



Further Adaptations and Reflections by an Assertive Community Treatment Team to Serve Clients with Severe Mental Illness During COVID-19

Greg P. Couser¹ · Monica Taylor-Desir¹ · Susan Lewis² · Tehillah Joy Griesbach³

Received: 5 April 2021 / Accepted: 10 June 2021 / Published online: 19 June 2021

© The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2021

Abstract

In September of 2020, Guan and colleagues wrote about their experience of an Assertive Community Psychiatry Program responding to the COVID-19 pandemic. We describe our own experience as an Assertive Community Treatment team in Minnesota responding to challenges of effectively and safely delivering service to clients. As the pandemic has progressed since last year, so has the literature, and updated references are highlighted. Common threads are woven between our experience, the experience of Guan and colleagues, and others to suggest the beginnings of a template to adapt services to a new post-pandemic world.

Keywords Assertive community treatment · Serious mental illness · COVID-19 · Pandemic · Community mental health · Coronavirus

Introduction and Background Regarding Assertive Community Treatment

Assertive Community Treatment (ACT) is a multidisciplinary, team-based approach of providing comprehensive individualized care outside of a formal clinical setting. ACT dates to the early 1970s and stems from the training in community living model developed at Mendota Mental Health Institute in Madison, Wisconsin (Dixon, 2000). Team members today include a team leader, psychiatrist, nurse(s), a peer specialist, and social workers or case managers with various expertise in such areas as dual diagnosis or occupational/vocational issues. Care is meant to be flexible to the acuity level of clients and their needs, adjusting to see the clients more or less based upon these needs. ACT is

recommended as an evidence-based treatment for persons with schizophrenia (American Psychiatric Association, 2019) and is also indicated for persons with bipolar disorder, severe depression, and dual diagnosis issues. ACT has been linked to outcomes such as shorter hospital stays, improved quality of life, treatment adherence, and patient satisfaction (Dixon, 2000; Spivak et al., 2019; Substance Abuse & Mental Health Services Administration, 2008).

Despite well-established outcomes and recommendation for dissemination of ACT teams, availability of ACT teams is decreasing. From 2010 to 2016, a national survey collected by the Substance Abuse and Mental Health Services Administration (SAMHSA) reported decrease in the proportion of facilities offering ACT. Not all facilities participated, yet the absolute number of mental health facilities reporting ACT services went down from 1847 in 2010 to 1657 in 2016. These findings were thought to have numerous underlying causes including difficulty maintaining funding and staffing. The same study showed an increase in the proportion of facilities with ACT that offer the full array of required services, suggesting promotion of ACT model fidelity (Spivak et al., 2019). A fully staffed ACT team incorporates a significant breadth of knowledge including important perspectives from such team members as a peer specialist. Regardless of staffing status, to our knowledge no research has been done regarding ACT during a pandemic.

✉ Greg P. Couser
couser.gregory@mayo.edu

¹ Mayo Clinic, 200 First Street SW, Rochester, MN 55905, USA

² ACT Team, Olmsted County Adult and Family Services, 2100 Campus Drive SE, Suite 200, Rochester, MN 55904, USA

³ ACT Team – Employment Specialist, Olmsted County Health, Housing and Human Services, 2100 Campus Drive SE Suite 200, Rochester, MN 55904, USA

In September of 2020, Guan and colleagues first wrote (i.e., article originally appeared online) about their Assertive Community Psychiatry Program that included ACT. They discussed their experience of adapting and responding to the COVID-19 pandemic (Guan et al., 2021). We agree that little has been written about COVID-19 in community mental health populations, yet there has been more research since Guan and colleagues published their manuscript. This paper, informed by updated literature on COVID-19, will outline our experience during the pandemic while providing the same general framework as Guan and colleagues. We will integrate this information to suggest the beginnings of a template to adapt services to a new post-pandemic world.

COVID-19 Pandemic Abruptly Changed Psychiatric Services Delivery

Coronavirus Disease 2019 (COVID-19) is a highly contagious viral respiratory illness that spread across the world and was declared a public health emergency by the World Health Organization on January 31, 2020 (World Health Organization A, 2020) and then later declared a pandemic on March 11, 2020 (World Health Organization B, 2020). As COVID-19 spread to all 50 United States, lockdown measures were taken to reduce risk related to serious illness and even death from the disease. In order to avoid spreading COVID-19, The Centers for Disease Control (CDC) recommended measures to prevent spread of COVID-19 and protect health, including frequent hand washing, social distancing (at least six feet of distance between people), and wearing masks in public settings (Centers for Disease Control, 2020).

The uncertainty and changes brought forth by the pandemic resulted in concerns about mental health. A March 2020 poll reported that 48% of Americans were anxious about the possibility of getting coronavirus (COVID-19), nearly 40% were anxious about becoming seriously ill or dying from COVID-19, and 62% were anxious about the possibility of family or loved ones being infected (American Psychiatric Association, 2020). Over one-third (36.1%) said the pandemic was having a serious impact on their mental health (American Psychiatric Association, 2020). Researchers were concerned about measuring this impact and related issues, such as the impact of repeated media consumption and health messaging around COVID-19 (Holmes et al., 2020).

