Building and Landing the Plane While Flying: How New York State Addressed the Needs of People With Serious Mental Illness During the COVID-19 Pandemic

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New York State was the epicenter for COVID-19 in Spring 2020 when little was known about the pandemic. Dire circumstances necessitated New York State's (NYS) public mental health system to rapidly pivot, adapt, and innovate its policies and procedures to ensure continuous high-level care to individuals with serious mental illness (SMI), a population especially vulnerable to both the physical and psychosocial sequelae of COVID-19. NYS rapidly adopted emergency measures to support community providers, expanded the capacity of its State-Operated facilities, created policies to promote improved infection control access, collaborated to enhance the public-private continuum of service to support people with SMI, and broadened the use of new technologies to ensure continued engagement of care.

Key words: psychiatric hospital/health care system/telehealth/mass vaccination/vulnerable populations/SARS-CoV-2

Introduction

In the United States, psychiatric care for individuals with serious mental illness (SMI) lacks a uniform approach due to heterogeneity between regulatory frameworks, payers (private- and public-based financing), resource availability, and best practices across systems of care. The emergence of COVID-19, to which individuals with SMI are especially vulnerable, necessitated these disparate behavioral health care systems to quickly adopt new approaches. Some of these approaches derived from containment strategies learned from earlier infectious outbreaks, others were extemporaneous such as asymptomatic transmission and the changing nature of evolving variants.

In this report, we describe how the New York State (NYS) mental health authority, the NYS Office of Mental Health (OMH), responded to the challenges presented by the pandemic. During a period of relaxed regulations and emergency orders from state and federal governments, OMH created and implemented new policies, procedures, and interim guidance to limit COVID-19's deleterious impacts upon the SMI population. OMH also strengthened its collaborations with the state's multiple systems of care by redefining inpatient psychiatric care, improving telehealth services, and, most importantly, working with statewide general hospitals to preserve and create medical and intensive care unit (ICU) capacity while preserving access to acute psychiatric services. Understanding OMH's experience elucidates how the intersection of innovative governmental policies and cross systems collaboration may improve health outcomes for people with SMI.

System Overview

In a state with a population approximating 20 million, the NYS mental health system serves more than 700 000 individuals annually through a mix of not-for-profit community hospitals, county public hospitals with psychiatric services, community nonprofit agencies, and a large state (OMH)-operated mental health system with inpatient, outpatient, crisis, and residential services. OMH is both a regulatory agency and a provider of services across 4500 state, county, private, and nonprofit agencies. As of 2018, NYS had 7467 adult inpatient psychiatric beds (47.8/100 000 adults) and 1606 child and adolescent beds (38.2/100 000 children) statewide; New York City (NYC) had 3763 adult beds (55.2/100 000 adults) and 468 child and adolescent beds (26.0/100 000 children).² Most of

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the NYC beds were in 36 NYC public or nonprofit community hospitals and are referred to here as "acute" or "community" beds to distinguish them from the OMH-operated psychiatric hospitals. Community hospital units have an average length of stay of 1 to 2 weeks; patients are typically admitted either from medical emergency rooms or from 1 of 16 Comprehensive Psychiatric Emergency Programs (CPEP)—specifically designated settings with requirements for staffing, specialized resources, and the legal authority to admit people for 72-hour observation.³

OMH operates 24 state hospitals for civil, forensic, and research populations accounting for approximately 16% of the state's inpatient programs. As of 2020, these services included: 2300 inpatient beds in its adult and child and adolescent civil units; 2200 forensic beds in its specially designated forensic centers and across the OMHoperated prison system; over 90 clinics for children, adolescents, and adults-serving 20 000 ambulatory patients; dozens of crisis-based teams; and thousands of residential beds.^{4,5} OMH-operated facilities accept referrals from inpatient psychiatric wards in community hospitals for people with persistent severe symptoms who require further specialized treatment. In contrast to the relatively brief length of stay at the acute care hospitals, the average length of stay in OMH facilities vary from 6 to 12 months.

