regulatory agencies on quality assessment and disseminating evidence-based treatment models to clinics.
- Continue to develop clinical information systems: Providers in mental health clinics, other medical settings, and nonmedical social service settings are all interested in the ability to share information in making decisions about clinical care and identifying resources for their patients and clients. The city can work with partners in government and in the private nonprofit sector to improve information-sharing, which will enhance integration of care across the system. We recommend convening health systems and large community-based providers to create a long-term information system—development strategy.

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1. Introduction

Mental health services are critical components of public health infrastructure that provide essential supports to large numbers of people living with psychiatric disorders in the community. Psychiatric disorders are common in the general population. In a typical year, about 20 percent of people will have a psychiatric disorder, and about 5 percent will experience serious psychological distress, an indicator of a potentially serious mental illness (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020b). Psychiatric disorders are associated with significant functional impairment and shortened life expectancy (Chesney, Goodwin, and Fazel, 2014). Yet, large portions of people with psychiatric disorders do not receive mental health services. In the United States as a whole, fewer than half (45 percent) of people with any mental illness and only two-thirds (66 percent) of people with a serious mental illness received mental health services in the past 12 months (SAMHSA, 2020b). New York City's (NYC's) 2019 Community Health Survey (CHS) used a different measure of mental health status but found the same general pattern as that in the national data. In the 2019 NYC CHS, 58 percent of people with serious psychological distress had received mental health treatment in the past year (New York City Department of Health and Mental Hygiene [DOHMH], undated-b).

Not only is the use of mental health services low in relation to the level of need in the community but it is also inequitably distributed. In the United States as a whole, non-Hispanic black and Hispanic residents are less likely to use mental health services, even after accounting for differences in mental health status (Cook et al., 2019). In this regard, NYC exemplifies patterns found across the country. In Figure 1.1, we show data on the use of mental health services across racial and ethnic groups in NYC from the 2019 CHS. Non-Hispanic white individuals are much more likely than other racial/ethnic groups to use mental health services and more than twice as likely to use services as non-Hispanic black individuals. The challenges of ensuring the availability of mental health services for all groups in NYC are particularly acute, given the size of the population and its diversity in income, culture, ethnicity, and language.

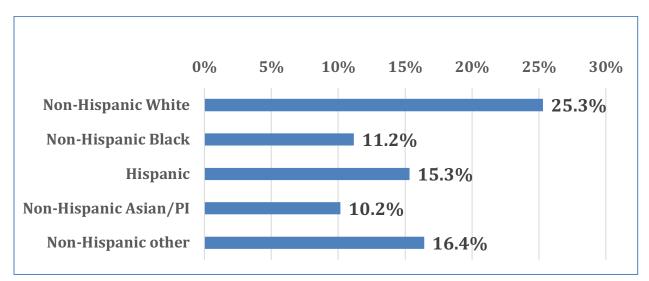


Figure 1.1. Use of Mental Health Services in New York City, by Race/Ethnicity, 2019

SOURCE: 2019 NYC CHS (DOHMH, undated-a).

NOTE: The data in this figure include counseling or medication for a mental health condition. PI = Pacific Islander.

To advance policy strategy for addressing gaps in the mental health services system, the Mayor's Office for Economic Opportunity (NYC Opportunity) contracted with the RAND Corporation to investigate the availability and accessibility of mental health services in NYC. Availability and accessibility both relate to the ease with which people can obtain mental health treatment. *Availability* captures key dimensions of the system of care: What is the distribution of facilities where mental health services are offered, and what is their capacity to provide services? *Accessibility* views the system from the users' perspective: What barriers or facilitators exist that make it harder or easier to use the services that are available? With respect to both of these issues, city policymakers are particularly interested in publicly funded services, which form the safety net for mental health services for low-income New Yorkers. The public mental health system is also the primary source of treatment and support for people with serious mental illnesses.

To address these issues, the RAND research team conducted a mixed-methods study, combining a quantitative investigation of the numbers, characteristics, and distribution of mental health treatment facilities in NYC and a qualitative investigation of stakeholders' perspectives on the availability and accessibility of those services. Data on mental health treatment facilities were drawn from multiple data sources and integrated into a single analytic data set to identify gaps in coverage. The stakeholders comprised patients who receive care in the public mental health system and a variety of experts and providers working in the system inside and outside government. In this report, we describe the results of this work. We describe the methods used to compile and analyze data on mental health treatment facilities, providing an initial analysis that identifies the geographic areas of highest need. This analysis of the distribution of mental health treatment facilities also serves as a demonstration of strategies that the city can adopt on an

ongoing basis to monitor and analyze the service system to inform policy decisionmaking. We also describe the major themes related to the availability and accessibility of mental health services that emerged from our stakeholder interviews.

2. Providers' and Mental Health Leaders' Perspectives on Service Availability

To obtain perspectives on mental health service availability in NYC, we invited representatives from various stakeholder groups to participate in a virtual interview lasting 45 to 60 minutes. We worked with the Mayor's Office of Community Mental Health to identify potential interview candidates, including health system and plan administrators, policy experts, government officials, representatives of agencies that typically partner with mental health providers, leaders of community-based organizations that offer mental health services, and primary care providers. We sent emails to invite 44 stakeholders to participate in this study. Between June 16 and August 18, 2021, we conducted interviews with 32 stakeholders (see Table 2.1 for tallies of interviews by stakeholder type). Leaders of community-based organizations were offered a \$50 gift card for their participation. We conducted interviews using a semistructured interview protocol that was tailored to the specific stakeholder group. Interview questions inquired about service availability; interactions between care providers; pathways to accessing care; facilitators, barriers, and potential solutions to access to care; and the effects of the coronavirus disease 2019 (COVID-19) pandemic on service availability and accessibility. Interviews were recorded to allow us to ensure that our notes included all pertinent stakeholder comments.

Table 2.1. Completed Interviews, by Stakeholder Type

Stakeholder Type	Number of Interviews with Stakeholders Completed
Community-based organization leader	8
Mental health provider	7
Primary care provider	4
Health system administrator	3
Government official (in health or mental health)	3
Policy expert	2
Partner service agency representative (e.g., education, corrections agency)	4
Health plan administrator	1

¹ Of the 44 invited stakeholder groups, there was no response from three community-based organizations, three mental health providers, and two primary care providers. One community-based organization and one health system stakeholder declined participation. One mental health provider and one partner agency ran into scheduling difficulties and were unable to participate.

We reviewed the notes thoroughly to inform the development of a codebook that reflected themes that we determined in advance were important to understanding mental health service availability and accessibility. In addition, we updated the codebook to include relevant themes that emerged from the data. We used Dedoose, an electronic data analysis tool, to facilitate thematic analysis of the interview data. Our coding team consisted of four authors of this report, each of whom coded up to five interviews. Interviews were divided by stakeholder type to allow researchers to develop in-depth knowledge of the content discussed by each type of stakeholder. After one or two interviews were coded by each researcher, a senior qualitative researcher reviewed the coded data and met with the coders to reconcile any differences, ensure thorough understanding of the codebook, and address coders' questions. After reconciliation, the researchers coded their remaining assigned interviews and met as a team with the senior researcher to discuss and summarize findings within and across themes.

In the following sections, we describe the two themes that emerged as the key challenges and barriers to the availability of services: workforce shortages and the lack of integration of care systems. For each theme, we also highlight participants' suggestions for solutions to the challenges.

Workforce Shortages

Throughout our interviews, the most commonly cited challenge to the availability of mental health services was the limited provider workforce. Workforce limitations were emphasized by multiple informants and across all stakeholder categories. A few informants described how critical they believe the issue to be:

I don't think we can talk about behavioral health without talking about workforce first. —Government official

One issue [is the] workforce. The workforce problems are so severe. That has been our number one advocacy issue. —Mental health provider

We have been having a ton of people knocking down our doors needing [mental health] care, and there aren't enough providers to accommodate all of that. There are inordinate wait lists. —Government official

As one informant explained, the workforce shortage is not just one issue among others but is instead a foundational issue that underlies many other issues with the system: "The real problem is staffing. If we had enough staff, all the other issues go away."

Although stakeholders were unanimous in highlighting the workforce shortage, they also pointed out an important qualification: that the shortage is not attributable to the small number of providers in the city but to the small number of providers that accept Medicaid or other forms of insurance payment. According to one policy expert,

The city also has a high density of providers. We have a lot of independent practitioners licensed by the state educational sector (therapists, counselors, etc.) and the majority don't take any form of insurance. It's all cash for

service. . . . Manhattan probably has the highest number of providers of any place in the world, but God help you if you have Medicaid. . . . So, we end up with the highest density of providers with no access to them at all.

Workforce shortages in mental health facilities also have been described in the research literature, and they are not unique to NYC. To the contrary, there has been a long-standing national concern with the mental health workforce (Covino, 2019; Olfson, 2016). Nationally, the number of psychiatrists has been decreasing since the early 2000s (Bishop et al., 2016). Workforce problems are particularly acute in the public sector, where reimbursement and provider salaries are low (Mark et al., 2020; Olfson, 2016). Low numbers of providers are exacerbated by low reimbursement and opportunities to focus exclusively on commercially insured or self-paying patients (Mark et al., 2020; Wen et al., 2019).

Against the backdrop of this national situation, our informants emphasized several specific concerns that they face. First, our informants noted that there is a shortage of providers from underserved communities. Informants emphasized particularly severe workforce shortages with respect to providers of color and providers who can practice in languages other than English:

Big need areas . . . [have a] lack of Spanish bilingual [behavioral health/mental health] workers. [A r]eal need. [We are c]onstantly struggling to get people assigned to in-language care. It's not well known that in the Bronx there are pockets of people who speak Creole [and] South Asian dialects; that's a real need. . . . It remains a high-need group after 20 years of focus. [I'm n]ot sure we've been able to make a dent in meeting their service needs. —Health system administrator

We need social workers that can speak the language and relate to our clientele, and that is a huge challenge. Many languages are spoken by our clientele. Spanish social workers are a challenge to get, let alone [workers who speak] the other languages we have. —Partner agency representative

Second, informants explained that shortages are acute for all types of clinicians. We heard from informants about shortages with respect to multiple types of clinicians, including outpatient mental health care providers, especially those who can provide specialized evidence-based treatments; experienced licensed clinical social workers; and child psychiatrists. Specifically, informants noted the following:

From my perspective, the most difficult referral right now is outpatient [mental health] for someone looking to connect with a counselor or a therapist. We're encountering excessive wait times, sometimes up to three months. We're at a point where providers are letting us know that they are shutting down intake because they need to catch up. That is pretty common right now. So, the search for resources takes us further and further from a geographical zone—we try to get people resources as close to a ZIP code as possible. —Community-based organization employee

There's very limited evidence-based services in the community. You have counselors, you have psych providers or psychiatrists who offer meds. But in the public health system—[there are] very limited behavioral interventions, no dialectical behavioral treatment, which can be incredibly helpful for people with

emotional dysregulation. I cannot think of a clinic that provides evidence-based [cognitive behavioral therapy] services that has large capacity and [is] covered by Medicaid; [you] have to go to a private provider for those services. —Partner agency representative

Access to everything [is a problem], but child psychiatrists particularly are at a premium, . . . especially those with any linguistic access. But any child psychiatrist, [there are] never enough child psychiatrists. —Policy expert

Third, informants explained that the COVID-19 pandemic has exacerbated the workforce shortage. Informants reported that workforce shortages had continued to worsen as of the time of our interviews in summer 2021, as providers faced high demand because of the negative impact of the pandemic on patients' mental health and on providers themselves. The COVID-19 pandemic brought about stress as a result of economic recession, grief from sudden personal loss, and anxiety as a result of social and societal disruption. These mental health stressors affected both patients and providers, who additionally had to continue providing care. According to our informants,

[The pandemic] has really contributed to the increase in need most importantly, and we have seen a need for grief and loss services. New York City was really hit hard, and we have a large Black and Latino community, which was hit hard. We are meeting the need minimally. —Mental health provider

All of the anxiety, grief, [and] loss that people were dealing with, you are too. There was a lot of burnout, and people needed to step back. Eighty percent of our workforce is women; they have a lot of problems around child care. Our staff had to deal with a lot of situations that they weren't prepared or trained for. They never received hazard pay [and received] no raises. —Mental health provider

Pre-COVID, we didn't have [a waitlist] really—you could get matched pretty quickly. Once COVID hit, at the peak, worst case scenario, we had a waitlist of about five months, [it's] now down to about two months, but it still exists. We have worked considerably to reduce it as much as possible but have been struggling with the influx in need that has been coming forward. —Community-based organization employee

We were maybe at 75-percent capacity in terms of staffing prior to COVID, but now with COVID, we are working with 35-percent capacity. We are in a state of crisis in terms of staffing, and we are concerned about outpatient behavioral health programs. —Mental health provider

Informants emphasized that they are being hit from both sides during the pandemic; as demand has increased in the community, the recruitment of new staff and the retention of previous staff—both clinical and administrative—have become more difficult. Furthermore, stakeholders noted that, despite efforts to recruit and to retain staff, such as through signing bonuses and allowing more schedule flexibility, nothing seems to be working:

Demand is up so much. More people [are] reaching out for support, but we have the smallest workforce we've had in many years to try to meet the needs.