As COVID-19 impacted individual mental health, it also greatly changed the way services were delivered by mental health providers. Quarantines, lockdowns, and social distancing necessitated new approaches to service delivery, with some providers trying phone and video visits for the first time. The Centers for Medicare & Medicaid Services

(CMS) encouraged telehealth by allowing reimbursement for services through common communication applications including FaceTime, Facebook Messenger, Google Hangouts, Zoom, or Skype (i.e., even if not fully compliant with the Health Insurance Portability and Accountability Act) (United States Department of Health and Human Services, 2021). Yet evidence-based recommendations and guidance were lacking. ACT teams found themselves conducting business however they could manage during a pandemic and the constraints it placed upon providing mental health services.

Minnesota ACT Team

A specific well-established Minnesota ACT team has been providing services to local clients out of a county community health center serving a population of over 100,000 people. The team has had fluctuation in team composition and client census over the years. In 2019, the team partnered with a local academic institution to provide psychiatric care by two psychiatrists. The team then quickly had a full contingency of critical team elements, including a team leader, two nurses, two employment specialists, one dual diagnosis specialist, one general case manager, and one program coordinator. There was also one specialized therapist trained to implement empirically supported therapeutic interventions specific to the needs of ACT clients (e.g., cognitive behavioral therapy for psychosis). In 2020, the team added the final team member, a peer specialist. The team has most recently been providing services to 34 clients (i.e., although the team is well-established, it only recently acquired full staffing that will allow census to climb) 100% of which have diagnosis of schizophrenia, bipolar disorder, major depression with psychotic features, or schizoaffective disorder. Seventy-four percent of the clients have a dual diagnosis issue, 41% have an active legal issue, 15% have housing that is in jeopardy, and 38% are employed. Most of the clients are of low socioeconomic status with insurance from programs like Medicaid. Yet the local community has many resources, which may offset potential adverse outcomes (e.g., homelessness, severe drug use, poverty, etc.) that are often found in larger metropolitan areas.

Just a few months prior to COVID-19, the ACT team was assigned to new space. As the ACT model is flexible with many visits in the office and many in the community, as of March of 2020 a large percentage of client visits occurred in the office. That abruptly changed in mid-March of 2020 when the local office was closed to in-person services. Most workers were instructed to work from home when feasible. Many healthcare services were for the first time provided remotely, except for certain in-person services such as ACT that were allowed to continue in person with appropriate precautions as they were deemed essential (i.e., services that

had high risk of adverse client outcome if discontinued, such as medication observation, injections, etc.). As the season was the spring of 2020, ACT team members could see clients at picnic tables outside the office, but most clients now needed to be seen virtually or in the community.

How a Minnesota ACT Team and Others Adjusted to the Pandemic

In September of 2020, Guan and colleagues wrote about their adaptations and innovations. They described three main categories: defining and maintaining essential services while limiting risk of contagion; promoting health and mitigating physical and mental health impacts; and promoting staff resilience and wellness (Guan et al., 2021). We will use the same three categories to compare how we, Guan and colleagues, and others recently have adjusted to the pandemic.

Defining and Maintaining Essential Services While Limiting Risk of Contagion

In Rochester, Minnesota, ACT services were still considered essential, and like Guan and colleagues, we relied on our best judgment in what was considered essential. In the beginning we had limited personal protective equipment (PPE), and we determined that long-acting antipsychotic (LAI) injections by the team nurses took priority. We had staff from three different agencies (i.e., the local academic center for the two psychiatrists, a local nurse contractor, and the rest of the staff working directly for the county). The team needed to adjust to policies by these three agencies. We had fewer team members than Guan and colleagues. Yet to minimize risk of exposure we employed the same strategy of having about half of the team working from home and the other half working from the program's offices (Guan et al., 2021).

In the literature, similar responses were reported in Michigan when one group reported the most pertinent equipment needs as information technology and PPE (surgical and N95 masks, gloves, goggles, gowns, and hand sanitizer). They prioritized in-person visits to clients requiring injections, urgent psychiatric evaluations, or encounters regarding new and unstable conditions after hospitalization (Alavi et al., 2020). We similarly by consensus prioritized which clients needed to be seen in person, which was less sophisticated than the "risk matrix" approach used by Guan et al. (2021). When appropriate we would switch home visits to phone visits, with a small minority of clients having the willingness or ability to try connection via Microsoft Teams. Prior to every in-person visit, we asked COVID-screening questions (by phone if possible) regarding recent fever, cough, or shortness of

breath. We decreased transporting clients except when critical (e.g., to get to medical appointments when there was no other means). Meanwhile we wore masks, kept our distance, and as it got warmer started seeing clients outside as solutions to keep in direct contact. For those few clients with their own cars, staff members would meet with the clients in separate cars in adjacent parking spaces with the windows rolled down.

Although we were adjusting quickly just as Guan and colleagues and others had to do by necessity, more recent literature supports what we all did. Bowman and colleagues reviewed responses in epidemics and pandemics similar to COVID-19. Recommendations as suggested from the review included such ideas as pivoting to non-contact (telephone or telehealth) screening, assessment, and treatment where possible; or implementing home-based interventions, allowing people to self-isolate while still receiving treatment (Bowman et al., 2021).

We not only had to change how we interacted with clients but also how we interacted with one another. Guan and colleagues noted they initially briefly suspended daily clinical meetings before getting into a rhythm of meetings via Zoom with essential meetings conducted in larger rooms or virtually when possible (Guan et al., 2021). We similarly adjusted to a combination of in-person meetings (for the lesser number of employees in the office) and virtual meetings first through Skype and then later through Microsoft Teams.

