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## SPECIAL COMMUNICATION



## Response to the COVID-19 Pandemic Among Posthospital Brain Injury Rehabilitation Providers



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#### Abstract

Rehabilitation after significant acquired brain injury (ABI) to address complex independent activities of daily living and return to family and community life is offered primarily after initial hospitalization in outpatient day treatment, group home, skilled nursing, and residential settings and in the home and community of the person served. The coronavirus 2019 pandemic threatened access to care and the health and safety of staff, persons served, and families in these settings. This article describes steps taken to contain this threat by 7 leading posthospital ABI rehabilitation organizations. Outpatient and day treatment facilities were temporarily suspended. In other settings, procedures for isolation, transportation, cleaning, exposure control, infection control, and use of personal protective equipment (PPE) were reinforced with staff. Visitation and community activities were restricted. Staff and others required to enter facilities were screened with symptom checklists and temperature checks. Individuals showing symptoms of infection were quarantined and tested, as possible. New admissions were carefully screened for infection and often initially quarantined. Telehealth played a major role in reducing direct interpersonal contact while continuing to provide services both to outpatients and within facilities. Salary, benefits, training, and managerial support were enhanced for staff. Despite early outbreaks, these procedures were generally effective, with preliminary initial infections rates of only 1.1% for persons served and 2.1% for staff. Reductions in admissions, services, and unanticipated expenses (eg, PPE, more frequent and thorough cleaning) had a major negative financial effect. Providers continue to be challenged to adapt rehabilitative approaches and to reopen services.

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The novel 2019 coronavirus disease (COVID-19), caused by severe acute respiratory syndrome coronavirus 2, can present with a wide array of symptoms and coronavirus disease syndromes. Since the pandemic onset, the wealth of articles and case descriptions present a picture of disease that can affect nearly all major organ systems. There is increasing attention to neuro-invasive presentations as well that include a continuum of vague neurologic symptoms to discrete neurologic syndromes.<sup>1-3</sup> Mao et al<sup>4</sup> detailed subgroups of COVID-19 neurologic manifestations centered around central nervous system, peripheral nervous

system, and skeletal muscular injury. Estimates suggest that from a quarter to one-third of individuals hospitalized with COVID-19 may develop neurologic symptoms, with neuroinvasive presentations being linked to more severe COVID-19 cases.<sup>1,4</sup> The preferential effect on neuroanatomic structures may include brain stem regions linked to regulatory functions, such as respiration and cardiac function, possibly exacerbating the disease course.<sup>5,6</sup> More discrete neurologic complications can include stroke, even in persons with few if any risks factors, and seizures.<sup>1,2</sup> Additionally, the potential for residual encephalopathy syndromes, long-term hypoxic/anoxic effects and post—intensive care unit syndrome raises concerns that the number of individuals with more severe forms of COVID-19 could have significant rehabilitation needs during the subacute recovery stage and even across

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the lifespan.<sup>2,7</sup> Thus the COVID-19 pandemic challenges rehabilitation providers both to manage the spread of the disease among the people that they presently serve and to consider the potential future rehabilitation needs of those who have recovered from severe forms of the infection.

Over the last several decades, the duration of both acute medical and inpatient rehabilitation hospital stays after significant acquired brain injury (ABI) have declined markedly. In most cases, inpatient rehabilitation extends for only 2-3 weeks, with a focus on addressing basic self-care and equipping the patient and family to transition out of the hospital either to home or to a less medically intensive care facility. Rehabilitation to address limitations in more complex instrumental activities of daily living, cognition, behavior, and other barriers to return to participation in family and community life is currently offered by specialty posthospital rehabilitation organizations. These organizations provide rehabilitation in a range of settings including residential, skilled nursing, group home, outpatient, and day treatment facilities, as well as home and community in which services are provided in the personal residence of the person served. Services range from intensive rehabilitative and behavioral interventions with a goal of significantly improving the functional status of the person served to assistive services designed to maintain gains made previously in more intensive rehabilitation and the current level of community participation. Braunling-McMorrow et al<sup>8</sup> provide further detail about current practice in posthospital ABI rehabilitation.

Predicting the extent of potential rehabilitation needs stemming from the COVID-19 pandemic is challenging. Nonetheless, consideration of potential treatment options and providers to manage the complexity of the neurologic and rehabilitation needs of individuals with ABI who contract COVID-19 appears warranted. Given the limited length of stay for inpatient rehabilitation, it is likely that any additional needs for intensive rehabilitation for these individuals will be met by posthospital rehabilitation organizations.