—Mental health provider

The pandemic has created a lot of problems. . . . For the majority, it's burnout. They were on the front lines and dealing with the trauma of their own life and also the clients' and they were in hot spots. Once we started to open up more, we started to get a lot of resignations. A lot [of workers] were traumatized and burned out and they were going into other fields. We gave raises, reduced caseloads, and were flexible, but even with that. . . . We were [also] trying to do student loan repayment. And perhaps we should be doing the do-nothing approach because they are leaving anyway. —Mental health provider

Now a lot of our new [job] applicants want to work 100 percent telehealth, and that is not really the kind of model we have because we have a hybrid model. The insurance companies will allow people to work remote 100 percent of the time, so they might take those jobs instead. So, a lot of our management staff or people with families have moved on as well. So, there are significant plusses to telehealth but also a lot of problems [related to staffing]. —Mental health provider

Fourth, informants described how telehealth enabled more-efficient use of workforce resources during the pandemic. As in-person care decreased during the pandemic, providers in NYC filled the gap by switching to telehealth. The experience with telehealth was generally positive and had some unexpected benefits, such as reducing no-show rates. There was a broad consensus among informants that telehealth was not only hugely beneficial during the pandemic but that it should play a larger role than it has historically played, even after restrictions on inperson care are lifted:

I think, overall, that telehealth increased services and [the] number of people seen. —Policy expert

Telehealth has allowed a lot more young people to engage. It has allowed our current caseloads to engage more consistently. . . . [I]f you are going to miss therapy or can't make it in person, being able to do it virtually has certainly extended the continuity of care. I will say that it drastically improved the attendance of psychiatrists—folks wouldn't show up as consistently for a 15-minute session. But when we moved to virtual, the number of sessions she did, I believe, tripled in the last year. —Community based organization employee

I think that, first of all, the allowance for reimbursement for tele-video service being exactly the same as for in-person should continue. And I think it will. Constituents want it. —Health system administrator

From an economic perspective, why would we go back? Before, we had 30 percent no-show because of transportation [or] child care, [which are] all reasonable things that people struggle with. —Health system administrator

However, informants raised some concerns about telehealth as well. In particular, informants had concerns about the quality of care, especially for people with a serious mental illness. Some mental health therapeutic protocols require the provider to read nonverbal movements or use eye movement desensitization and reprocessing procedures, which are harder to do over virtual platforms because of technical difficulties that can disrupt the experience. Informants reported that ensuring client safety and assessing response to treatment are also harder during audio-only

visits. Furthermore, not all people have the same level of access to technology, the resources necessary, or the skill set to navigate technology. Specifically, informants noted the following:

I'm skeptical about quality [with telehealth]. I would want providers to work harder to make sure telephone was last resort. I would reimburse less for telephone-only to get providers to work harder for other methods. —Health system administrator

In terms of quality of care, I do think in-person is better. It's been a real challenge trying to navigate telehealth services. One of the issues that's coming up now as we're talking about in-person [care], and in-person with masks [is] young people opting to stay with virtual until masks aren't needed. Even though being in person is needed and we crave that community and connection, you can't read expressions as a therapist when you can't see half of the person's face. The short answer [is] yes, I think quality of service is compromised with virtual and we're doing the best we can. —Community-based organization employee

For the high-need population, we think telehealth is not sufficient. . . . —Policy expert

But you have elderly [people] and children, and you don't know if the parent is on the side intimidating them, you don't know if they have bruises. For clients who have eating disorders or cut themselves, you cannot see that. Eighty percent of our visits were audio, 15 percent were video, and only 5 percent were on-site in July [2021]. So, we need to transition quickly to video or on-site because we cannot see their affect, and it is not ideal for everyone. If things don't shut down again, we are going to ask at least all new clients to come in in-person so we can determine if they are appropriate for telehealth. —Mental health provider

In our interviews with experts, we also discussed potential solutions to these challenges, which we discuss further in the next section.

Perceived Solutions to Workforce Shortages

Solving workforce shortages requires long-term strategic planning. The process of producing more clinicians takes years, and the structural issues facing the mental health system—and public mental health services in particular—are unlikely to change dramatically. Acknowledging these conditions, informants raised several policy strategies that could improve the capacity of their clinical workforce more quickly.

First, informants suggested increasing pay for licensed clinical social worker positions. Informants strongly emphasized the need for higher salaries for clinical staff, focusing specifically on licensed clinical social workers:

That's the fault of government. You're not going to have a workforce with master's degrees who are willing to be paid \$35,000. You can't live on that in New York City. When we talk to government, they will acknowledge the wage issue but say that money is needed elsewhere. —Mental health provider

Second, informants recommended developing models that give larger roles to peers and nonlicensed providers. Informants at multiple levels emphasized a need to continue integrating

peers and nonlicensed providers into clinical teams. Peers already play important roles in outreach and engagement, but careful consideration of how those roles can be expanded without supplanting the existing workforce is needed. Specifically,

The peers lead our outreach efforts. So, for example, if we are going out, we go out on a lot of Saturdays, Sundays, and after hours. Peers are out there, setting up tables, tabling, handing out flyers, [and] talking to people. They go to church groups, go to pantries, they are really out there in the communities, talking to the barbers [and] hairdressers. —Primary care provider

One informant emphasized the potential benefits of increasing the roles of peers while acknowledging that one of the challenges that they face is developing consensus regarding the alignment of peers with the roles of existing licensed clinical staff:

Using peers has been one of the strategies we've used with mixed success. [We're] underutilizing peer-based strategies to our detriment. . . . It's been hard to develop that workforce. . . . Peers leading or co-leading groups, self-management—that kind of stuff runs afoul of what many of the unions want to do in terms of their scope and licensure. [Peers] could make a difference in the lives of our patients. —Health system administrator

Third, informants recommended supporting the training of new providers, especially providers of color. Training new providers requires time and resources. Informants suggested targeting training support to individuals whose cultural and linguistic skills are most in demand:

Given [the] shortage of Spanish bilingual [and] Asian bilingual languages, I wonder if there needs to be a real investment, a state-city-federal partnership to encourage people to go into those fields, pay loans, etc., so incentives aren't just provided in the field. At the federal level, from a racial and health equity [standpoint], I wouldn't be tying this to a geographic area. —Health system administrator

Finally, informants suggested continuing support for telehealth after the pandemic. Telehealth is considered a key strategy for improving the efficiency of clinical services. Informants were unanimous in their support for continuing regulatory and financial support for telehealth, even after concerns about pandemic-related face-to-face care recede. Beyond simply allowing telehealth and reimbursing services provided through telehealth, hybrid models of care need to be developed and tested. Specifically, informants noted the following:

Absolutely [I think that telehealth will persist]. I think it's going to be widely used in general, and people are now more comfortable. There are always people who will want to do in-person, but both will be staying for the long haul.

—Mental health provider

We were doing a lot of phone-based psychotherapy even pre-pandemic, so we were able to adapt. [Telehealth i]mproves access and adherence. It should not have required a pandemic to do it. Out of crises come opportunities. That hopefully will be sustained and, with the right evidence, could be effective.

—Health system administrator

In addition to the problem of workforce shortages, informants identified the challenge of integrating services across sectors and providers. We discuss that issue and potential solutions in the following sections.

The Need for Integration of Services Across Sectors and Providers

A second theme emphasized by multiple informants across stakeholder types was the need for greater integration among agencies that provide services to people with mental health conditions. Because of the many systems that people with mental health conditions touch, such as primary care services, inpatient and outpatient mental health care, substance use treatment, schools, children's services, shelters and housing services, and jails, integration is understandably a critical issue. By *integration*, we mean all the ways in which different providers or provider agencies can work together to provide care to individual patients. Where integration is poor, patients might receive care from multiple providers who are unaware of what the others are doing, resulting in duplication of effort, poor-quality care, loss to follow-up, contradictory treatment plans, and excessive burden on patients. Integration can happen in many ways, including through informal information-sharing, shared medical record systems, co-located services, multidisciplinary case conferences, and formal contracts between providers regarding clinical collaborations. Providers expressed general concerns about the lack of communication across systems. For instance, such comments as the following were common:

We need more communication; it feels like we are very disjointed, and we need to figure out how to coordinate more. As a city, we could also do more with communication. Patients . . . jump around from one facility to another, [and] we need to be able to communicate better for that. —Health system administrator

Like the workforce shortage, integration of care is not a problem that exists only in NYC. It is a major concern of policymakers both nationally and internationally (Horvitz-Lennon, Kilbourne, and Pincus, 2006; Ramanuj et al., 2017).

Informants raised concerns related to integration in several ways. One pattern emerging from their observations was that mental health services that have been established in nontraditional mental health settings, such as schools, jails, and shelters, encounter challenges when linking the people with mental health problems to ongoing specialized mental health treatment.

In reference to issues associated with integration of mental health services in school settings, one informant described the difficulty in tracking students through care:

One of the issues that has come up is that the school should be able to follow that student. If I am a guidance counselor and I make a referral, there should be a form, there should be . . . consent, and I should be able to follow up to see if they made their first call. —Policy expert

A similar issue was raised with respect to jail-based mental health services, where referral to post-release care is a major challenge:

The first obstacle when working in a jail setting where people are being discharged unexpectedly [is that] there's very limited care offered outside of just walking into a clinic and getting services. Typically, you have to call and make an appointment, and you have to hope the patient shows up. Our patients are often homeless, have limited resources, [and] may not have Metro cards. When they show up, they should get services. A lot should be provided in that one shot to increase the chances that they will show up again. There's some of that in New York City, but it's actually incredibly limited. —Partner agency representative

Informants also stressed that integration is most critical for the highest-need patients who have comorbid medical conditions and need social supports. An example of this can be seen in an informant's description of the lack of evidence-based services for patients involved in multiple systems:

Patients that the city is struggling with—by that I mean [patients] coming in and out of the jail system, [emergency room] system, shelter system—are a complicated group of people with very complicated mental illness, with trauma. Lots of them have emotional dysregulation, [substance use disorder, and] cognitive and intellectual impairment. For that group, there is very little evidence-based services [or] individualized treatment plans. —Partner agency representative

Informants also described efforts that they have made to establish collaborative relationships with people in other types of agencies. Although informants valued these connections, they also expressed concern that the relationships require extensive investments of time and energy and result in small steps toward integration that only partially cover the many areas of need. For instance, one informant shared an experience partnering with hospitals, describing that not all hospitals are equally collaborative:

What has worked has been a constant communication and partnerships with hospitals. We have monthly meetings with some and [have] streamlined the process so that [for] clients that are being referred to us, we send someone to the hospital so they know someone from the clinic before they are discharged, and this has worked well with our high-risk clients. Not all hospitals are that responsible, and some will just discharge clients. —Mental health provider

In addition to identifying issues with integration, informants made suggestions for solutions, which we describe in more detail next.

Perceived Solutions to Integration Problems

As we noted earlier, individual agencies, including city government agencies and community-based providers, are engaged with identifying partners and developing cooperative relationships to improve the care that they provide. However, these efforts result in piecemeal solutions at best. When asked about strategies for improving integration, informants identified some systemic approaches that the city could support that could make lasting improvements.

First, informants suggested improving information technology by using systems that cross institutional boundaries and enable referral-tracking and information-sharing. Informants from city agencies and community providers have made use of information tools, such as the Psychiatric Services and Clinical Knowledge Enhancement System, and Regional Health Information Organizations.² One informant also described a new application-based system for making social service referrals. Early reports regarding the app, which is called NowPow, have been positive, but robust tests have yet to be conducted. As one informant pointed out, systemic approaches to information-sharing would reduce the burden on agencies that must invest resources in developing memoranda of understanding (MOUs) with each information-sharing partner:

There is one big change that would make these partnerships work better: Even though we are one city government, the ability to share data requires these extensive MOUs that take years to work through, and if there could be an MOU that crosses all the agencies, that would be great. —Partner agency representative

Second, informants recommended funding care coordination and nonclinical support services, especially through Medicaid. Because many activities that are required to coordinate care across sectors or to address the acute social needs of patients are not directly reimbursable, they are very difficult for providers to sustain. Informants highlighted one exception: the model for New York state's certified community behavioral health clinics (CCBHCs)—a community of mental health centers with a broad scope of services and a prospective payment system where integrated care is provided and the costs of addressing patients' needs are covered.³ However, and despite their promise, innovative payment models that cover behavioral health care have not been implemented in New York state's Medicaid system. One example of this was provided by a key informant who shared the value of potentially implementing these types of models:

[H]aving a comprehensive network and bringing in the non-Medicaid billing entities that provided vital services to the community [and] the more we could engage managed care and [value-based payment] contractors [means that] we could get some savings from the improvements in care and outcomes. But it never materialized because we don't have a contract with a [managed care organization] or a [value-based payment contractor], but that's how we would work with the [community-based organizations]. —Health system administrator

Finally, informants suggested simplifying regulatory systems. The integration of care is challenging, in part because the regulatory systems that cover different types of services are

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² The Psychiatric Services and Clinical Knowledge Enhancement System is operated by the New York State Office of Mental Health (OMH) and analyzes Medicaid claims and other state data to inform quality improvement efforts. Regional Health Information Organizations assist in electronically sharing health information from a region's health care system across stakeholders.