Policies Implemented for the Pandemic

The NYS governor declared a state of emergency in response to COVID-19 on March 7, 2020. By March 22, the NYC area accounted for half of the cases in the United States and roughly 5% of cases globally.⁶ With rapidly increasing cases, there was considerable concern that NYS hospitals would become overwhelmed by acutely ill COVID-19 patients and exhaust existing inpatient medical resources.⁷

To rapidly increase medical and ICU capacity, the NYS governor canceled elective surgeries statewide⁸ on March 7, 2020, and required hospitals to continuously maintain 30% ICU available capacity.⁹ Community hospitals responded by shifting resources and staffing; repurposing inpatient psychiatry services and staff was a critical part of this response. During the first wave of the pandemic, for example, acute care hospitals in NYC closed an estimated 20% of their inpatient psychiatric beds to accommodate the need for increased medical capacity.¹⁰

To ensure that general medical hospitals could meet the demand created by the pandemic and to ensure continuity of inpatient care for people with SMI, OMH rapidly responded across its system, particularly in the NYC metropolitan area. All OMH-operated facilities remained open during COVID-19 and participated in "decanting" of more than 250 adult, child, and adolescent psychiatric patients from the acute care system into OMH facilities during several weeks in Spring 2020.

OMH also centralized the referral process to facilitate faster transfers, temporarily diverted patients from regions of the state with higher COVID-19 positivity rates to areas with lower infectivity, created swing-space in offline-wards to increase capacity, and established regular reporting from community hospitals on inpatient capacity to support rapid triage of inpatient psychiatric bed need.³

Alongside these efforts, OMH—working collaboratively with the NYS Department of Health and the CDC exercised its regulatory and licensing responsibilities to issue guidance to both OMH-operated facilities and its community providers. One of the most consequential shifts was the rapid expansion of telepsychiatry across the system. Federally, with the declaration of a public health emergency by the Health and Human Services (HHS) in March 2020, the Drug Enforcement Agency (DEA) allowed modifications to the Ryan Haight Online Pharmacy Consumer Protection Act, broadening the practice of telemedicine by specifically allowing for the prescribing of scheduled II-V controlled substances without having conducted at least 1 in-person medical evaluation. OMH waived many telehealth requirements and worked with other agencies to ensure that telehealth sessions could be appropriately billed. Within 2 weeks of the lockdown, outpatient psychiatric provider clinics delivered 80%–90% of services via telehealth. Positive feedback from providers and recipients has led to significant increase in the use of telehealth and shifted the provision of psychiatric care from the clinical facility to the home.

Although changes in regulatory rules allowed for continued prescribing of most psychotropics, initiations and maintenance of clozapine and long-acting injectable antipsychotic medications (LAIs) continued to require in-person management. Historically, OMH-operated facilities were the leading clozapine prescribers in NYS,¹¹ and continued prescription of clozapine remained high during the pandemic. This was accomplished through several efforts, namely offering outpatient clients individual appointments with appropriate safety precautions in place to allow for blood monitoring and injections. The NYS OMH Chief Medical Officer also issued guidance to public mental health providers encouraging them to follow expert consensus recommendations for reduced monitoring of blood counts of clozapine patients during the COVID-19 pandemic.¹²

OMH also adjusted many other aspects of its regulatory and guidance framework to allow the continuation of clinical services as safely, efficiently, and effectively as possible. First, documentation requirements were significantly relaxed; for example, on inpatient units, the requirement was waived for written, multidisciplinary treatment plans. Instead of writing daily comprehensive progress notes, treatment teams were only required to write admission notes, discharge notes detailing course of treatment,

and brief notes detailing clinically relevant events. Each patient was required to have at least 1 medical record notation per day, not 1 per treating professional. Second, as discharge planning was complicated by the lockdown, protocols were put in place. For higher-risk patients, the inpatient team was asked to proactively remain in contact with the patient after discharge pending continuation of outpatient care, a practice that has continued and will probably become a permanent best practice. OMH leveraged several Assertive Community Treatment teams to provide critical time intervention services to individuals who presented to psychiatric emergency departments to reduce the need for inpatient readmissions. Third, billing, documentation, and treatment planning requirements were eased for community ambulatory providers to allow the system to rapidly transition to telehealth service provision; however, all NYS ambulatory programs were required to maintain capacity for in-person treatment for those patients who required physical examinations, laboratory testing, injections, or who could not adapt to telehealth services. With respect to lack of adoption to telemental health services, it is yet unclear as to what logistical challenges arose among people with SMI during the pandemic amidst stay-at-home orders; however, a more detailed analysis is underway, and new policies to expand its use should help diminish barriers and improve access in the future.

For NYS mental health programs, one of OMH's priorities was to promote safety through infection control procedures. OMH guidance permitted community providers to cancel therapeutic, rehabilitative, and recreational groups and allow patients to remain in their rooms throughout the day. Community programs were also advised to consider plans in which nursing staff and 1 psychiatrist remained on-site to handle emergencies, whereas the rest of the treatment team provided telehealth services. OMH provided extensive infection control technical assistance to licensed and funded community ambulatory and residential programs.