Meanwhile the work we were doing was informing other groups, such as case management, that worked out of our county community health center. Despite continuing to engage with clients directly when appropriate, no COVID-19 cases were noted in our group in the first 6 months of the pandemic. This gave other groups more confidence to implement what we tried. Later in late 2020 and early 2021, our team did have two COVID-positive clients and one COVID-positive psychiatrist (i.e., from a high-risk exposure at another hospital outside of community work). Each of these cases resolved with proper isolation and without sequelae.

Guan and colleagues were explicit about the importance of harnessing community resources and developing new collaborations (Guan et al., 2021). Along that line, it was difficult during the pandemic for our clients to go about their usual business, such as obtaining government documents or physically visiting various housing options. Our team helped clients navigate those issues while advocating for them. As an unexpected benefit of the pandemic, we noted that some clients that were struggling in their current housing arrangements (e.g., with complaints by neighbors) were given more leeway than before the pandemic (i.e., as there was a state-wide eviction moratorium in place).

Promoting Health and Mitigating Physical and Mental Health Impacts

Guan and colleagues systematically prioritized the most vulnerable of their clients (Guan et al., 2021). We similarly made certain that the most acutely ill clients were prioritized, particularly those with disrupted routine. Loss of community resources was an issue for some, for example, who liked to exercise at the local YMCA or attend AA meetings in person. We referred clients to alternative resources (e.g., electronic offerings) as appropriate.

Also as done by Guan and colleagues, we educated clients about COVID-19 in real time as new information became available (Guan et al., 2021). People diagnosed with a serious mental illness (SMI) generally have worse physical health and reduced life expectancy compared to the general population and there is concern that the COVID-19 pandemic could make things worse (e.g., due to disruptions to services) (Williams et al., 2021). In one study, persons with schizophrenia spectrum disorders were found to be nearly three times more likely to die from COVID-19 infection than their counterparts without mental illness. Having schizophrenia spectrum diagnosis was found to be the second most potent risk factor, with age being the greatest risk factor (Nemani et al., 2021). The SMI population may be more at risk for acquiring infection due to various potential reasons such as not being able to fully understand the health risks and recommendations (e.g., due to decreasing cognitive ability and/or cognitive impairment), limited awareness of self-care and hygiene measures, using medication continuously, and difficulties with screening and/or stay-at-home orders (Bowman et al., 2021; Shinn & Viron, 2020; Sukut & Ayhan Balik, 2020; Thomson et al., 2020; Zhang et al., 2020).

As an illustration from the literature, a cross-sectional telephonic survey of 132 clinically stable clients with SMI indicated that nearly three fourth of clients did not have adequate knowledge about symptoms (72%) and precautionary measures (64%) about COVID-19 (Muruganandam et al., 2020). We recognized we needed to continuously educate clients, many of whom in the beginning were slow to adopt mask-wearing and social distancing. Meanwhile it has been suggested that providers need to balance service needs with infection risk, which requires adjusting social distancing levels in response to changes in the local conditions (Fetter, 2021). We adjusted our team operations accordingly per guidelines issued by state and local authorities.

Guan and colleagues discussed adapting pharmacotherapy by such measures as lengthening duration of prescriptions and switching from oral antipsychotics to LAI formulations when feasible (Guan et al., 2021). Initially we had some clients receive greater than usual quantities of oral medication. However, this was less of a problem for us as the local pharmacy mails many of the medications, and this

mailing service was not disrupted by the pandemic. Clients were still able to get lab work done, as blood draws and similar lab work were considered to be essential services. There were some clients that were hesitant to obtain blood draws during the pandemic. We followed the recommendations from the United States Food and Drug Administration (FDA) and Clozapine Risk Evaluation and Management Strategy (REMS) to allow for flexibility in obtaining lab work while the clients developed a plan with the ACT for safely obtaining labs (United States Food and Drug Administration, 2020; Clozapine REMS, 2020).

Guan and colleagues addressed issues related to clients coping with stress from the pandemic (Guan et al., 2021), as did others in the literature. For example, an observational study in Italy of 205 clients with SMI indicated that clients were four times more likely to perceive high COVID-19 pandemic-related stress and had two to three times higher risk of severe anxiety and depressive symptoms when compared to non-psychiatric participants (Iasevoli et al., 2020). Also in Italy an observation was made that those affected by SMI seemed to have faced the acute phase of the epidemic in the same way as any other Italian citizen, that is adapting quite well given the unprecedented behavioral regulations imposed by the situation (Carpiniello et al., 2020). We informally polled our team members about how we perceived our clients' symptoms were during the pandemic compared to before the pandemic. Informal polling was done via a voluntary and anonymous question (In general how severe were your clients' symptoms during the pandemic compared to before the pandemic: much worse, somewhat worse, about the same, somewhat better, or much better?) by web survey completed by eight out of 12 team members. Most team members thought our clients' symptoms were about the same, with two team members rating clients' symptoms as worse and one team member rating clients' symptoms as much worse.