³ CCBHCs in New York state are paid a fixed rate for each day on which a patient receives services, regardless of the type of services received. The rate is designed to cover the total costs of providing care to the patient caseload using historical cost data.

entirely separate and, from the perspective of an integrated care provider, unnecessarily duplicative. The most commonly cited example in our conversations concerned mental health and substance use treatment, but informants also mentioned that other systems, such as schools and jails, are required to meet regulatory requirements that make the integration of mental health care more challenging than it needs to be. An informant shared one such recommendation for integrating mental health and substance use treatment. When asked what the city could do to improve, the informant replied that

[there should be i]ntegration between the mental health and substance abuse world and the primary care world. . . . There should be a merged New York state agency. Our providers are currently in two very different worlds—mental health and substance abuse. [There are d]ifferent audits, different regulations, different billing. It should be high on the city's agenda. —Mental health provider

In the next chapter, we discuss the perspectives of patients on service accessibility.

3. Patient Perspectives on Service Accessibility

The expert interviews provided valuable information about the availability of mental health services in NYC, including a severe workforce shortage and poor integration of care within mental health facilities, but we also sought to understand patients' experiences with accessing care and engaging with mental health facilities. We worked with mental health provider stakeholders (e.g., from clinics, hospitals, shelters) to recruit patients who were willing to describe their experience with seeking mental health care in NYC. We asked stakeholders from each of the five boroughs to post flyers and send study information via email newsletters to their distribution lists. Advertising was done in Spanish and English. Participants were offered a \$50 gift card for their participation. Interview questions inquired about patients' pathways to care; interactions with providers; facilitators, barriers, and potential solutions to access to care; and the effects of the COVID-19 pandemic on service accessibility. Patient interviews were not recorded because of the sensitive nature of the topics. However, one or two notetakers were present during each interview to take nearly verbatim notes.

We conducted a total of 20 patient interviews. Although we did not systematically collect demographic information on the patient sample, we recorded patient characteristics that were mentioned during the interviews to provide an overall characterization of the sample. About half the people in the sample were young adults between the ages of 18 and 29. All of the interviews were conducted in English. Several interviewees initially contacted us to schedule their interview in Spanish using a separate phone number set up for this purpose, but they ended up electing to do the interview in English. We had a high proportion of individuals who identify as nonbinary (15 percent), while 50 percent identified as male and 35 percent identified as female. The high percentage of patients identifying as nonbinary is likely because one of the clinics from which we recruited serves the lesbian, gay, bisexual, transgender, and queer or questioning (LGBTQ) population. Patients came from four boroughs; we were unable to recruit any patients from Staten Island. More than half of the sample identified as African-American/Black, Hispanic, Asian, or other person of color. The sample was also diverse with respect to the length of time that the patients had been receiving mental health treatment. Thirty-five percent had initiated treatment within the past year, 25 percent had been in treatment for between one and five years, and 40 percent had been in treatment for ten years or longer.

Pathways into Care

We asked patients to describe their process of engaging services, including how they determined that care was needed, how they identified a provider, and what desirable attributes they looked for when selecting a provider. Throughout our interviews, patients identified various

reasons why they initially sought mental health care. Most self-identified, or determined with the help of family and friends, that there might be a need to engage in mental health services. Others were referred to care by a primary care physician or because of a hospitalization.

Identifying and Connecting with a Provider

All patients in our sample discussed difficulties with accessing care, from navigating the mental health system to identifying a provider. Many patients expressed frustration with not knowing where to start once they identified that they needed care and the idea that the stressors of navigating the system were making their current mental health worse:

It's very discouraging and overwhelming to go online and navigate the system to find your own therapist. When you have depression or [obsessive compulsive disorder] like my friends and I, it's hard to find a therapist online. —Patient

For patients who found resources (through specific websites or referrals from friends or other people) to aid in their search for a provider, they still struggled to get an appointment. Patients spoke about the difficulties of finding a clinic or provider that was accepting patients:

I mean it hurts. You come back at the end of the day, and you know you tried your best to do something for you and can't get it. It's like there are 10,000 psychiatrists out here, why can't I get one. . . . I feel betrayed. I think I'm blacklisted across NYC because I can't seem to get a therapist. You can't even get a psychiatrist. You can get anything you want in NYC—a Philly cheesesteak, anything you want—but you can't get a good psychiatrist. —Patient

We also learned about these difficulties from the providers we interviewed, who noted that there are more people calling for providers, but, because of limited staffing capacity, they were unable to take in patients. Once a patient moved past the hurdles of navigating the system to find a clinic or provider, they encountered a protracted intake process that was described as very long and, at times, resulted in no appointments:

The number of phone calls I had . . . I had to talk to a primary care provider first before I could see a mental health provider. Then after I talked to the primary health provider, they told me I couldn't see a mental health provider because they didn't accept my insurance. But they would have taken me if I didn't have insurance. It was just so frustrating, and it just felt like there were so many hurdles. [S]omeone who is not as committed to phone calls and need for care . . . wouldn't access it. —Patient

When the intake process was completed, the wait time to the first appointment varied across all the patients. As we show in Table A.1 in Appendix A, some patients had a wait time of less than a week for their first appointment, while others waited more than a year for their first appointment. According to one patient,

I talked to a person who manages appointments in July, the appointment was in Aug[ust], and the appointment was only 30 [minutes,] which I don't think is enough time to do anything valuable.

What Patients Consider When Selecting a Provider

In this section, we discuss the attributes that patients identified as most important when selecting a provider. In the context of patients' experience accessing mental health care, there was an overwhelming consensus that there were three things that mattered most when identifying and connecting with a provider: cost, provider cultural competence, and quality of care.

Many patients commented on the struggle of simply paying their day-to-day bills to make ends meet. Thus, if a provider's cost was too high, even though a patient knew that they needed mental health care, it was a deterrent. Both patients and providers identified cost as a barrier to accessing services. This perspective is not unique to NYC; it is in alignment with national studies that have identified affordability as a prevalent barrier to mental health access and a key attribute that patients are mindful of (Coombs et al., 2021). Specifically, one patient said, "I don't have funds for a \$250 therapy session."

It mattered to patients that their provider understood their experiences and was respectful of and responsive to their cultural and linguistic needs. This was mentioned not just in relation to racial/ethnic backgrounds or language but also with regard to sexual orientation and the stigma that many people experience in their communities when seeking mental health care. Providers also were able to clearly identify that there should be a diversity of providers who speak the languages of the diverse clientele; however, this was lacking.

She was also part of my culture. She knew Spanish and was partly Hispanic, so that is something that I find some comfort in. She was also very understanding when I told her I might be LGBTQ. —Patient

Once patients identified a provider, the quality of care and responsiveness of the provider also mattered:

The form of engagement in regard to having a certain "bedside manner," compassion, empathy. . . . their listening skills, keeping eye contact. It's offputting when you're discussing something personal and they're looking down at a writing pad the entire time. —Patient

The location of care was mentioned by many patients as an important factor, although it was not usually a deciding factor. Patients indicated that they would prefer to get care closer to home but that they would be willing to travel if it meant that they could get better-quality services. In response to a question about which factors are most important in finding services, one patient responded,

For me personally, it would definitely be location. I would prefer close to home and also someone who is of Hispanic descent because they understand the dynamics and they would have better understanding. Also, someone who specializes in the things that I'm going through. For example, if I am dealing with something traumatic, I would want to see a specialist in that. Also, the atmosphere, I want it to be a safe space. —Patient

In response to the same question, another patient answered,

I'm a good traveler. It doesn't really matter how far it is. The only time location matters is if the office is located in a safe, clean environment. —Patient

One patient mentioned that their maximum travel time by subway was 45 minutes. Travel time was often listed as one concern among others, such as quality of care, safety of the neighborhood, and cost.

Patients' Assessments of the Quality of Care

The quality of treatment and care was important to the patients we interviewed. Many patients expressed the need to get better and get their mental health on track; however, their goals were negatively affected by the quality of care they received. Two aspects of quality of care were discussed: the staff providing the services and the services provided.

Quality of Staff Providing Services

The experiences of the patients, from the moment they arrived for their appointment to the minute they departed, informed their perspectives of quality of care. Patients talked about how their engagement with the check-in staff set the mood for their appointment and how it was rare to find staff who were empathetic. Patients also described their concerns about providers' ability to understand them. Several patients spoke about the disconnect certain providers exhibited regarding several factors, such as patients' socioeconomic status, racial or ethnic experiences, and sexual orientation. Patients also mentioned a disconnect regarding the scant resources available to them. Patients expressed their desire to be part of the decisionmaking process with their provider, and some reported not having the opportunity to participate in this process:

The quality of care depended upon how well you connected with the right staff and their attitude. And the level of care you got changed based on whether they liked you. —Patient

For me specifically, because I am queer, a lot of mental health providers don't really understand that experience, and sometimes they don't think about what they say before they say it. —Patient

Quality of Services

Patients raised concerns about the quality of care that they themselves received or observed others receiving in some programs, and some called for increasing oversight of the use of medications. Although the research team was not able to identify specific programs that were mentioned or independently verify these claims, the concerns were important to our informants. Concerns about quality of care included perceptions that providers were oversedating patients, worries about a lack of access to prescription medications, and worries about the short duration of appointments, which made it impossible to address patients' mental health problems:

There was only one psychiatrist working with the program. They did some backwards stuff. I don't know if sedation was required at all times, but they were

very quick to sedate people. I don't think it was the proper use of resources.

—Patient

Maybe adding more sessions. Something that I would also like would be maybe making the sessions longer, so we don't have to play catch-up every time and then update and then go back into what has been going on and barely get time to talk about what needs to be talked about to heal. Sometimes it just feels a little bit rushed. —Patient

In addition to these issues with the quality of care provided, patients described issues with accessing care, which we discuss further in the next section.

Barriers to Accessing Care

Patients discussed three types of barriers affecting their ability to access care: barriers related to patients' lives, barriers from providers, and barriers that affected the mental health system as a whole.

Patients spoke about barriers related to their own lives in terms of readiness, stigma, and knowledge gaps. Several patients recognized that they needed mental health care, but too often felt that they were not ready to engage with care because other issues had to take priority. For example, patients spoke about being unemployed or homeless, and although they thought that mental health was important, so was paying the bills and providing for their families. Thus, for these patients, until their day-to-day needs were addressed, mental health had to be secondary. Patients also discussed stigma and a lack of understanding within their families or communities that made it difficult to seek care. Many patients talked about their struggles to explain their mental health issues to their families, communities, and friends. For most, negative perceptions of mental health held by family, friends, and others often hindered their ability to seek care. Providers also cited negative perceptions as a major issue. Furthermore, patients pointed to a lack of information available to help guide them through the process of identifying and connecting with a provider. Without help, patients spent hours trying to find information on first steps in accessing care. Additionally, patients spoke about a lack of information available to help their communities understand the importance of mental health care:

We are a big Puerto Rican family, and you don't show weakness, [you] don't talk about depression, [and you] don't use mental health services, and, as a result, I have family members who committed suicide because they didn't receive help.

—Patient

Next, patients identified several provider-related barriers that hindered their ability to access care. The most prevalent barrier was cost. Most providers were not getting back to patients in a timely manner for appointments or were not as willing to accommodate alternative ways of meeting (i.e., a phone interview) or different meeting times (i.e., after 5 p.m.). Patients reported a lack of trust in providers and the mental health system as a barrier to their care. For instance, many individuals who identified as LGBTQ described poor experiences with providers and how

that has affected their engagement with future providers. Other patients who engaged with the mental health care system when they were minors spoke about the lack of confidentiality within the system, which affected their home lives—for instance, when they shared something in confidence, it was reported to child services. Such experiences left them more mistrustful of mental health care as adults.

I've been part of the LGBTQ system. It's hard to go through the process of opening up to people. It's hard to know that they're not aiming for your best health but to them you're just a ticket number. —Patient

I tried to get help in high school, but my mom didn't let me because she didn't want me to say anything that was going to make us lose my brother. So even as an adult it still affects me, I think about how it would affect my mom and my little brother what I say in therapy. —Patient

I'd want a phone [appointment] and I wanted different hours. But they couldn't understand. They just wanted to do video calls or in person and by a particular time. With my work schedule, I wanted like a 10 p.m. appointment [to be able to do a video call] and they couldn't give [it to] me. I wanted phone calls [inbetween work breaks] and they said I can't receive proper care without video. I would try to explain that I am living in a living room and don't have privacy and they still wouldn't understand. —Patient

Lastly, patients discussed the need for better communication and integration between systems of care and resources. It was difficult for patients to remember medications and previous treatments; their preference was for an integrative system that allows new providers to see a patient's medical history. Additionally, if a patient needs other services, such as housing, the patients we interviewed felt that it is imperative that organizations providing such services are in communication with mental health care providers:

NYC is a melting pot of resources, it's about all those programs connecting.