For OMH-operated facilities, decreasing transmission was paramount. All facilities had strict requirements regarding testing prior to admission (and/or quarantining for up to 14 days once admitted to protect fellow patients and staff); ensuring regular staff-testing and contact tracing when there was a suspected index case (ie, starting December 2020, shortly after the availability of Abbott Lab's BinaxNOW COVID-19 Antigen test was available, OMH required all of its facilities to offer voluntary rapid antigen testing to all staff and patients); and cohorting of patients who were suspected of having COVID-19 symptoms. Group activities and visitation were modified during periods of high infectivity to prevent spread of COVID-19 with strict enforcement of masking and physical distancing. Dispensing of medications, vital signs, lab draws, and routine checks remained in-person. OMH purchased more than 1000 iPad tablets for its facilities during the pandemic to promote safe access to necessary services while maintaining physical distancing. Tablets allowed patients to meet with their treatment team, have virtual visits with family and friends, and engage in behavioral health-oriented apps. ¹³ Moreover, new policies and procedures were arranged with the NYS court system and Mental Health Legal Services to allow for remote hearings (ie, treatment over objection, contesting an involuntary status) using iPads and other virtual technologies. Many of these new policies may become permanent post-COVID. For example, OMH has recently proposed considerable financial investments in personal protective equipment and testing for community residences as well as vaccine education efforts. ¹⁴

Once vaccines were made available, OMH launched a vaccination campaign to limit COVID-19 spread both in its hospitals and beyond. On January 1, 2021, Pfizer-BioNTech and Moderna Covid-19 vaccines were made available to all OMH inpatients and staff on a voluntary basis with an extensive vaccine education effort. Due to OMH's efforts, from November 2020 (prevaccination availability) to February 2021, COVID-19 infection rates in inpatients and staff decreased by 96% and 71%, respectively. 15 OMH also launched a campaign to ensure the vaccination of other state agency service recipients and community providers through its successful O-Agency Link-Outreach-Vaccinate Program, which administered nearly 80 000 vaccines in 2021 at OMH facilities and across 400 mobile clinic and pop-up events reaching underserved communities.

Outcomes

Prior periods of disaster and economic recession have resulted in poorer mental health outcomes and increased rates of suicide. 16 The COVID-19 pandemic has severely affected individuals in New York, particularly those with SMI (eg, economic recession, increased loneliness and social isolation, fear associated with social disturbance, etc.). However, provisional data from NYC did not show an increase in the numbers of suicides through the fourth quarter of 2020 compared to the prior 6 years. There were 542 confirmed suicides in 2020 in NYC.17 The suicide rate in NYC is 6.1 per 100 000 people, which is about half the overall rate for the United States, or 13.9 suicides per 100 000 people. 18 It does not appear that the early part of the pandemic, which resulted in the most mortality and morbidity in NYC, resulted in a higher suicide rate. Conversely, the pandemic did result in a significant increase in drug overdose deaths. According to the CDC, NYS and NYC had 2260 and 1653 drug overdose deaths, respectively, in March 2020. These increased to 2950 and 2243, respectively, by March 2021, that is about a 75% increase for both over 1 year.¹⁹

Hospital psychiatric services considerably decreased during the first 18 months of the pandemic due to 3

main factors: lockdowns and quarantines prevented the utilization of services; hospitals required all available beds to treat the medical conditions of COVID-19 patients leading to the annexation of psychiatric beds; and increasing telehealth services coupled with physical distancing led to changes in the utilization of both inpatient and outpatient psychiatric services. Numerous policies were implemented in response, namely those that ensured continued access to psychiatric access during the pandemic, increased access to testing—and later vaccination, and access to best practices, such as the provision of clozapine, LAIs, and suicide prevention.

Discussion

With NYS as the epicenter of COVID-19 in Spring 2020 and with deleterious resurgences again in winter 2020, throughout 2021, and now into 2022, the pandemic remains a serious disruption to the practice of psychiatry in NYS affording little preparation and yielding multiple policies and interventions predicated on the adage that necessity is the mother of invention. Although numerous innovations and adaptations worked to manage the pandemic and allow for continued services to individuals with SMI, serious fault lines in the psychiatric service delivery system were exposed, as is evident by the dramatic increase in drug overdose deaths. It is probably premature to evaluate OMH's adaptations and innovations resulting from the pandemic, as they were built during a period of transition which is still occurring. Nevertheless, recommendations can be offered that aim to optimize care for this vulnerable population, and proposals can be put forth to improve the resilience of the psychiatric healthcare system as we rebuild.