Regardless of how SMI clients and all of us adjusted at the beginning of the pandemic, it is natural for people to experience a range of negative emotions in such difficult situations. Since having sleep disturbances, irritability, feelings of helplessness, etc., are fairly common early in these types of situations, there is concern that these immediate psychological consequences need downplaying while monitoring for longer term concern of evolving adjustment disorders, anxious and depressive disorders, addictions, and post-traumatic stress disorder (Chevance et al., 2020). Furthermore, there has been concern that current public health messaging might be leaving out caregivers of SMI clients who are an important at-risk population (Eckardt, 2020). Throughout the pandemic we have been vigilant for stress-related symptoms in both clients and their families. As appropriate we have discussed and normalized their concerns.

Meanwhile the pandemic has created a specific health-promoting opportunity within our team. The Coronavirus Aid, Relief, and Economic Security (CARES) Act allowed grants for certain applications that could improve the health of the SMI population (United States Department of Treasury, 2021). Our team was able to secure a grant to purchase Fitbit activity trackers. We are using these smartwatches to help promote regular physical activity and sleep monitoring for our clients as part of health promotion.

Promoting Staff Resilience and Wellness

Research regarding COVID-19 has shown that healthcare workers report high rates of mood disturbance and had an increased vulnerability to clinical mental disorders during pandemic settings (Sergeant et al., 2020). Thus, it was particularly appropriate that Guan and colleagues focused on staff resilience and wellness (Guan et al., 2021). We similarly recognized staff well-being as a critical issue. Informal polling was conducted via voluntary and anonymous question (What was your level of work stress during the pandemic as compared to before it started: much higher work stress, somewhat higher work stress, work stress about the same, somewhat lower work stress, or much lower work stress during the pandemic?) by web survey completed by eight out of 12 team members. Only one team member felt work stress was about the same during the pandemic as before it started. Most team members indicated having a somewhat higher work stress during the pandemic (with one

member indicating much higher work stress). We also asked more general questions of team members via the same voluntary and anonymous web survey completed by eight out of 12 team members. We asked, “What were the biggest challenges you had during the pandemic?” These challenges are catalogued in Table 1 (Biggest Challenges of a Minnesota ACT Team During a Pandemic). Similarly, we asked, “How did your work change during the pandemic?” with results as shown in Table 2 (How Work Changed During a Pandemic for Members of a Minnesota ACT Team).

Our team was intentional about recognizing these challenges and work changes as we emphasized supporting one another. Guan and colleagues indicated relying on the Psychological First Aid model (Guan et al., 2021). We did not use any specific model yet focused on each other by doing a simple team building activity (e.g., asking team members, “What career would you choose if you weren’t doing this?”) before every meeting with responsibility for the activity rotating among team members. Meanwhile the team leader sought out an external consultant to interview team members and open discussion regarding what could be improved about the team. “Team norms” (i.e., encouraged, and unacceptable behaviors) were established that were reiterated at least weekly. Encouraged behaviors included: clear and timely communications, showing empathy with words, recognizing, and agreeing that we are all doing our best and we can all do better, working through disagreements, being accountable, vulnerable, and flexible. We were encouraged to approach work with positivity and possibility. Unacceptable behaviors

Table 1 Biggest challenges of a Minnesota ACT Team during a pandemic

-
- Discerning what sources of information could be trusted regarding pandemic restrictions; changing guidelines
 - Making judgments about what services are essential when deciding on direct contact and then explaining this to clients
 - Balancing personal safety and health concerns with job requirements and client needs
 - Finding creative ways to meet clients outside of their homes (e.g., when the weather may not allow for meeting outside)
 - Feeling isolated at home so much and not in the office with the team
 - Adjusting to home office and new technology
 - Not feeling helpful as sometimes not having answers for clients and sometimes not being able to see clients in person
 - Lack of usual self-care outlets such as travel and contact with family/friends
-

Table 2 How work changed during a pandemic for members of a Minnesota ACT Team

-
- Restricted team interactions meant less immediate availability for collaboration
 - Less face-to-face client contact (even though there was more direct client contact than other local programs)
 - Inability to transport clients at times leading to creative problem solving to help clients achieve goals
 - Adjustment to social distancing could be difficult when meeting with clients
 - Switch to remote working and home officing
 - Teammates required to be more intentional about connecting with each other to foster relationships
 - Staff meetings conducted by combination of in-person and virtual meeting platform
 - Less going into client homes, which often could be a good excuse to encourage walking
-

were noted as being passive-aggressive, failing to recognize others and what others bring to the team, holding resentments and dominating conversations. A “safe space” was created to talk about stressful issues related to the pandemic or otherwise. As Guan and colleagues did, each meeting started with mindful reflections on any “positive moments” (Guan et al., 2021). Clear and transparent communication within the team was already an ongoing effort yet had added focus within the pandemic. There was some acknowledgment that our ACT team was on the “cutting edge” of seeing people in the local community, fostering a sense of professional identity. Staff also benefited from being part of a larger public government organization in different ways. Other division employees provided resource lists which were shared among departments, food delivery boxes were made available and distributed by employees on site for clients, and critical and public health updates were given through email. There were also resiliency trainings and resources that were made available such as a weekly email providing a “well-being moment” and an employee well-being resources page available on the intranet web site.