—Patient

You need accessibility to your record, not everyone can remember what meds they've taken in the past, the dosage, the side effects they experienced. It's difficult to have that info on hand. . . . The clinics need to talk to each other. I don't mind signing a [Health Insurance Portability and Accountability Act (HIPAA)] form—just send the information over. I have [attention-deficit/hyperactivity disorder (ADHD)]—I can't remember, just send the information. —Patient

Yeah. It's hard to get records from one provider I've seen before without starting the process all over again and having them trying to diagnose me all over again.

—Patient

Patients also described facilitators to accessing care, which we focus on in the next section.

Facilitators to Accessing Care

Although patients faced many barriers, they also spoke about facilitators that aided them in accessing care. The most-salient facilitators for accessing care that patients cited included their awareness of mental health, supportive relationships, and personal resilience. Patients expressed the idea that their awareness of mental health issues and the fact that they knew people who had mental health challenges was a major facilitator to them accessing care. Some patients were very aware of common treatments and knew what they wanted, which also helped facilitate the process of accessing care. Patients likewise felt that being supported at home and not experiencing any form of negative stigma positively affected their experience with accessing care. Finally, patient resilience also emerged as a facilitator. Patients faced an enormous number of hurdles just to receive care, and yet they kept engaging with what they identified as a broken system because they know that mental health care is important.

I think part of the reason I was able to get care as an underage person at the time was just that I tried so hard to get it. Others who don't spend so much energy will just not access it at all. —Patient

My sister was an advocate for me on getting me into a place [to get mental health care] in the Bronx.—Patient

The Impact of the COVID-19 Pandemic on Mental Health Care for Patients

Although the experience that patients had with the mental health care system prior to the pandemic was challenging, the emergence of COVID-19 exacerbated patient need for care and further constrained their access to and the quality of care. Patients who had been receiving care prior to the pandemic expressed how COVID-19 and the economic and social disruption caused by the pandemic increased their need for care, while other patients explained that COVID-19 caused the emergence of mental health issues in their lives and pushed them to find services:

[Mental health issues] definitely increased. My emotions were . . . elevated. What's the word? Heightened, that's it. —Patient

Before the pandemic, I didn't think much about mental health care service. With the pandemic, I changed as a person and realized I need to get those services.

—Patient

New patients seeking care during the pandemic struggled with where to get care and how to get appointments. This was equally difficult for patients who had been receiving care prior to the pandemic. Patients explained that wait times for an appointment prior to the pandemic was "3 or 4 days," but as a result of the pandemic, "the wait could be as long as a month and a half."

A lot of appointments for the clinic you had to make extra early, like a few months early even. So, I had to wait a long time to even just get the psych evaluation to tell me I am very depressed. Then, I needed to wait even longer to see a psychiatrist and get a psych evaluation there. —Patient

With care during the pandemic relegated to phone calls or video conferencing, some patients appreciated the ability to not have to commute to get to their appointments. They appreciated having more time to engage in such resources as reading materials and therapeutic techniques that they would not otherwise have had. For new patients, telehealth was all they knew, so there was nothing to compare it with:

The virtual meetings I do really like, especially now that the providers know how to use it. Because of the pandemic, it feels as if I have more time to use and read the resources I am given by my therapist. —Patient

I am comfortable with online maybe because it's all I've known. —Patient

However, telehealth was not viewed positively by most patients. Indeed, most patients believed that quality of care had decreased because of telehealth. Too often, the provider and/or the patient would have connectivity issues that interrupted the time allotted for the appointment. Other times, patients felt that their provider was not present in their appointment. They complained that the provider sometimes sounded very distant, as though they were engaged in other things while attempting to provide care:

Sometimes the Wi-Fi didn't work or got turned off or the phone [was] being too shaky, so a lot of the times the majority of the session would be the technical difficulties and then only like 15 [minutes] to talk. —Patient

Not everyone has access to [a] phone. There's a lot of things you can't do over the phone that you need to do in person. You can get lost on the telephone, I could be pouring my heart out and they could be filing their nail[s] on the other side and call that telephone therapy. —Patient

As things began to go back to normal after pandemic-related shutdowns, some of our patient informants expressed a desire to receive care in person because of the higher quality of care they believed they would receive:

It's much better in person. If you have to let it all out, you can't do that level of expression on the phone. If they see how you carry yourself, people can know what you're going through. —Patient

In the next chapter, we turn to the geographic mapping of mental health facilities in NYC. We combine this quantitative data with the qualitative interviews discussed in this chapter and in Chapter 2 to provide a comprehensive picture of the availability and accessibility of mental health services in NYC.

4. The Distribution of Mental Health Facilities in New York City

To describe and analyze the distribution of mental health services throughout NYC, the RAND team sought (1) existing data on the locations and characteristics of mental health treatment facilities and (2) geographically linked data on needs for mental health services in the general population. Although there is no comprehensive list of mental health treatment facilities, we identified three sources that list large numbers of these facilities. Two of the sources are provider directories, compiled to assist individuals in finding care. The third is an administrative licensure database. As we describe further in this chapter, we combined information from these three databases to create a more comprehensive database than has previously been available. Because the databases include the locations of the facilities, they can be mapped at any level of geography that would be useful for decisionmaking purposes. Additional data on facility characteristics were drawn from a fourth source, the Patient Characteristics Survey (PCS), which is conducted annually by the New York State OMH.

We used two kinds of data to characterize the population of NYC. First, data from the U.S. Census provide information on basic demographic characteristics, including income, which is used to define eligibility for Medicaid. Second, we used data from the 2019 CHS to characterize the level of unmet need for treatment. However, because of limitations of sample size, the CHS data cannot be examined within small geographic areas. We describe each of these data sources in greater detail in the following sections.

Data Sources

Data on Mental Health Facilities

The facility data set we used was compiled from three provider directories: the Behavioral Health Treatment Services Locator, maintained by SAMHSA (SAMHSA, undated); NYC Well, maintained by Vibrant, an NYC contractor (NYC Well, undated); and the New York State Provider & Health Plan Look-Up, which is a database of state-licensed or -funded mental health facilities (New York State of Health, undated). The Behavioral Health Treatment Services Locator data are collected through the National Mental Health Services Survey, an annual survey on the location, organization, and structure of all mental health treatment facilities in the United States (SAMHSA, 2020a). The response rate to the survey is very high; in 2019, of the 14,013 eligible facilities, 91 percent completed the survey. In New York state specifically, the response rate was 95.1 percent (SAMHSA, 2020a). Facilities reflected in the survey include community mental health centers, outpatient mental health clinics, psychiatric hospitals and psychiatric inpatient units of general hospitals, U.S. Department of Veterans Affairs medical centers, and

residential treatment centers. The survey excludes individual or small-group mental health practices that are not licensed or certified as mental health clinics or centers. The NYC Well data set lists locations that are licensed by or in contract with an NYC or New York state agency for services regarding mental health, substance use, developmental disabilities, or related social determinants (e.g., housing, immigration). The data are updated annually. The New York State Provider & Health Plan Look-Up database lists providers that offer mental health services for specific insurance plans.

We combined the databases by matching facilities using information on their names and addresses. Although the resulting database is more complete than any of the individual databases, there are some limitations. In particular, the combined database lists each facility at its primary address, although it might have more than one treatment site; therefore, we might miss sites where treatment is available. In addition, we do not have an independent source against which to assess the completeness of the data sets, so we could be undercounting facilities. If facilities in certain areas of the city or with certain characteristics are less likely to be included in the provider directories, our results regarding the distribution of services could be affected. It is reasonable to assume that our data on facilities that are licensed by OMH are more complete and more accurate than data on other types of facilities.

Each of the three databases is made up of a different set of information on facility characteristics. If a facility reported accepting Medicaid as a form of payment in any of the three databases, we reported it as a facility that accepts Medicaid as a form of payment. Similarly, if a facility reported offering telehealth services or Spanish-language services in either the Behavioral Health Treatment Services Locator or the NYC Well data set, we reported it as a facility offering such services. There was no information on telehealth services or Spanish-language services in the New York State Provider & Health Plan Look-Up database.

For purposes of mapping facilities, we aggregated the data within Neighborhood Tabulation Areas (NTAs), which are frequently used for planning purposes within NYC government and are defined by aggregations of census tracts that roughly correspond to commonly recognized neighborhoods. The average population of an NTA is about 45,000 people. NTA boundaries are defined by the NYC Department of City Planning.

New York State Office of Mental Health Patient Characteristics Survey

Every other year, the New York State OMH administers the PCS, which is a census of people who use public mental health facilities across the state. The survey covers all facilities that are licensed, operated, or funded by OMH, including outpatient, inpatient, and residential treatment facilities. The facilities provide information about every person to whom they provide a service during a specified one-week period. These are the only client-level data on public mental health services in New York state. For this research study, the RAND team obtained a restricted-use data set covering all facilities in the New York City region for the most-recent PCS survey for which data are available, which was conducted in 2019. The restricted-use data include

information on the number of clients at specific programs and are broken down by client demographic characteristics (e.g., age, race/ethnicity, whether the individual identifies as LGBTQ), source of payment (e.g., Medicaid), and other characteristics (e.g., co-occurring disorders).

New York City Community Health Survey

NYC's CHS is a telephone survey of a representative sample of NYC adults (ages 18 and older) that is conducted annually by the City. The CHS collects information on mental health status and mental health treatment use that can be used to examine the distribution of unmet need for treatment across the city. Identifying areas with high levels of unmet need can help city planners and leaders prioritize areas for expansion of services. The RAND team obtained access to the 2019 CHS for the purposes of this report. In 2019, the CHS sample size was 8,803, the response rate was 7.2 percent, and the cooperation rate was 79.6 percent. Analyses were conducted using Stata survey procedures and analysis weights generated by the City. (Stata is a software package used for data analysis.)

In the 2019 CHS, mental health status was measured using the Kessler-6 (K6), a standard measure of serious psychological distress (Kessler et al., 2003). The K6 has been calibrated to identify clinically significant mental health conditions; thus, it is an appropriate indicator of the need for mental health treatment. Using standard cut points, individuals with scores above 12 on the K6 were classified as being distressed in the past 30 days. The CHS also asks whether the respondent received counseling or prescription medication for a mental health problem in the past 12 months. Respondents indicating either of these services were considered to be past-year users of mental health services.

Although our other data sources are linked to specific locations, such as facility addresses, the CHS data are limited by survey sample size. The sample size becomes too small to produce reliable estimates in small areas of the city. The smallest geographic unit for which a single year of CHS data can provide aggregate information is at the level of United Hospital Fund (UHF) neighborhoods. The UHF neighborhoods are 42 areas of NYC defined by aggregating zip codes that are used by city government and others to analyze health and health care. The UHF neighborhoods are larger than the NTAs used in other analyses in this report.

We provide more information about the CHS data and the characteristics of individuals accessing care in NYC in Appendix B.

The Distribution of Mental Health Facilities Across New York City Neighborhood Tabulation Areas

In total, we identified 1,724 mental health treatment facilities in NYC. The facilities were unevenly distributed across boroughs. As shown in Figure 4.1, Manhattan, which has about 19 percent of NYC's population, has about 28 percent of the city's mental health facilities. The

Bronx, which has about 17 percent of NYC's population, also has a larger percentage of the city's mental health facilities (22 percent). In contrast, in Brooklyn and Queens, the percentage of mental health facilities is lower than the borough's percentage of the city's population. Interpretation of these results should consider that facilities vary in size, so the number of facilities might not reflect the capacity to provide treatment.

35% 31% 28% 30% 27% 25% 25% 22% 19% 19% 20% 17% 15% 10% 6% 6% 5% 0% **Bronx** Brooklyn Manhattan Queens Staten Island ■ Population ■ Facilities

Figure 4.1. Percentages of New York City Population and Mental Health Facilities Across the Five Boroughs

SOURCES: New York City Department of City Planning, 2021; U.S. Census Bureau, 2019; and data compiled by the RAND team. NOTE: *N* = 1,724.

To examine the geographic distribution of facilities, we mapped their locations across NTAs. With address information, we could have used smaller geographic units, such as census tracts, but we found the NTAs to be most interpretable to a map reader. We found that more than 75 percent of the 187 NTAs in NYC had at least one mental health treatment facility. NTAs that had at least one mental health treatment facility had, on average, 13.2 (standard deviation [SD] = 11.7) facilities. Figure 4.2 displays the distribution of facilities at the NTA level; darker shading indicates a higher number of facilities. A similar map created at the zip code level can be found in Figure A.1 in Appendix A. Figure 4.2 clearly reflects the concentration of facilities in Manhattan, and it identifies concentrations of facilities in the Bronx and around downtown Brooklyn. At the other end of the range, clusters of NTAs with few facilities are found in the North Bronx, Northeastern Queens, and sections of Queens bordering Brooklyn.

⁴ We exclude three NTAs from our sample: Riker's Island (BX98), Breezy Point (QN10), and Airport (QN98).