The COVID-19 pandemic allowed for the expansion of telemental services in NYS OMH licensed facilities following federal guidelines. For emergency rooms and inpatient services, best practices involve telemental health services as an adjunct to in-person staffing, that is, telemental health is not a replacement for an in-person clinician, but it can be seen as an extender to inpatient core services. The most critical lesson, anecdotally, has been that people with SMI require a significant amount of in-person care correlating with their functioning. In outpatient services, telehealth's convenience cannot wholly substitute for in vivo evaluations and assessment. This requires a robust utilization review of telehealth services and critical assessments of individualized service plans to ensure which modality, in-person or telehealth or a combination, is appropriate. Moreover, if telehealth becomes permanent, measurable outcomes and new standards of care will need to be put in place to ensure the delivery of high-quality care during the provision of telehealth services. Namely, enhanced technology will be critical as will ensuring that there are measurable outcomes to assess telehealth's utility for the SMI population and

to delineate appropriate utilization of virtual services versus on-site services to prevent any unnecessary reduction of on-site services. In hindsight, provision of telehealth services for routine medical care, family visits, and legal consultation could have been the standard of care well before the pandemic. Additional access to care, opportunities for sustained engagement of psychiatric treatment, and client satisfaction are all benefits. It would be useful to continue telehealth practice and continue a relaxation of the Ryan Haight Act to allow for more flexibility regarding continuity of care post-COVID. 20

Rebuilding of an adequate psychiatric service delivery system post-pandemic is also paramount. Due to the COVID-19 public health emergency, NYS saw a serious diminution of its psychiatric inpatient capacity for children, adolescents, and adults. Additionally, the pandemic highlighted an existing issue, namely it remains difficult to understand the inpatient bed shortage. Estimating the number and discerning solutions is complex due to multiple variables from infrastructure to resource variability across the US health care system.²¹ Although the urgency of the pandemic required a surge in general medical beds and the annexation of psychiatric beds, the abatement of the pandemic requires that these crucial inpatient psychiatric resources be restored. There are ample opportunities for broadening inpatient services to incorporate more flexible services, improved active treatment with enhanced transition of care planning to promote community tenure, and utilization of new technologies. Addressing the above concerns is critical to forging new strategies and policies regarding inpatient capacity.

All of these additions will not only address the above issues, but allow the behavioral health system to address issues regarding structural racism and discrimination to reduce health disparities and improve equality for vulnerable populations. As the pandemic ebbs, critical needs have been revealed for SMI clients, namely ensuring that the continuum of care is enhanced with the addition of crisis beds, community-based services better tailored for SMI clients, and improved wrap-around treatment that promotes behavioral and medical engagement. Moreover, this could also allow for further integration of clinic and residential services to provide a more fluid recoveryoriented pathway to allow for improved crisis treatment, enhanced clinical treatment pathways, and more rigorous inpatient services utilizing pathways such as the "333 model." The United Kingdom's National Health Service's "333 model" is a time-limited, recovery-oriented inpatient pathway that stresses treatment in a continuum that is time-managed, namely approximately 3 days for inpatient assessment, 3 weeks for inpatient treatment, and 3 months for recovery on specified "Recovery Units." Postimplementation, it was found to reduce unnecessary admissions, decrease length of stay, and improve community engagement of clients.²²

COVID-19 also made clear the risks of a siloed health care system. Individuals with SMI require services in medical hospitals, psychiatric inpatient units, primary care clinics, the chemical dependence system, ambulatory mental health programs, psychosocial rehabilitative services, social services, emergency medical services, and myriad others. All these programs had to adapt in parallel because of different regulatory and funding structures. This increased complexity created significant distress for provider agencies and significant opportunities for patients to fall through the cracks. Increased investment in integrated, "no wrong door" wrap-around services is critical for individuals with SMI. Innovations introduced during this pandemic afford the opportunity to reimagine psychiatric services as well as collaboration among crisis, acute care, and intermediate care providers leading to post-pandemic best practices.