Lessons from the COVID-19 Pandemic

The COVID-19 pandemic was clearly a challenge that affected everyone across the world and required community mental health providers to quickly adapt to successfully serve their clients. The immediate response to the pandemic was focused on safety and preventing spread of illness. Yet it has been hypothesized that lengthy negative events related to COVID-19 cause psychological stress that consolidates into behavioral and emotional reactions (Pera, 2020). One such lengthy negative event is lockdowns, or large-scale movement restrictions (World Health Organization B, 2020). Recent studies are showing a post-lockdown acceleration in urgent and emergency mental health referrals, indicating potential long-term negative impact of lockdown on mental health (Chen et al., 2020). Although these findings are correlational and not causal (i.e., acceleration in mental health referrals could also be due to other causes, such as availability of services at different points of time, client fears about attending care, difficulty traveling to appointments, etc.), this is consistent with what has been seen in similar past scenarios. A mental health-focused review of literature on past epidemics, natural disasters, and COVID-19 stated that alcohol use, PTSD, anxiety, anger, fear of contagion, perceived risk, uncertainty, and distrust are a few of the immediate and long-term effects that are likely to result from the COVID-19 pandemic (Esterwood & Saeed, 2020). This anticipation of a widespread surge in mental health need has enhanced interest in the potential for a new, prevention-oriented public mental health strategy (Arevian et al, 2020).

Such a new strategy can include offering a spectrum of options for remote and in-person care and integration of digital health interventions, also helping to decrease mental healthcare disparities for underserved and marginalized populations. (Kopelovich et al., 2021). Prior to the pandemic, national survey data indicated that the use of telemedicine services had grown in facilities providing ACT at a rate proportional to its growth in all mental health facilities (Spivak et al., 2019; Talley et al., 2021). Easing of telehealth regulations during the pandemic allowed for flexibility to approach recovery-oriented behavioral health services differently (Medalia et al, 2020).

Even though barriers to using telehealth services greatly decreased during the pandemic, such services were not always practical for ACT teams. Many of the clients served by ACT teams have difficulty navigating the technology. It may help to use familiar devices such as smartphones. Yet there are risks for clients as they gain literacy using these tools, such as privacy concerns. Clients are expected to agree to a privacy policy written at a college reading level, and many clients may not fully understand what privacy details they are forsaking (Torous & Keshavan, 2020). Other barriers to telehealth remain, such as clinician unwillingness, lack of accessibility for vulnerable populations, and lack of acceptance by many clients and clinicians (Ojha & Syed, 2020). Most clients on our team have cell phones, yet we found variable acceptance to meeting by phone. Even if our clients have phones, often they are still hard to reach and assertive in-person outreach is therefore required.

An individualized approach and some flexibility may be required when use of virtual methods are not feasible or sufficient (Zhand & Joobar, 2021). For example, the unique power of in-person interactions to foster connection and community integration should not be discounted (Talley et al., 2021). For staff with proper training, virtual methods can enhance care if staff members help ensure social connections and reinforce digital infrastructures to reduce gaps in understanding. (Almeda et al., 2021).

ACT teams have traditionally provided intensive in-person services to SMI clients. Maintaining regular contact with clients can be vital in providing a sense of social connection and preventing symptom relapse and possible hospitalization (Hamada & Fan, 2020). Yet in some cases with SMI clients, the pandemic affected them in not necessarily intuitive ways. In the literature it was stated that interviewed clients with SMI have reported that the pandemic had a positive or neutral impact on their overall life and sense of connectedness (Riblet et al., 2020). Many clients already had a limited social network and were not interested in expanding it. In some cases, the change in social norms was even perceived as positive because it “normalized” their own baseline behaviors (Riblet et al., 2020). In our experience we found a wide array of client responses

Table 3 Suggestions from a Minnesota ACT Team for Those Doing Similar Work

-
- Establish mutually agreed upon guidelines for team member communication and then follow the guidelines
 - Normalize calling on each other in the moment when help is needed for difficult decisions and client challenges
 - Understand this is temporary although it may seem like forever
 - Pay attention to your own self-care, knowing your limits and enjoying the little things
 - Maintain flexibility which is natural to those on an ACT team
 - Model good behavior for clients by following guidelines for hygiene, social distancing, and masking
 - Take clients on walks
 - Help clients learn new technology and learn virtual sources of support
 - Normalize with clients our own challenges and response to uncertainty
 - Switch primary clients on occasion to help with staff burnout and for other staff members to become more familiar with other clients
 - Consider the essential nature of what we do in providing face-to-face services to many people who need us as they are alone
 - Be kind to each other and recognize that other team members may have different comfort levels in providing face-to-face work during a pandemic
 - Talk with clients openly and honestly regarding changing guidelines and changes in services
 - Get support and advice from other teams doing similar work
-

from similar normalizing effect to increase in depressive symptoms attributed to isolation. Our clients in general have low socioeconomic status that makes it difficult for them to prioritize wellness. The pandemic brought temporary additional financial supports in the form of expanded unemployment benefits (United States Department of Labor, 2021), supplements to the federal Supplemental Nutrition Assistance Program (SNAP; United States Center on Budget & Policy Priorities, 2021) and Economic Impact Payments, the third of which was in accordance of the American Rescue Plan Act of 2021 (United States Internal Revenue Service, 2021). These additional funds gave many clients short-term freedom and opportunity to purchase goods and services they would not otherwise have been able to enjoy.