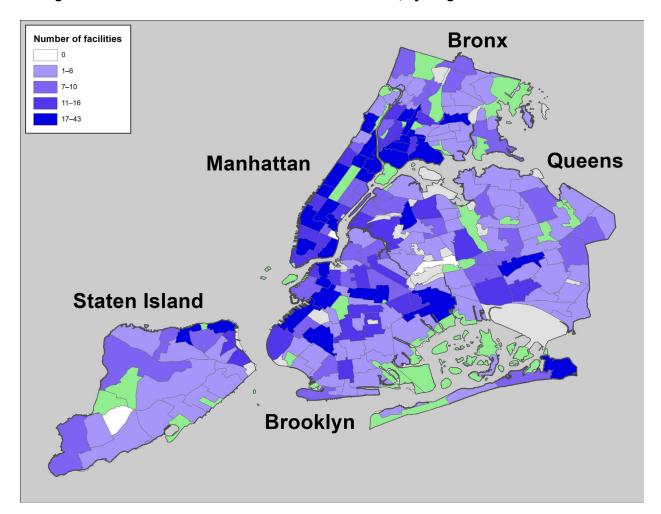


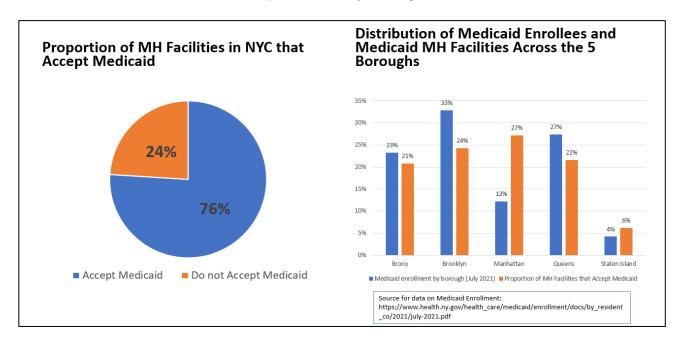
Figure 4.2. Number of Mental Health Treatment Facilities, by Neighborhood Tabulation Area

NOTES: Dark borders indicate boundaries between the five boroughs. NTAs shown in white have zero facilities, while NTAs shown in gray are excluded from the analysis. Areas shown in green are parks.

Facilities Accepting Medicaid

Approximately 76 percent of treatment facilities that we identified reported accepting Medicaid as a form of payment (Figure 4.3). The percentage of facilities that accept Medicaid ranged from 73 percent in Brooklyn to 82 percent in the Bronx. However, the distribution of these facilities across boroughs does not align with the distribution of Medicaid enrollees. Manhattan, which has 12 percent of the city's Medicaid enrollees, is home to 27 percent of the city's mental health facilities that accept Medicaid (Figure 4.3). In contrast, Brooklyn and Queens are home to smaller percentages of mental health facilities that accept Medicaid relative to the boroughs' shares of the Medicaid-enrolled population.

Figure 4.3. Percentages of New York City's Medicaid Enrollees and Mental Health Facilities That Accept Medicaid, by Borough



SOURCES: New York State Department of Health, 2021; and data compiled by the RAND team. NOTE: MH = mental health.

Approximately 29 percent of NTAs lacked a mental health treatment facility that accepted Medicaid as a form of payment (Figure 4.4). There were, on average, 9.9 (SD = 8.4) treatment facilities that accepted Medicaid as a form of payment in NTAs that had at least one facility accepting Medicaid as a form of payment. The areas with low numbers of facilities accepting Medicaid are similar to those identified in Figure 4.2 as having low numbers of total facilities. Figure 4.4 also highlights the NTAs that had the highest percentages of people insured by Medicaid (shown with yellow boundaries). In upper Manhattan and the Bronx, there were NTAs with high percentages of low-income residents and high numbers of mental health facilities that accept Medicaid. Some of the NTAs with the highest percentages of low-income residents had many mental health facilities that accept Medicaid. However, in some areas of Brooklyn and Queens, NTAs with high percentages of low-income residents had relatively few mental health facilities accepting Medicaid.

Figure 4.4. Number of Mental Health Treatment Facilities That Accept Medicaid, by Neighborhood
Tabulation Area

SOURCES: Medicaid coverage data are from the 2018 American Community Survey's five-year estimates (New York City Department of City Planning, 2021).

NOTES: Dark borders indicate boundaries between the five boroughs. NTAs with yellow borders are those in the top quartile of NTAs for the share of residents on Medicaid. NTAs shown in white have zero facilities, while NTAs shown in gray are excluded from the analysis.

Facilities Providing Services via Telehealth or in Spanish

The facility database allows us to examine the distribution of facilities with specific characteristics of interest, and in this section, we focus on facilities that offer services via telehealth and facilities that offer services in Spanish. Although telehealth services are, by definition, remote and thus less connected to specific geographic locations, there are important reasons to examine its geographic availability. Most people who receive telehealth treatment also receive in-person treatment, and these hybrid patterns of care are likely to continue. Furthermore, the continuing importance of in-person care was emphasized by the patients we interviewed. Thus, although telehealth might reduce the importance of geographic proximity, the local

availability of services that provide telehealth will remain important for accessibility of services in the future. Services in Spanish are important for providing care to the large numbers of people in NYC who speak Spanish and have limited proficiency in English. In addition, facilities that provide services in Spanish are more likely to be culturally welcoming to Hispanic patients, regardless of their language skills.

Information on whether facilities provide services via telehealth and/or services in Spanish is available in both the Behavioral Health Treatment Services Locator and NYC Well databases. Among the facilities listed in these databases, 65 percent offered telehealth services, and the distribution did not vary meaningfully across boroughs. Approximately 34 percent of NTAs in the city lacked a facility that offered telehealth (Figure 4.5). On average, an NTA that had a treatment facility that offered telehealth had 5.6 (SD = 4.5) facilities that offered the service.

Number of facilities providing telehealth

0
1-2
3-4
6-7
0-26
Top quartile of share of population of Medicaid recipients

Manhattan

Queens

Bronx

Page 19-26
Brooklyn

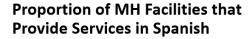
Figure 4.5. Number of Mental Health Treatment Facilities That Offer Telehealth, by Neighborhood Tabulation Area

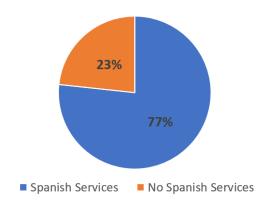
SOURCES: Medicaid coverage data are from the 2018 American Community Survey's five-year estimates (New York City Department of City Planning, 2021).

NOTES: Dark borders indicate boundaries between the five boroughs. NTAs with yellow borders are those in the top quartile of NTAs for the share of those enrolled in Medicaid (i.e., those with income at or below 138 percent of the federal poverty level). NTAs shown in white have zero facilities, while NTAs shown in gray are excluded from the analysis.

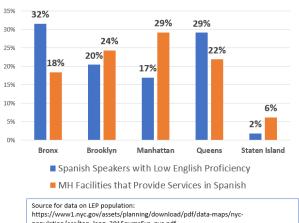
More than three-quarters of the facilities in the databases indicated that they provide mental health services in Spanish (Figure 4.6). The percentages ranged from 68 percent of facilities in Staten Island to 80 percent of facilities in the Bronx. Figure 4.6 compares the distribution of NYC residents who speak Spanish and have low English proficiency (i.e., those who reported speaking English "not well" or "not at all") with the distribution of facilities offering services in Spanish across boroughs. Relative to the percentage of potential users of Spanish-language services, there was a higher percentage of facilities offering these services in Manhattan and a lower percentage offering these services in the Bronx and Queens.

Figure 4.6. Percentages of New York City's Spanish Speakers with Low English Proficiency and Mental Health Facilities Providing Services in Spanish, by Borough





Spanish Speakers and MH Facilities with Services in Spanish by Borough



https://www1.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/acs/top_lang_2015pums5yr_nyc.pdf

SOURCES: Data are from New York City Department of City Planning, 2017. NOTE: MH = mental health.

About 34 percent of NTAs lacked a facility that offered mental health services in Spanish. NTAs with a facility that offered mental health services in Spanish had, on average, 6.6 (SD = 5.5) facilities (Figure 4.7). NTAs with high percentages of Spanish speakers are highlighted with yellow boundaries in the figure. NTAs with high percentages of Spanish speakers and low numbers of mental health facilities that offer services in Spanish can be found in Brooklyn, in the South Bronx, and in northern areas of Queens.

Figure 4.7. Number of Mental Health Treatment Facilities That Offer Mental Health Services in Spanish, by Neighborhood Tabulation Area

SOURCES: Language data are from the 2018 American Community Survey's five-year estimates (New York City Department of City Planning, 2017).

NOTES: Dark borders indicate boundaries between the five boroughs. NTAs with yellow boundaries are in the top quartile of NTAs for the share of residents aged 18 or older who speak Spanish and report speaking English "not well" or "not at all." NTAs shown in white have zero facilities, while NTAs shown in gray are excluded from the analysis.

Distance to Facilities

We also can identify areas with a lack of nearby mental health facilities by calculating travel time—that is, the amount of walking time that residents need to travel to receive care in person. We calculated walking times from the center of each NTA to the nearest treatment facility using a publicly accessible Google Maps application programming interface (API). The measure of walking distance might be inaccurate in the context of dense urban areas, but differences in walking times across areas are good indicators of differences in accessibility. Reflecting the density of NYC, walking times from an NTA to a treatment facility were relatively short. Across NTAs, the mean walking time to a treatment facility was 7.1 (SD = 6.2) minutes. More

importantly, there was substantial variation across boroughs. For example, in Manhattan, the travel time was 2.5 (SD = 1.8) minutes. In the other boroughs, travel times were longer. In Staten Island, the mean walking time was 14.3 minutes (SD = 11.8). In the Bronx (mean = 5.5, SD = 4.3 minutes), Brooklyn (mean = 6.6, SD = 3.8 minutes), and Queens (mean = 8.5, SD = 5.4 minutes), travel times were all under 10 minutes but were greater than Manhattan's travel time.

Community Health Survey Data

Of the total NYC population, 17.3 percent of people used mental health services in the past year as of 2019, but this proportion varied across the boroughs, as shown in Figure 4.8. Use of services was higher in Manhattan and Staten Island than in the other three boroughs.

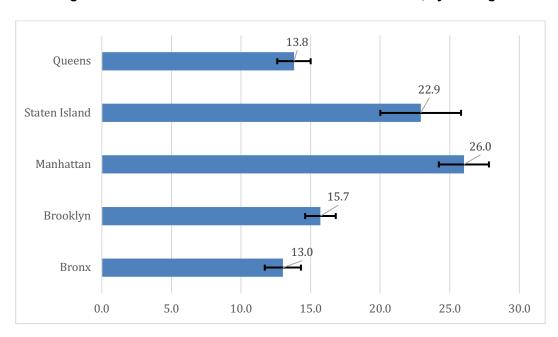


Figure 4.8. Use of Mental Health Services in the Past Year, by Borough

NOTE: Data are from the 2019 CHS (DOHMH, undated-a). *Mental health services* include counseling or medication for a mental health condition. N = 8,803.

There were also differences as reported by UHF neighborhood. We show these differences with a heat map in Figure 4.9. The highest rates of counseling or medication were found in Central Harlem (32.8 percent), Downtown-Heights-Slope (29.5 percent), Upper-East Side (28.2 percent), Chelsea-Village (27.1 percent), and Washington Heights (25.8 percent). The lowest rates were in Southeast Queens (6.5 percent), Rockaway (8.2 percent), Jamaica (8.3 percent), Northeast (NE) Bronx (9.3 percent), and Flushing (9.3 percent). Most of the lowest-rate UHFs were concentrated in Queens, while the highest-rate UHFs were mostly in Manhattan. The estimates for Central Harlem and Southeast Queens are unreliable, according to guidance from

DOHMH. No statistical significance testing was conducted to check for differences between groups.

Percentage of individuals receiving mental Washington health care (counseling or medication) 6.5-10.3 NE 10.4-17.4 Fordham Central 17.5-23.0 Harlem 23.1-32.9 Upper Little Neck Chelsea Village Union Square Flushing Lower Manhattan Downtown Queens Heights - Slope Ridgewood Upper E Southeast Gramer Bed Stuy East New - Crown Heights Park Borough Northern ensonhurst Coney Island

Figure 4.9. Percentage of Individuals Receiving Mental Health Services via Counseling or Medication, by United Hospital Fund Neighborhood

SOURCES: Data used in this figure are restricted-use CHS data from DOHMH, accessed October 2021. NOTES: Dark borders indicate boundaries between the five boroughs. UHFs shown in gray are those for which data were unavailable. The following seven UHF neighborhoods are flagged as unreliable: East New York, Sunset Park, Central Harlem, Upper West Side, Flushing, Bayside-Little Neck/Fresh Meadows, and Southeast Queens.

Patient Characteristics Survey Data

The PCS data contain information on mental health treatment for 125 NTAs in NYC. Within NTAs that had PCS data, we found that the average number of clients was 644.0 (SD = 681.8). The distribution of clients across NTAs is shown in Table 4.1. The majority of clients receiving mental health treatment were over the age of 17 but below the age of 65. There was close to an even distribution of clients by sex. The majority of clients were nonwhite, and around one-third

were Hispanic. Relatively few clients were non–English-speaking and/or LGBTQ. We found that more than half of clients were Medicaid recipients. The vast majority of clients (93.1 percent) met the New York state criteria for a serious mental illness or serious emotional disturbance, which require a psychiatric diagnosis and evidence of significant functional impairment (New York State Office of Mental Health, undated-b). Relatively few clients had alcohol or substance use disorder.