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References

- Druss BG. Addressing the COVID-19 pandemic in populations with serious mental illness. JAMA Psychiatry. 2020;77(9):891–892.
- NYS Office of Mental Health, Office of Performance Measurement and Evaluation. County Capacity and Utilization Data Book. Calendar Years 2017-2019. Albany, New York, NYS Office of Mental Health; 2019.
- 3. Berezin J, Casoy F, Erlich MD, Hernandez Y, Smith TE. Inpatient psychiatry during COVID-19: a systems perspective. *Psychiatr Clin North Am.* 2022;45:45–55. doi:10.1016/j. psc.2021.11.002
- 4. 2017 Interim Report to the OMH Statewide Comprehensive Plan. New York State Office of Mental Health. https://omh.ny.gov/omhweb/planning/docs/2017-interim-report-web.pdf. Accessed November 11, 2021
- About OMH. New York State Office of Mental Health. https://omh.ny.gov/omhweb/about/. Accessed November 11, 2021
- McKinley J. New York City Region Is Now an Epicenter of the Coronavirus Pandemic. The New York Times. March 22. https://www.nytimes.com/2020/03/22/nyregion/Coronavirusnew-York-epicenter.html. Accessed July 2, 2021.
- Rosenthal BM, Goldstein J, Rothfeld M. Coronavirus in N.Y.: "Deluge" of Cases Begins Hitting Hospitals. The New York Times. March 21 https://www.nytimes.com/2020/03/20/ nyregion/ny-coronavirus-hospitals.html. Accessed July 2, 2021.
- 8. Andrew Cuomo, Governor, New York State. Executive Order issued by the State of New York Executive Chamber.

- Executive Order 202.10: Continuing Temporary Suspension and Modification of Laws Relating to the Disaster Emergency. In: State NY. editor. 2020.
- Amid Ongoing COVID-19 Pandemic, Governor Cuomo Outlines Additional Guidelines for When Regions Can Re-Open. May 4, 2020. https://www.governor.ny.gov/news/ amid-ongoing-covid-19-pandemic-governor-cuomo-outlinesadditional-guidelines-when-regions-can. Accessed July 2, 2021.
- 10. Smith TE, Sullivan AT, Druss BG. Redesigning public mental health systems post-COVID-19. *Psychiatr Serv.* 2021;72(5):602–605.
- 11. Carruthers J, Radigan M, Erlich MD, *et al.* An initiative to improve clozapine prescribing in New York State. *Psychiatr Serv.* 2016;67(4):369–371.
- 12. Siskind D, Honer WG, Clark S, *et al.* Consensus statement on the use of clozapine during the COVID-19 pandemic. *J Psychiatry Neurosci.* 2020;45(3):222–223.
- 13. Smith T, Daniels A, Lee G, et al. Updated Psychiatric Center Visitation Policy. Updated December 20, 2021. https://omh.ny.gov/omhweb/guidance/covid-19-updated-omh-pc-visitation-policy.pdf. Accessed December 28, 2021
- Sullivan AMT. OMH-SAMHSA COVID Mitigation Funding Plan. October 1, 2021. https://omh.ny.gov/omhweb/ planning/cmhsbg-fmap/omh-samhsa-covid-mitigation-planoctober-2021.pdf. Accessed December 28, 2021.
- 15. Smith TE, Rodgers IT, Silverman DJ, *et al.* COVID-19 case rates after surveillance and vaccinations in a statewide psychiatric hospital system. *Am J Public Health*. 2021;111(10):1780–1783.
- Oyesanya M, Lopez-Morinigo J, Dutta R. Systematic review of suicide in economic recession. World J Psychiatry. 2015;5(2):243–254.
- 17. Magas I, Norman C, Baxter A, Harrison M. *Suicides in New York City, 2020*. New York City, Department of Health and Mental Hygiene. September 2021. https://www1.nyc.gov/assets/doh/downloads/pdf/epi/suicide-data-2015-2020.pdf. Accessed November 29, 2021.
- 18. Magas I, Norman C. Suicide Deaths in New York City, 2010 to 2019. New York City, Department of Health and Mental Hygiene: Epi Data Brief (127). September 2021. https://www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief127. pdf. Accessed November 29, 2021.
- 19. Ahmad FB, Rossen LM, Sutton P. *Provisional Drug Overdose Death Counts*. National Center for Health Statistics. 2021. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm. Accessed November 29, 2021.
- Talley RM, Brunette MF, Adler DA, et al. Telehealth and the community SMI population: reflections on the disrupter experience of COVID-19. J Nerv Ment Dis. 2021;209(1):49-53.
- 21. McBain RK, Cantor JH, Eberhart NK. Estimating psychiatric bed shortages in the US. *JAMA Psychiatry*. 2022;79(4):279–280.
- 22. Kar Ray M, Lombardo C, Syed Z, et al. Embedding recovery to transform inpatient mental health care: the 333 model. *Psychiatr Serv.* 2019;70(6):465–473.