The COVID-19 pandemic challenged these organizations to develop innovative methods for continuing to provide services while protecting the health and safety of persons served, their families, and staff and managing financial budgets based on prepandemic planning. Individuals with ABI are particularly vulnerable to infection by COVID-19 because of cognitive and behavioral limitations that could compromise their ability to comply with precautionary measures to decrease risk of infection. Many are also more vulnerable to the effects of infection because of multiple comorbidities associated with ABI.<sup>9</sup>

Because the reality of the pandemic dawned suddenly, posthospital ABI rehabilitation organizations were compelled to make major modifications to their procedures in a very short period of time. Although these organizations have experience in infection control, the high contagion rate and insidious nature (ie, asymptomatic carriers) make COVID-19 control particularly challenging. Organizations contributing to this article addressed the challenges posed by the pandemic independently with variable guidance from federal and state public health authorities. However, across organizations, considerable consistency and consensus emerged. This

List of abbreviations:

ABI acquired brain injury

CDC Centers for Disease Control and Prevention

COVID-19 coronavirus disease 2019

PPE personal protective equipment

SO significant other

article summarizes the consensus of leading posthospital ABI rehabilitation organizations regarding suggested and recommended practices in response to the COVID-19 and similar future pandemics. At the time this article is being published, many of the practices described in this article have been widely adopted throughout health care. Nonetheless, these procedures and their effectiveness in postacute ABI rehabilitation have not been previously presented in the professional literature and are offered here as a potential guide for postacute facilities in regions not yet extensively affected by COVID-19, for reference in the event of future similar health crises, and to document their effectiveness.

## Methods

## Adapting services and assuring safety for persons served and families

Organizations uniformly instituted a number of practice and environmental changes (appendix 1) following guidance from the Centers for Disease Control and Prevention (CDC) and state and/or local regulatory agencies when available. Practice changes were initiated immediately after awareness of the pandemic threat (although, as noted below, major practice realignments, eg, transition to telehealth, took more time to fully implement) and continue to be regularly reviewed and updated as new guidance emerges from the CDC and state agencies. Rehabilitation therapies continued to be provided in residential settings for individuals deemed to be unsafe to return to community settings or when such a transition would greatly affect their recovery potential. In-person services also continued in most group home and home and community settings with recommended protections. Residential facilities designated a specific area of the facility for persons served who were identified as COVID-positive to prevent the spread of infection. As testing became more available, 1 organization with a number of group homes designated 1 home as a "Recovery House" in each geographic area served for those who were recovering from a COVID infection and other homes for those without symptoms or with negative testing.

New evaluations were also limited and modified as described in appendix 2. Although COVID testing was generally conducted in cases screened as suspicious for infection, this varied by locale. Early on when testing was scarcer, some states prohibited long-term care facilities from using COVID testing as a requirement for admission and advised preadmission temperature tracking and symptom monitoring followed by 14-day quarantine. In other cases, admission was delayed as possible for a period ranging from 5 days (the median time from infection to disease<sup>10-12</sup>; Lauer et al<sup>11</sup> reported that 97.5% of individuals with COVID-19 exhibit symptoms within 11.5d) to 14 days depending on the urgency of the admission.

#### Telehealth

The effectiveness and benefits of rehabilitation delivered by telehealth have been of interest to rehabilitation providers for some time,<sup>13,14</sup> although uncertainty over reimbursement has discouraged extensive implementation. The Coronavirus Aid, Relief, and Economic Securities Act expanded Centers for Medicare and Medicaid Services reimbursement for many telehealth rehabilitation services not previously reimbursed. Shortly afterward, commercial insurance companies allowing similar telehealth options further increased access. State licensing and other regulatory bodies also relaxed guidelines for telehealth to facilitate its implementation during the pandemic. (However, as states have begun to reopen, prepandemic restrictions on telehealth have been reinstituted in some locales.) Although organizations had information technology services, none had an established telehealth service line. Implementation involved identifying a stable and secure platform to use, developing appropriate policies and procedures and release forms, staff training including in HIPAA compliant use of telehealth applications, developing and testing therapy protocols, and reimagining how to incorporate telehealth into the service model. Time for initial implementation was typically 2-3 weeks, although full implementation required up to 2 months in some cases.