We found that NTAs with the highest mean number of clients were within the Bronx (805.6, SD = 913.8). There was some geographic variability in the total number of clients, with fewer clients found in Brooklyn (mean = 765.2, SD = 691.7), Manhattan (mean = 590.2, SD = 559.0), Queens (mean = 524.9, SD = 670.9), and Staten Island (mean = 409.5, SD = 308.5). Variation at the NTA level per 10,000 population is shown in Figure 4.10. From the figure, it is clear that the largest concentration of NTAs with low rates of usage of the mental health system are in Queens. A similar figure restricted to clients who are insured by Medicaid can be found in Figure A.6 in Appendix A.

Table 4.1. Number and Characteristics of Clients in Neighborhood Tabulation Areas

Characteristics	Percentage	Mean	Standard Deviation
Age			
Child (aged 1–17)	23.2	149	228
Adult (aged 18–64)	66.9	431	449
Elderly adults (aged 65 and older)	9.9	64	81
Sex			
Male	46.9	302	309
Female	53.1	342	380
Race/ethnicity			
Minority	66.9	431	542
Hispanic	36.6	236	288
Language spoken			
Non–English-speaking	14.8	96	134
LGBTQ status			
Transgender	1.7	11	15
Lesbian, gay, homosexual, bisexual, or other	9.0	58	69
Insurance			
Medicaid recipient	78.8	508	572
Condition			
Serious mental illness or serious emotional disturbance	93.1	600	644
Alcohol or substance use disorder	16.7	107	126
Criminal justice system involvement			
Criminal or juvenile justice status	4.9	32	43
Substance use			
Received treatment, counseling, or medication for alcohol use in the past 12 months	7.7	50	77
Received treatment, counseling, or medication for opioid use in the past 12 months	4.7	30	72
Received treatment, counseling, or medication for any other drug or substance use in the past 12 months	8.5	55	78

Individuals receiving care per 10,000

1-49

1-49

147-5,700

Manhattan

Queens

Brooklyn

Figure 4.10. Number of Individuals Receiving Mental Health Services per Capita, by Neighborhood
Tabulation Area

SOURCES: Data are restricted-use PCS data from New York State Office of Mental Health, 2019. NOTES: Dark borders indicate boundaries between the five boroughs. UHFs shown in gray are those for which data were unavailable. Calculations were done per 10,000 population of the NTA as provided by the five-year American Community Survey estimates (New York City Department of City Planning, 2017).

Summary

Using existing data sources, the RAND team was able to compile a more comprehensive data set of mental health treatment facilities than has previously been available. These data can be useful to NYC policymakers by enabling the identification of areas of the city that face geographic barriers to access to mental health care. The figures shown in this chapter reflect locations where care can be accessed, which provides important—but limited—information because access also might depend on the availability of appointments and the particular treatments a person is seeking. The data show that there is wide variability in the availability of services, utilization of services, and the total capacity of services. The city could build on this

work and create more-useful tools through more-extensive categorizing of facilities by criteria, external validation of location data, and automated systems for updating facility information.

5. Conclusions: Strategies for Improvement to the Mental Health System in New York City

In this report, we examine barriers to expanding the availability and accessibility of mental health services in NYC from several perspectives. In our key informant interviews, we spoke with a diverse group of people with experience working in the mental health system providing care or administering services, people in allied sectors of government, and policy experts. In these interviews, interviewees consistently identified two barriers: workforce shortages and a lack of integration across service settings. These themes were reflected in interviews with patients, where we heard about challenges accessing care because of a limited supply of treatment and a lack of coordination between providers. Patients also described barriers that they experienced in their families and communities, sometimes for many years prior to successfully accessing care. Patients described difficulties finding providers that they feel provide quality care that meets their needs. According to both key informants and patients, these challenges have intensified during the pandemic, when a shrinking workforce is being asked to meet increasing levels of need. Telehealth, which expanded dramatically during the pandemic, promises some benefits for increasing the capacity of the system to provide care, but concerns that the quality of care delivered via telehealth is poorer than that delivered in person remained among both key informants and patients.

In addition to conducting the qualitative interviews, we also examined the potential to use existing data on the location and characteristics of mental health treatment facilities to analyze the geographic distribution of services across the city. We combined information from multiple sources into a single data set containing the addresses and key service characteristics of more than 1,700 treatment facility locations. Mapping these facilities provides a way to identify areas of the city that lack easily accessible mental health treatment. Across several categories of facilities, areas in the Bronx and Queens emerged as having relatively few nearby treatment facilities. The data set compiled for this project has limitations, which we discuss next, but it provides a foundation for future efforts by the city to guide mental health policy based on empirical analysis of the distribution of treatment facilities.

Limitations

Our findings and recommendations should be understood in the context of several limitations of the project. The samples of interview respondents—the key informants and the patients—for this project were not representative. In qualitative studies in which a small number of individuals are interviewed in depth, it is not possible to ensure that all important perspectives are included. The completeness of qualitative studies is often assessed by the extent to which new information

continues to arise in interviews. In our interviews with key informants, the issues of workforce shortages and integration were highly consistent, indicating broadly shared concerns. Interviews with patients were more varied, and the small sample size should be kept in mind in considering the findings. Additional patient interviews were not possible because of constraints of the project timeline.

Interpretation of the patient interviews also should take into consideration the fact that the patient sample was recruited from a small number of facilities. The RAND team was prepared to conduct interviews in Spanish and English, although none of our respondents chose to conduct their interviews in Spanish. In addition, because we did not include respondents who had sought but had not received care, our sample might underestimate the significance of barriers to care.

Limitations of the facility data also should be considered. First, the database does not include information on many office-based clinicians who do not receive Medicaid reimbursement. As mentioned earlier, there are many mental health treatment providers who operate on a self-pay basis and do not register with the federal or city treatment registries. Second, the database focuses on specialty mental health providers and does not include nonspecialty settings where mental health treatment is provided, such as primary care offices and nonpsychiatric units of hospitals. The database also might include locations where mental health providers are positioned within nonmedical service settings to provide mental health services and/or refer patients to specialty care. We did not verify that all locations in the database provide mental health treatment. Therefore, our estimates of geographic accessibility and availability could be overestimates. Third, the database identifies the locations (i.e., addresses) of mental health treatment facilities but does not identify individual treatment programs that might be listed with the same address. Although addressing these limitations was not possible within the timeline of this project, the city could address these gaps by building on the current database.

Finally, both the survey data and the data on the use of public mental health services are from 2019, prior to the COVID-19 pandemic. The likelihood that patterns of service use have changed since early 2020 should be considered in interpreting those results.

Recommendations

Address Workforce Issues

Stakeholder and patient informants described long-standing workforce shortages that have been exacerbated by an increased demand for services and a decreased supply of workers during the pandemic. The workforce shortage in mental health care has been an issue for several years and across the country. For example, a 2016 report from the Heath Resource and Services Administration projected shortages across most categories of mental health clinicians (Health Resources and Services Administration and National Center for Health Workforce Analysis, 2016). A recent study of the behavioral health clinician workforce in Philadelphia identified

many of the same challenges related to the pandemic that our informants reported in NYC (Last et al., 2021). Indeed, labor force participation has decreased across the U.S. economy as a whole, and there is no consensus among experts regarding when participation might return to prepandemic levels (Kochhar and Bennett, 2021). As some of our informants pointed out, the shortage of behavioral health clinicians in the public sector is, in part, because clinicians have the option to practice without accepting public or even commercial insurance payment (Olfson, 2016). Solutions should focus on increasing the number of mental health clinicians and making public-sector practice more attractive.

There are several methods that the city could use to make work in public-sector mental health more financially attractive that would be likely to have a positive impact. First, there is evidence that loan repayment programs, which offer loan repayment in exchange for a commitment to work in a designated underserved area for a specified length of time, have been effective in encouraging clinicians not only to work in underserved areas but also to stay in those areas once their period of service is complete. The city might be able to address a limitation of the National Health Service Corps loan repayment program by allowing participation of noncitizens (Olfson, 2016).

A more direct impact could be had by improving working conditions in publicly funded mental health services. Along with increased salaries, greater work flexibility (including workfrom-home options), and more benefits (including child care) have been discussed in the literature as ways to address workforce shortage. One approach to achieving this goal is by increasing reimbursement, particularly through Medicaid, which is beyond the scope of city policymakers. To the extent that advocating for higher Medicaid reimbursement for mental health care is possible for the city, it should be a priority. We discuss financing models that might make this possible next. However, the city does have a direct impact on employment conditions in the services it purchases through contracts with providers.

NYC should not expect large increases in the capacity of the mental health system to result solely from efforts to increase the number of people in the mental health care workforce. Increases in capacity are more likely to come through increases in the efficiency of the current workforce. Strategies that increase efficiency include greater use of care managers to reduce noshows to clinic appointments and to improve treatment follow-up; task-shifting (i.e., enabling care to be provided by nonclinical community-based service providers); and the deployment of technology, including telehealth and internet-based communication (Raney et al., 2017). The Connections to Care program, which was developed and tested in NYC, has shown promise by training nonclinicians in community-based organizations to identify clinical needs and promote engagement in mental health services (Dunbar et al., 2017). Task-shifting strategies that focus on clinical treatment, such as the treatment of depression, and were developed for low- and middle-income country settings, have shown some promise (Matsuzaka et al., 2017) but have not yet been tested in high-income countries. Finally, peer-support models have a growing evidence base

for their effectiveness (Gaiser et al., 2021). New models of care teams that involve peers could play a larger role as the number of peers trained to provide care increases.

Continue Developing Data-Driven Methods to Identify Underserved Areas

Our mapping of mental health facilities identified areas of the city that lack local access to care. The findings generally confirm the hypothesis that areas of the city with large low-income populations have fewer facilities. These findings can help the City identify areas where the development of new facilities should be prioritized. More importantly, compiling the facility database and mapping the facilities provides the city with a policy tool that can be used to assess, monitor, and manage mental health services. With the ability to see the distribution of services, city policymakers will be better able to make policies that expand access to care. We offer several recommendations for how the city can build on the work done for this project in the following sections.

Improve Facility and Treatment Capacity–Monitoring Data System Using Federal, State, and City Data

The safety net of outpatient mental health services in NYC is composed of a large number of small providers, many of which are nonprofit community-based social services organizations. Having a comprehensive view of where these organizations are located and what services they offer could greatly enhance the City's ability to monitor and improve access to and availability of services. The data set compiled for this project provides an initial step in this direction, and it could be enhanced with additional investment of effort. The current data set is organized around the locations of treatment facilities. It is important to know the locations of facilities to assess how far a resident would need to go from their home to the closest place where mental health treatment is provided. However, the city could benefit from using more of the information that is currently available, collecting additional data, and merging the data with other existing data sets. We recommend four next steps in the development of data systems for mapping and monitoring mental health services.

Characterize treatment facilities using additional information that is currently available. Additional information on the languages in which services are provided, the use of telehealth, age groups seen (e.g., children and/or people over 65), hours of operation, evidence-based services provided, and licensure would enhance the usability of the current data tool. A system for categorizing licensed mental health providers has been developed by the Coalition for Behavioral Health, a network of NYC behavioral health providers (Coalition for Behavioral Health, undated).

Include data on school-based mental health services. The current database includes a small number of school-based mental health clinics. Including these data could expand the database to cover services for children in the public school system.

Collect additional data from facilities. The city could collect additional information that is not available in publicly accessible databases on treatment facilities and incorporate that information into the mapping tool. In particular, information on facility staffing, satellite locations, the availability of primary care services or referrals, and affiliated social service agencies could be valuable. Because this data-collection effort would require significant resources, the city might want to focus on a subset of key facilities, such as OMH-licensed outpatient mental health clinics. Collecting data would enable more—up-to-date information on facility capacity than is currently available from the PCS, which is conducted every other year.

Explore the use of additional data sets. Some data on mental health facilities were not available to the RAND team because of limits on public use or the time required to gain access. The city should explore whether additional sources of Medicaid claims data, financial reporting data collected through the Consolidated Fiscal Reporting System, or other data collected and analyzed by the Department of City Planning could contribute to monitoring mental health treatment facilities.

Use Data to Support Public-Private Partnerships for Facility Planning

One of the most-challenging aspects of the mental health system in NYC is that the safety net of outpatient mental health care, which provides care to Medicaid enrollees and the uninsured, comprises a large and diverse set of community-based organizations. These organizations cannot be directly managed by the city to address its public health goals. This limits the city's ability to integrate care and to direct care to underserved populations. However, as evidenced in our interviews, the community-based organizations and the city are broadly aligned on goals for addressing mental health needs in the population, although they operate under different organizational constraints. Engaging these organizations in policy planning and implementation, although it is challenging, should be a priority.