Regardless we learned during the pandemic that our ACT team and the clients we serve have adjusted well and have more resilience than we may have originally thought possible. ACT team members wanted to continue to serve clients that in turn wanted to continue to receive high quality services. Just like many other healthcare providers, we learned new technologies during the pandemic. It will be interesting to see how these new technologies affect the future of delivery of ACT services. Traditionally many insurance carriers had been reluctant to fully reimburse for telehealth services unless stringent guidelines were followed, which made it difficult for many providers to adopt new technologies for their clients. The barriers of disruption and learning the new technology have now been removed, as the pandemic forced many of us to adapt and learn. Issues of reimbursement may remain. For example, it is unclear whether reimbursement will continue to occur for services through common communication applications (e.g., FaceTime, Microsoft Teams, Google Hangouts, etc.) that before the pandemic may not have met reimbursement guidelines. It is also unclear whether reimbursement for such services will occur at the

same rates as in-person services yet possibly now payers will have more liberal reimbursement. Many clients have now experienced the convenience of video visits, which may make sense in certain scenarios (e.g., distance and/or time limitations) instead of in-person visits every time. Much of what we learned from the pandemic was through trial and error, and we have provided suggestions for those doing similar work in Table 3 (Suggestions from a Minnesota ACT Team for Those Doing Similar Work).

Limitations

Just like Guan and colleagues, our experience is based upon a single program, lacking in empirical data, and a large reliance on informal information. In comparison with other ACT programs, our program is relatively small in team size and client census and located in a relatively small community without the extent of homelessness, severe drug use, poverty, etc., that are often found in large metropolitan areas.

Conclusion

COVID-19 has forever altered the way we do our important work of providing care to the SMI population. In September of 2020, Guan and colleagues wrote that they hoped the response in their paper would provide helpful guidance for the development of organizational strategies and the identification of service areas that require targeted adaptations (Guan et al., 2021). We agree that a more detailed evaluation of the responses and the long-term effectiveness and impact is warranted. Yet since we had many similar experiences, we have created Table 4 (Suggestions for Services for SMI Clients in a Post-Pandemic World) that lists some

Table 4 Suggestions for Services for SMI Clients in a Post-Pandemic World (i.e., strategies by Guan et al. (2021), that we also found to be successful)

Defining essential services while limiting risk of contagion

- Continue outreach (i.e., a core component of ACT and still important during a pandemic)
- Rotate team members working from home in order to minimize risk of exposure and decrease crowding in shared office space
- Make personal protective equipment (PPE) readily available as appropriate to the situation
- Use up to date knowledge to stratify infection risk and guide choice of in-person versus virtual meeting options
- Adapt new communication media for meetings to promote physical distancing
- Mobilize new technologies to clients as appropriate (e.g., provide training and phones, tablets, or computers to aid in virtual visits)
- Pre-screen clients by phone prior to office or community visits

Promoting health and mitigating physical and mental health impacts

- Track the most vulnerable clients and prioritize resources toward them
- Locally collect perishable and non-perishable food and clothing for those in need of basic necessities while more globally advocating for government funding to support these needs
- Monitor social connections and provide support
- Adapt pharmacotherapy as appropriate (e.g., greater number of refills or switching to long-acting injection formulations)

Promoting staff resilience and wellness

- Solve problems together
- Recognize emotions while avoiding blame and criticism
- Keep a sense of humor
- Encourage healthy behaviors (e.g., regarding sleep and exercise) for each other
- Reflect on meaning and purpose of work
- Emphasizing positive moments in clinical work with regular team check-ins
- Create a safe space to discuss issues related to morale and potential moral injury
- Share tasks while acknowledging strong value of work
- Communicate clearly and transparently (i.e., both leadership and team members)
- Provide opportunity for regular feedback and input from team members

of the strategies in common that Guan and colleagues used successfully that we also used successfully. This will hopefully help for organizations that are continuing to develop their own strategies. Although the COVID-19 pandemic was unwanted, the silver lining for those working with the SMI population includes innovations and adaptations that will last far beyond the time when hopefully the pandemic ends. This is an opportunity for community psychiatry to research our innovations and use technology as a tool to expand our reach and ability to provide high-quality services to the SMI population.

References

- Alavi, Z., Haque, R., Felzer-Kim, I. T., Lewicki, T., Haque, A., & Mormann, M. (2020). Implementing COVID-19 mitigation in the community mental health setting: March 2020 and lessons learned. *Community Mental Health Journal*, 57(1), 57–63. <https://doi.org/10.1007/s10597-020-00677-6>
- Almeda, N., Garcia-Alonso, C., & Salvador-Carulla, L. (2021). Mental health planning at a very early stage of the COVID-19 crisis: A systematic review of online international strategies and recommendations. *BMC Psychiatry*, 21, 43. <https://doi.org/10.1186/s12888-020-03015-y>
- American Psychiatric Association. (2019). *The American Psychiatric Association practice guideline for the treatment of patients with schizophrenia*. 3rd edn. American Psychiatric Association.
- American Psychiatric Association. (2020). COVID-19 pandemic is taking MH toll, finds APA poll. *Psychiatric News*. <https://psychnews.psychiatryonline.org/doi/10.1176/appi.pn.2020.5a10>
- Arebian, A. C., Jones, F., Moore, E. M., Goodsmith, N., Aguilar-Gaxiola, S., Ewing, T., et al. (2020). Mental health community and health system issues in COVID-19: Lessons from academic, community, provider and policy stakeholders. *Ethnicity & Disease*, 30(4), 695–700. <https://doi.org/10.18865/ed.30.4.695>
- Bowman, C., Branjerdporn, G., Turner, K., Kamara, M., Tyagi, M., Reyes, N. J. D., et al. (2021). The impact of viral epidemics and pandemics on acute mental health service use: An integrative review. *Health Psychology Review*. <https://doi.org/10.1080/17437199.2021.1886864>
- Carpiniello, B., Tusconi, M., Zanalda, E., Di Sciascio, G., Di Gianantonio, M., & Executive Committee of The Italian Society of Psychiatry. (2020). Psychiatry during the Covid-19 pandemic: A survey on mental health departments in Italy. *BMC Psychiatry*, 20, 593. <https://doi.org/10.1186/s12888-020-02997-z>
- Center on Budget and Policy Priorities. (2021). States are using much-needed temporary flexibility in SNAP to respond to COVID-19 challenges. <https://www.cbpp.org/research/food-assistance/states-are-using-much-needed-temporary-flexibility-in-snap-to-respond-to>
- Centers for Disease Control and Prevention. (2020). How to protect yourself & others. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

- Chen, S., She, R., Pei, Q., Kersenbaum, A., Fernandez-Egea, E., Nelder, J. R., et al. (2020). The medium-term impact of COVID-19 lockdown on referrals to secondary care mental health services: A controlled interrupted time series study. *Frontiers in Psychiatry*. <https://doi.org/10.3389/fpsy.2020.585915>
- Chevance, A., Gourion, D., Hoertel, N., Llorca, P.-M., Thomas, P., Bocher, R., et al. (2020). Ensuring mental health care during the SARS-CoV-2 epidemic in France: A narrative review. *L'encephale*, 46(3), 193–201. <https://doi.org/10.1016/j.encep.2020.04.005>
- Clozapine REMS. (2020). Important program update (as of 04/02/2020). <https://www.clozapinerems.com/CpmgClozapineUL/home.u#>
- Dixon, L. (2000). Assertive community treatment: Twenty-five years of gold. *Psychiatric Services*, 51(6), 759–765. <https://doi.org/10.1176/appi.ps.51.6.759>
- Eckardt, J. P. (2020). Caregivers of people with severe mental illness in the COVID-19 pandemic. *The Lancet Psychiatry*, 7(8), e53. [https://doi.org/10.1016/S2215-0366\(20\)30252-2](https://doi.org/10.1016/S2215-0366(20)30252-2)
- Esterwood, E., & Saeed, S. A. (2020). Past epidemics, natural disasters, COVID19, and mental health: Learning from history as we deal with the present and prepare for the future. *Psychiatric Quarterly*, 91(4), 1121–1133. <https://doi.org/10.1007/s11266-020-09808-4>
- Fetter, J. C. (2021). A framework for the community psychiatrist's role in the COVID-19 response. *Community Mental Health Journal*, 57, 438–441. <https://doi.org/10.1007/s10597-020-00755-9>
- Guan, I., Kirwan, N., Beder, M., Levy, M., & Law, S. (2021). Adaptations and innovations to minimize service disruptions for patients with severe mental illness during COVID-19: Perspectives and reflections from an assertive community psychiatry program. *Community Mental Health Journal*, 57(1), 10–17. <https://doi.org/10.1007/s10597-020-00710-8>
- Hamada, K., & Fan, X. (2020). The impact of COVID-19 on individuals living with serious mental illness. *Schizophrenia Research*, 222, 3–5. <https://doi.org/10.1016/j.schres.2020.05.054>
- Holmes, E. A., O'Connor, R. C., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., et al. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: A call for action for mental health science. *The Lancet Psychiatry*, 7(6), 547–560. [https://doi.org/10.1016/S2215-0366\(20\)30168-1](https://doi.org/10.1016/S2215-0366(20)30168-1)
- Iasevoli, F., Fornaro, M., D'Urso, G., Gallietta, D., Casella, C., Pateroster, M., et al. (2020). Psychological distress in patients with serious mental illness during the COVID-19 outbreak and one-month mass quarantine in Italy. *Psychological Medicine*. <https://doi.org/10.1017/S0033291720001841>
- Kopelovich, S. L., Monroe-DeVita, M., Buck, B. E., Brenner, C., Moser, L., Jarskog, L., et al. (2021). Community mental health care delivery during the COVID-19 pandemic: Practical strategies for improving care for people with serious mental illness. *Community Mental Health Journal*, 57(3), 405–415. <https://doi.org/10.1007/s10597-020-00662-z>
- Medalia, A., Lynch, D. A., & Herlands, T. (2020). Telehealth conversion of serious mental illness recovery services during the COVID-19 crisis. *Psychiatric Services*, 71(8), 872. <https://doi.org/10.1176/appi.ps.71705>
- Muruganandam, P., Neelamegam, S., Menon, V., Alexander, J., & Chaturvedi, S. K. (2020). COVID-19 and severe mental illness: Impact on patients and its relation with their awareness about COVID-19. *Psychiatry Research*, 291, 113265. <https://doi.org/10.1016/j.psychres.2020.113265>
- Nemani, K., Li, C., Olfson, M., Blessing, E. M., Razavlan, N., Chen, J., & Goff, D. C. (2021). Association of psychiatric disorders with mortality among patients with COVID-19. *JAMA Psychiatry*. <https://doi.org/10.1001/jamapsychiatry.2020.4442>
- Ojha, R., & Syed, S. (2020). Challenges faced by mental health providers and patients during the coronavirus 2019 pandemic due to technological barriers. *Internet Interventions*, 21, 10030. <https://doi.org/10.1016/j.invent.2020.100330>
- Pera, A. (2020). Cognitive, behavioral, and emotional disorders in populations affected by the COVID-19 outbreak. *Frontiers in Psychiatry*, 11, 2263. <https://doi.org/10.3389/fpsyg.2020.02263>