The city already partners and collaborates extensively with community-based organizations through contracting and community advisory boards, such as the Community Services Board and the Human Services Council. The ThriveNYC mental health initiative built on and strengthened many of these connections (NYC.gov, undated). Convening these groups to review data on the system, identify gaps in services, and develop policy priorities could provide some coordination to an otherwise uncoordinated system of individual agencies. For instance, one strategy that the city could take would be to identify a "front line" group of robust outpatient mental health service providers that meet a specified scope of services, building on the model established by the CCBHC demonstration program. The criteria could include basic outpatient psychiatric services in addition to care coordination, links to an array of social services, culturally appropriate services, management of physical health conditions, and timely access to an initial evaluation. These clinics would receive some preferential treatment with respect to referrals and financial support from the city in exchange for agreements to treat all patients, without regard to

their ability to pay. Attention could be paid to achieving an equitable geographic distribution when selecting the clinics.

Define High-Need Areas

The Department of City Planning uses data from the CHS to identify areas of high unmet need for mental health services. The current approach is to calculate the percentage of people in each neighborhood who have a need for mental health care but have not received treatment in the past year. Need for mental health care is assessed with a standard screening instrument. The neighborhoods can be ranked from those with the lowest to the highest level of unmet need. A strength of this approach is that it is based on a consistent measurement of mental health need and service use. However, it has two limitations. First, the measure of unmet need includes information on the total population, but policymakers are interested in specific subgroups that are the focus of city policy, such as the uninsured, Medicaid enrollees, and underserved racial and ethnic groups. Second, the measure is not connected to a local measure of treatment capacity. Information on local treatment capacity is needed to target geographic barriers to care.

The unmet-need measure could be extended by focusing specifically on the Medicaid-eligible and uninsured populations and incorporating information on geographic proximity to services. Defining a measure of neighborhood-level need based on the Medicaid-eligible population would enable NYC policymakers to focus on low-income residents who have limited access to health care. Moreover, the Medicaid-eligible population can be characterized using information on income from the U.S. Census; that is, the percentage or number of people in each neighborhood with incomes below the Medicaid-eligibility threshold can be easily determined. The number of facilities that accept Medicaid and their clinical capacity also can be calculated using data collected by OMH. A limitation of this approach is that, because of small sample sizes, it might be difficult to use survey data on the need for mental health care that are specific to the low-income population within neighborhoods.

Develop a Telehealth Strategy

During the pandemic, when in-person care was limited, telehealth was expanded rapidly and dramatically throughout the health care system. The early changes were enabled by regulatory decisions at the federal level, such as the loosening of restrictions on reimbursement for telehealth visits (Haque, 2021). Although the expansion of telehealth was initially motivated by the pandemic and enabled by emergency regulatory decisions, the experience of telehealth is likely to have a lasting impact on the health care system. Moreover, the impact of telehealth might be larger in mental health than in other areas of medicine. For instance, a study conducted at the end of 2020 found that, while the use of telehealth declined from its peak early in the pandemic as in-person care became safer, it remained higher in mental health care than in any other area of medicine (Mehrotra et al., 2021). Indeed, some regulatory changes promoting the use of telehealth have been made permanent, although many areas of policy with potential

impacts on the postpandemic health care system remain undecided. Telehealth is an important strategy not only for expanding access to care but also for improving the efficiency of clinical care (Chakrabarti, 2019).

Our respondents pointed out both positive and negative aspects of telehealth that should be considered as new policies and practices are developed. Clinic and health system representatives highlighted the critical role that telehealth served as a lifeline to care during the initial months of the pandemic, when many patients and clinicians were unable or unwilling to come to in-person visits. Not only did telehealth provide an alternative to in person-visits, it also enabled clinics to allow staff greater flexibility with respect to when and where they worked, which helped with hiring and retention. Clinics also saw reductions in no-show rates, which increased the number of patients they saw while helping them financially. Patients appreciated the convenience that telehealth offered them, reducing their need to travel to receive services. However, the positive impacts of telehealth on the efficiency and accessibility of services should be balanced against perceptions—voiced by both key informants who are providers or from provider agencies and patients—that the quality suffers when care is provided through telehealth. The population receiving care in the public mental health system also is likely to face other barriers to telehealth access, such as lack of access to a smartphone, computer, internet connection, or private space from which to have a telehealth visit (Tse et al., 2021). They also might have stronger preferences for in-person care (Predmore et al., 2021). The need to balance the potential benefits of telehealth against potential losses in quality of care also has been a theme in the clinical literature (Reeves, Ayers, and Longhurst, 2021).

It is important to recognize that the city is not in a position to create policies that directly influence the use of telehealth. The most-influential policy decisions that will affect the use of telehealth in the post-pandemic health care system will be made at the state and federal levels. These decisions will determine what kinds of clinicians can use telehealth, the types of services for which telehealth can be used, and, importantly, the levels of reimbursement for services provided by telehealth (Shachar, Engel, and Elwyn, 2020). However, the city can play a role in shaping the use of telehealth in public mental health services through collaborating with New York state agencies on policy development and disseminating information about regulatory changes and new clinical models to community-based providers. At the state level, NYC policymakers could contribute to the development of telehealth policies, including Medicaid reimbursement strategies, licensing requirements, and quality measure development and monitoring.

The dissemination of new models of care to the provider community likely will become more important as innovation driven by the rapid uptake of telehealth continues. Procedures that were developed in the emergency conditions of the pandemic are likely to be replaced by evidence-based models of care that combine in-person and telehealth services in different ways (Childs et al., 2020). For instance, clinical teams might be able to risk-stratify their caseloads, providing relatively quick check-ups via video or phone with stable patients while reserving time for in-

person visits with patients who have more-acute needs. Community-based providers could benefit from access to staff training in best practices in telehealth and shared information and experience on new and emerging models of hybrid, in-person, and telehealth models. The city could directly support these efforts through grants to clinics to cover costs for staff training and/or internet technology. The city also could provide direct support to patients to cover costs for devices that could be used to access care remotely. A program in the Veterans Affairs system, where patients were provided with tablets through which they could access care, resulted in high patient satisfaction (Slightam et al., 2020).

Continue to Develop Information Systems

The city should have a long-term strategy for integrating information systems to guide programmatic policy and support clinical decisionmaking. Informants inside and outside city government stressed the potential benefits of improving information systems to make better use of existing data. The city already has made important advances in this area, including the development of the Worker Connect system, which provides access to case file data for social workers, and the Unite NYC Network, which was launched during the pandemic to connect city and community-based service agencies. However, neither of these systems were mentioned by any of our informants, so we are not able to comment on the extent to which they have been taken up by mental health treatment facilities. One information system that was mentioned is a web-based app designed to provide real-time access to social services, but, according to our informants, the system was new and as yet unproven at the time of our interviews. A more unified system could address the desire expressed by one of our patient interviewees to have access to their own medical records when those records are spread across multiple providers.

A long-term strategy is needed to organize this wealth of data into usable systems that help providers in government agencies and in community-based organizations identify resources for the people they serve, make referrals, and improve continuity and coordination of care across systems. Progress toward this goal is likely to be incremental, but a strategic plan describing the goals for information systems can help engage stakeholders and focus technology development. Initial priorities could focus on links among existing city-funded services—within the city's public hospital system, NYC Health + Hospitals, and city agencies—and links between these city-funded services and community-based outpatient providers, including OMH-licensed clinics.

Work with the State Office of Mental Health and Department of Health on Medicaid Financing Strategies to Strengthen Mental Health Outpatient Services in New York City

Although it is not directly within the city's control, the city might be able to influence ongoing policy discussions at the state level regarding Medicaid payment reforms. One policy that received enthusiastic support from informants is the CCBHC demonstration project. The

CCBHC is a model comprehensive community mental health center financed through an innovative prospective payment system (Breslau et al., 2016). The CCBHCs must provide a broad scope of behavioral health services, including outpatient mental health and substance use treatment, as well as referrals to primary care. They are financed using a cost-based prospective payment system that provides clinics with higher revenue and greater flexibility to meet individual patient needs. Clinics receive a fixed payment for each day on which a patient receives services rather than a payment for each individual service provided. More details on New York state's CCBHC program are described in New York State Office of Mental Health, undated-a. In addition to the positive reports from our informants, the quality of care in CCBHCs has been high in the national demonstration, and the program has been well received by advocates and repeatedly expanded by Congress (Enos and Canady, 2021). Increasing the number of CCBHCs also could help address needs in the uninsured population because CCBHCs are required to provide services to all patients, regardless of their ability to pay. Because the financing model for the CCBHCs is cost-based, the clinics are able to sustainably increase salaries for staff, potentially addressing the workforce issues our informants described. Making this model permanent and increasing the number of CCBHCs in the city could strengthen the system of mental health care.

Other financial reforms—notably, value-based payment models—are also designed to promote integration of care and allow providers flexibility in covering social needs that, when unmet, lead to avoidable psychiatric crises, including hospital and jail stays. However, the application of these models to behavioral health care in New York state has been extremely limited to date. Given the role of the city government in providing hospital care and other intensive services, the city has a strong interest in supporting the development and testing of these models in the future. Increasing the percentage of mental health care providers who accept Medicaid is also an important strategy, although city policymakers cannot change Medicaid policies directly. Although these regulatory decisions lie outside the purview of city government, city officials can contribute to advocacy for policy changes that would lead to improvements to the system of mental health care in the city. The city could focus specifically on efforts to increase reimbursement for mental health care and reduce the administrative burden of participation in the Medicaid program, particularly for smaller providers.

Conclusion

The challenges that NYC faces in ensuring that all New Yorkers have access to mental health services are not unique to the city. Workforce shortages, poor geographic distribution of care, mental health stigma in the community, and fragmentation across the systems on which people with mental illness depend for support are national problems. In many respects, the chronic problems of capacity falling short of need have been exacerbated by the pandemic. On the basis of interviews with diverse stakeholders and patients and an exploration of available data on

treatment facilities, our findings suggest that the city can improve policymaking and clinical care by building data resources and information systems.

In this appendix, we provide supplemental maps of facilities by zip code (see Figures A.1–A.6). These figures complement those in Chapter 4. We also provide demographic information of patients we interviewed in Table A.1.

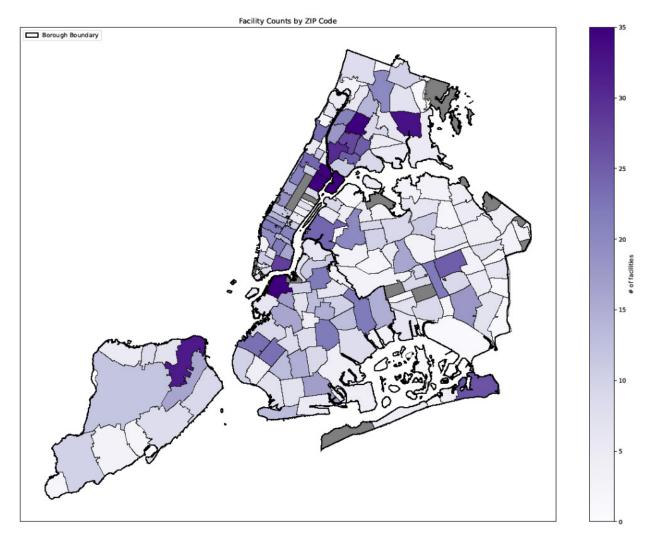
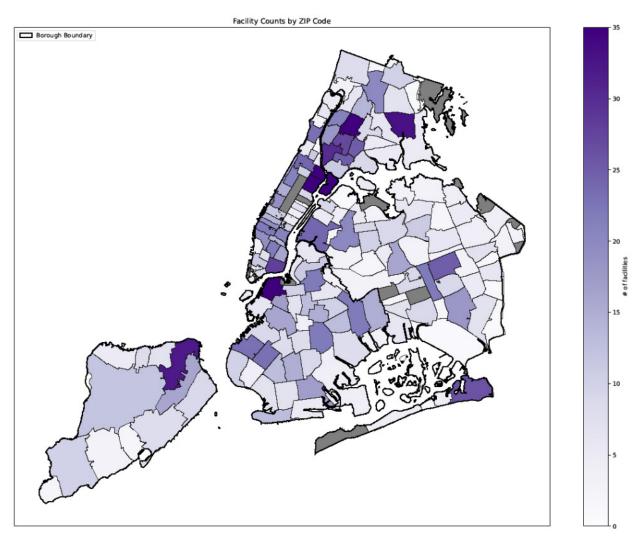


Figure A.1. Number of Mental Health Treatment Facilities, by Zip Code

NOTES: Dark borders indicate boundaries between the five boroughs. Zip codes shown in gray have zero facilities.

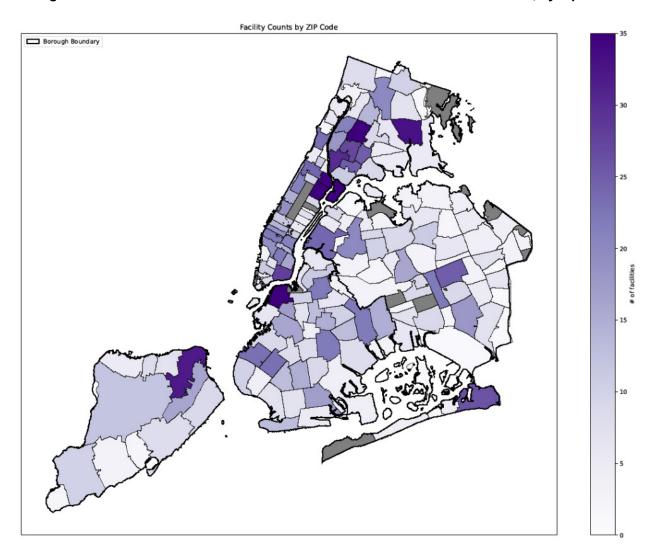
Figure A.2. Number of Mental Health Treatment Facilities That Accept Medicaid, by Zip Code



SOURCES: Medicaid coverage data are from the 2018 American Community Survey's five-year estimates (New York City Department of City Planning, 2021). Data on Medicaid-accepting facilities are from the American Community Survey's five-year estimates (New York City Department of City Planning, 2017).

NOTES: Dark borders indicate boundaries between the five boroughs. Zip codes with orange borders are those in the top quartile of zip codes for the share of those enrolled in Medicaid (i.e., those with income below 185 percent of the federal poverty level).

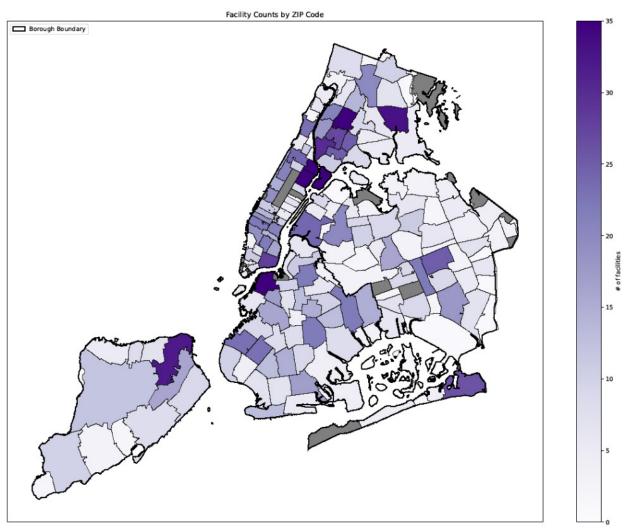
Figure A.3. Number of Mental Health Treatment Facilities That Offer Telehealth, by Zip Code



SOURCES: Medicaid coverage data are from the 2018 American Community Survey's five-year estimates (New York City Department of City Planning, 2021).

NOTES: Dark borders indicate boundaries between the five boroughs. Zip codes with orange borders are those in the top quartile of zip codes for share of low-income residents (i.e., those with income below 185 percent of the federal poverty level).

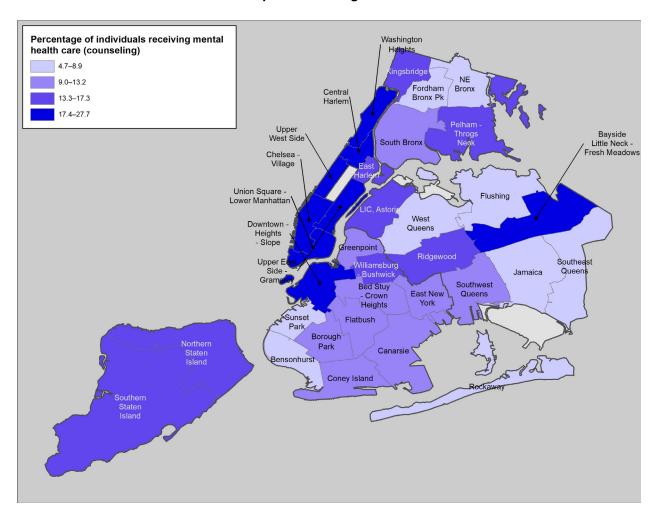
Figure A.4. Number of Mental Health Treatment Facilities That Offer Mental Health Services in Spanish, by Zip Code



SOURCES: Language data are from the 2018 American Community Survey's five-year estimates (New York City Department of City Planning, 2017).

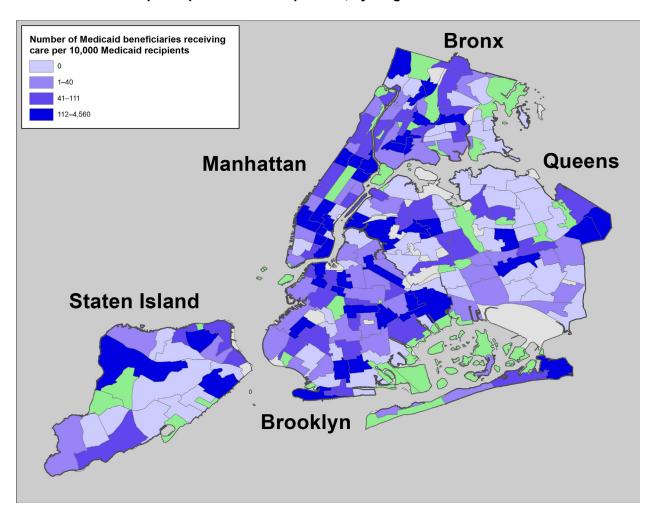
NOTES: Dark borders indicate boundaries between the five boroughs. Zip codes with orange borders are those in the top quartile of zip codes for share of residents aged 18 or older who speak Spanish and report speaking English "not well" or "not at all."

Figure A.5. Percentage of Individuals Receiving Mental Health Services via Counseling, by United Hospital Fund Neighborhood



SOURCES: Data used in this figure are restricted-use CHS data from DOHMH, accessed October 2021. NOTES: Dark borders indicate boundaries between the five boroughs. Gray UHFs do not contain data. The following seven UHF estimates are flagged as unreliable: 204, 205, 302, 304, 403, 404/406, and 409.

Figure A.6. Percentage of Individuals Receiving Medicaid Benefits and Receiving Mental Health Services per Capita/Medicaid Population, by Neighborhood Tabulation Area



SOURCES: Medicaid data are from the 2018 American Community Survey's five-year estimates (New York City Department of City Planning, 2017).

NOTES: Dark borders indicate boundaries between the five boroughs.

Table A.1. Demographics of Patients Interviewed

Demographic Characteristics	Total (Percentage)
Age range	
18–29	50
30–39	
40–49	5
50–59	15
> 60	5
N/A	20
Gender	
Male	35
Female	50
Nonbinary	15
Race/ethnicity	
Identified as a person of color	30
African American/Black	10
Hispanic	10
Asian	5
Multiracial	5
White	
Native American/Pacific Islander	
Unknown	35
Sexual orientation	
Identified as LGBTQ	35
Did not identify as LGBTQ	65
Location	
Bronx	30
Brooklyn	20
Manhattan	40
Queens	10
Staten Island	0
Length of time to access care or first appointment	
< 7 days	20
1–2 weeks	20
3–4 weeks	15
1–6 months	5
6 months to 1 year	0
> 1 year	5
Not stated	35
Length of time receiving care	
<1 year	15
1–2 years	20
2–5 years	5
5–10 years	15
10–20 years	25
> 20 years	15
Not stated	5

NOTE: Patient demographic information was self-reported during the intake and interview process. N = 20.

Appendix B. Characteristics of Users of Mental Health Services in New York City

Characteristics of People Who Use Any Mental Health Services in New York City

From the 2019 CHS, we calculated the share of individuals who received either counseling or pharmaceutical treatment for a mental health problem in the past 12 months and the share of individuals exhibiting psychological distress in the past 30 days. We found that approximately 17.3 percent of NYC residents received counseling or prescription medication for a mental health problem. There were differences by insurance status, with those insured by Medicare receiving care at the highest rate (18.8 percent, standard error [SE] = 1.6) followed by those with some other form of insurance (18.6 percent, SE = 3.5), those insured by Medicaid, (18.5 percent, SE = 1.3), those insured by private insurance (18.1 percent, SE = 1.0), and the uninsured (10.1 percent, SE = 1.6). Similarly, there were differences by the race/ethnicity of the individual. The highest rates of counseling or medication within the past 12 months were found for white individuals (25.3 percent, SE = 1.2). In contrast, the lowest rates of counseling or medication in the past 12 months were for non-Hispanic black individuals (11.2 percent, SE = 1.2) and non-Hispanic Asian individuals (10.2 percent, SE = 1.5). Hispanic individuals also had a lower rate of counseling or medication compared with white individuals (15.3 percent, SE = 1.2).

Around 57.8 percent (SE = 3.7) of individuals with mental distress in the past 30 days based on their K6 score received counseling or medication in the past 12 months. In contrast, only 15.0 percent (SE = 0.6) of those who did not suffer from distress in the past 30 days based on their K6 score received counseling or medication in the past 12 months. In this appendix, we present some demographic comparisons of the prevalence of mental health service use, but these comparisons should be interpreted with caution because of small sample sizes that, according to guidance from DOHMH, make the estimates potentially unreliable. The proportion of people with distress who received mental health services in the past 12 months was significantly higher among non-Hispanic white individuals (71 percent) than among non-Hispanic black individuals (36 percent). The prevalence did not differ significantly among non-Hispanic white individuals, non-Hispanic Asian individuals (57 percent), and Hispanic individuals (56 percent). The use of services did not differ significantly by type of insurance; the prevalence of service use was 55 percent among people with Medicaid, 62 percent among people with private insurance, and 70 percent among people with Medicare. Use of services by people with distress was significantly higher in Manhattan (69 percent) and Staten Island (71 percent) than in the Bronx (43 percent); estimates for Brooklyn (61 percent), or Queens (54 percent) did not differ significantly from

other boroughs. No statistical significance testing was conducted to check for differences between groups.

Characteristics of People Who Use Public Mental Health Services in New York City

Although the CHS data described in this report are from a survey that is representative of the population of NYC, the PCS provides a description of people who used mental health services in the public sector, meaning facilities that are either funded by or directly administered by the state OMH. In 2019, the most recent year for which PCS data were available, 94,407 New Yorkers were seen in the system during the one-week period that the survey was conducted (New York State Office of Mental Health, 2019). About two-thirds of the people seen were between the ages of 21 and 64 (65 percent), with about one-fourth (23 percent) below age 21, and just more than one-tenth above age 64 (Table B.1). About one-third (35 percent) of patients were Hispanic, and about one-third (35 percent) were black. These percentages are larger than the percentages of these groups in the total population of NYC, where 29 percent are Hispanic and 24 percent are black. White individuals constituted 29 percent of patients, while Asian individuals constituted 4 percent of patients. These percentages are smaller than the percentages of these groups in the total population of NYC, where 43 percent are white and 14 percent are Asian (U.S. Census Bureau, 2019). The data available did not allow us to disaggregate Hispanic ethnicity and racial identity. Of patients in the data set, 84 percent spoke English as their primary language. Spanish was the primary language for about 10 percent of patients, and the remaining patients had a wide variety of primary languages. According to 2019 U.S. Census data, 11 percent of the NYC population had limited English proficiency and spoke Spanish at home. Men and women were seen in nearly equal proportions—49 percent and 51 percent, respectively—which contrasts with patterns commonly observed in mental health service use, where more women than men are patients (New York City Department of City Planning, 2017). The percentage of patients in the data identifying as lesbian, gay, or bisexual was 7 percent, but this number should be interpreted with caution because no related information was available for more than 15 percent of patients.

Table B.1. Characteristics of Patients Treated in Public Mental Health Facilities in New York City, 2019

Characteristic	Percentage of Patients
Gender	
Male	49
Female	51
Age	
< 21	23
21 to 64	65
65+	12
Ethnicity	
Hispanic	35
Non-Hispanic	63
Racial groups	
White	29
Black	35
Asian	4
Multiracial	3
Other	24
Unknown	5
Primary language	
English	84
Spanish	10
Sexual orientation	
LGB	7
Non-LGB	77
Unknown	15

SOURCE: New York State Office of Mental Health, 2019.

NOTE: Some percentages might not sum exactly to 100 percent because of rounding. LGB = lesbian, gay, or bisexual. N = 97,407.

The vast majority (92 percent) of patients seen in the public mental health system had a serious mental illness, according to the state's definition, which requires evidence of significant functional impairment in addition to a psychiatric diagnosis (New York State Office of Mental Health, undated-b). More than one-fifth (21.4 percent) of the patients had a schizophrenic disorder, a similar percentage (22 percent) had an anxiety disorder, and more than one-third (36 percent) had a mood disorder. Nearly two-thirds were seen in outpatient facilities, while 5 percent were seen in inpatient settings, and 2 percent were seen in emergency care settings. The prevalence of medical comorbidity was very high; 19 percent had one comorbid medical condition, and 29 percent had two or more comorbid medical conditions.

Abbreviations

CCBHC certified community behavioral health clinic

CHS Community Health Survey
COVID-19 coronavirus disease 2019

DOHMH New York City Department of Health and Mental Hygiene

K6 Kessler-6

LGBTQ lesbian, gay, bisexual, transgender, and queer or questioning

MOU memorandum of understanding

NYC New York City

NTA Neighborhood Tabulation Area

OMH Office of Mental Health

PCS Patient Characteristics Survey

SAMHSA Substance Abuse and Mental Health Services Administration

SD standard deviation

SE standard error

UHF United Hospital Fund

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