- Riblet, N. B., Stevens, S. P., Shiner, B., Cornelius, S. J., Scott, R. C., & Watts, B. V. (2020). Longitudinal examination of COVID-19 public health measures on mental health for rural patients with serious mental illness. *Military Medicine*. <https://doi.org/10.1093/milmed/usaa559>
- Sergeant, A., van Reekum, E. A., Sanger, N., Dufort, A., Rosic, T., Sanger, S., et al. (2020). Impact of COVID-19 and other pandemics and epidemics on people with pre-existing mental disorders: A systematic review protocol and suggestions for clinical care. *British Medical Journal Open*, 10, e040229. <https://doi.org/10.1136/bmjopen-2020-040229>
- Shinn, A. K., & Viron, M. (2020). Perspectives on the COVID-19 pandemic and individuals with serious mental illness. *The Journal of Clinical Psychiatry*. <https://doi.org/10.4088/JCP.20com13412>
- Spivak, S., Cullen, B. A., Green, C., Firth, T., Sater, H., & Mojtabai, R. (2019). Availability of assertive community treatment in the United States: 2010 to 2016. *Psychiatric Services*, 70(10), 948–951. <https://doi.org/10.1176/appi.ps.201900032>
- Substance Abuse and Mental Health Services Administration. (2008). Assertive community treatment: The evidence. DHHS Pub. No. SMA-08-4344, Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. https://store.samhsa.gov/sites/default/files/d7/priv/theevidence_1.pdf
- Sukut, O., & Ayhan Balik, C. H. (2020). The impact of COVID-19 pandemic on people with severe mental illness. *Perspectives in Psychiatric Care*. <https://doi.org/10.1111/ppc.12618>
- Talley, R. M., Brunette, M. F., Adler, D. A., Dixon, L. B., Berlant, J., Erlich, M. D., et al. (2021). Telehealth and the Community SMI population: Reflections on the disrupter experience of COVID-19. *The Journal of Nervous and Mental Disease*, 209(1), 49–53. <https://doi.org/10.1097/NMD.0000000000001254>
- Thomson, S., Doan, T., Liu, D., Schubert, K. O., Toh, J., Boyd, M. A., et al. (2020). Supporting the vulnerable: Developing a strategic community mental health response to the COVID-19 pandemic. *Australasian Psychiatry*, 28(5), 492–499. <https://doi.org/10.1177/1039856220944701>
- Torous, J., & Keshavan, M. (2020). COVID-19, mobile health and serious mental illness. *Schizophrenia Research*, 18, 36–37. <https://doi.org/10.1016/j.schres.2020.04.013>
- United States Department of Health and Human Services. (2021). Telehealth: delivering care safely during COVID-19. <https://www.hhs.gov/coronavirus/telehealth/index.html>
- United States Department of Labor. (2021). Unemployment insurance relief during COVID-19 outbreak. <https://www.dol.gov/coronavirus/unemployment-insurance>
- United States Department of Treasury. (2021). The Treasury Department is delivering COVID-19 relief for all Americans. <https://home.treasury.gov/policy-issues/cares>
- United States Food and Drug Administration. (2020). Coronavirus (COVID-19) Update: FDA provides update on patient access to certain REMS drugs during COVID-19 public health emergency. <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-provides-update-patient-access-certain-rems-drugs-during-covid-19>
- United States Internal Revenue Service. (2021). Economic Impact Payments. <https://www.irs.gov/coronavirus/economic-impact-payments>

- Williams, J., Fairbairn, E., McGrath, R. Clark, A., Healey, A., Bakolis, I., et al. (2021). Development and rapid evaluation of services to support the physical health of people using psychiatric inpatient units during the COVID-19 pandemic: Study protocol. *Implementation Science Communications*, 2, 12. <https://doi.org/10.1186/s43058-021-00113-0>
- World Health Organization (A). (2020). Novel Coronavirus (2019-nCoV). Situation Report—11. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200131-sitrep-11-ncov.pdf?sfvrsn=de7c0f7_4
- World Health Organization (B). (2020). Listings of WHO's response to COVID-19. <https://www.who.int/news-room/detail/29-06-2020-covidtimeline>
- Zhand, N., & Joobar, R. (2021). Implications of the COVID-19 pandemic for patients with schizophrenia spectrum disorders: Narrative review. *Bjpsych Open*, 7(1), e35. <https://doi.org/10.1192/bjo.2020.157>
- Zhang, J., Ren, Y., Huang, H., Kauer, A. J., Liu, Y., Du, Q., et al. (2020). Timely psychological care for patients with severe mental illness during COVID-19 epidemic. *Asian Journal of Psychiatry*, 52, 102178. <https://doi.org/10.1016/j.ajp.2020.102178>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.