In response to the pandemic, telehealth became a primary method to reduce direct interpersonal contact and spread of the virus. Medical and nursing follow-up and support, speech therapy, occupational therapy, psychological and counseling therapies, music therapy, and some physical therapy are being delivered by telephone or, if visual contact is required, by using commercially available video communication software that support both individual and group interventions. Therapists assigned to a single location to avoid cross-contamination are able to serve across settings through telehealth technology. Telehealth therapy was also used in some cases within a residential setting. Given the need for extensive personal protective equipment (PPE), including face masks or shields during in-person therapy, video interactions are particularly important for the safe delivery of therapies that require the person served to see the therapist's face, for example, some speech therapy interventions. Telehealth is also being used for psychiatric and other medical consultations, family conferences, wheelchair evaluations, and home evaluations. With restricted visitation, telecommunication is important for participants to maintain connections with family and significant others (SOs).

Formal participant satisfaction surveys are underway; informal feedback from participants about telehealth has generally been positive. Primary barriers to telehealth are related to technology (eg, lack of Internet or phone, problems with telehealth platforms), limited family and social support to aid in service, and resistance to video telehealth.

#### Assuring the health, well-being, and safety of staff

The potential for spread of infection applies not only to persons served but to the staff who serve them. Managing staff exposure was critical because many organizations quickly learned how a single positive case could temporarily deplete a treatment team or support staff group. Many of the practice modifications (see appendix 1) to protect participants from infection also protect staff. Additional interventions specific to staff are listed in appendix 3. Obtaining PPE and testing is challenging in some locales and requires diligence and creativity in managing the systems controlling these resources. Programs have also needed to be vigilant regarding CDC updates for PPE, particularly around the asymptomatic spread of COVID-19. Staff showing symptoms or testing positive were instructed to self-quarantine; however, some with minimal or mild symptoms continued to deliver therapy using telehealth.

Formal and informal staff feedback during the pandemic revealed an elevated level of stress regarding personal safety and the overall uncertainty of how COVID will affect job security as well as concern about long-term organizational viability. Initiatives to address increased stress among staff and to enhance staff appreciation and support were implemented across organizations and facilities. Facilities and organizations varied in their approaches, which included frequent (daily to weekly) e-mails and virtual town hall meetings offering support, coping resources, and information about safety practices and local infection rates; video conferences with local physician experts for staff to ask questions about COVID and safety precautions; technical and logistical support for staff working from home as well weekly telephone calls from administrative staff to offer assistance and support; ongoing communications about resources for childcare and employee assistance programs for mental health and financial aid; signs, posters, and buttons offering thanks and encouragement; small gifts; individualized snacks, boxed lunches, and catered socially distanced group lunches; theme days (eg, wear favorite football team shirt) and staff appreciation days; organizing external volunteers to sew masks and gowns for staff; dedicated space for staff to decompress and relax; and videoconference and text groups for decompression and support.

### Results

## Effectiveness of interventions to reduce spread of COVID-19

As table 1 illustrates, implementation of the procedures and processes previously described were generally effective in reducing the spread and effect of COVID-19 across the 7 posthospital rehabilitation organizations that contributed to this article. Infection rates among 2027 staff and 1820 persons served were low and primarily represent individuals afflicted before preventative procedures could be fully implemented. Quarantine rates are higher; however, conscientious quarantining likely reduced the spread of the disease and contributed to low infection rates. The categories in table 1 are not mutually exclusive; for example, a person identified as COVID-positive may also have been hospitalized and required intensive care unit treatment. The pandemic continues, and estimates are limited by a lack of widely available testing and well-established diagnostic procedures. As such these estimates, although based on the best available data at the time this article is being written, must be considered preliminary.

#### Financial effect and other costs

The early financial effect of practice changes (appendix 4) required to respond to the pandemic on organizations has been

Table 1	Effectiveness	of responses	s ac	ross	7 posthos	pital reha-
bilitation	organizations	(categories	are	not	mutually	exclusive;
data colle	cted through M	1ay 2020)				

Variables	Persons Served n (%)	Staff n (%)
	20 (1.1)	42 (2.1)
Hospitalizations	3 (0.2)	4 (0.2)
ICU	3 (0.2)	4 (0.2)
Deaths	0 (0)	0 (0)
Quarantined (tested positive)	18 (1.0)	36 (1.8)
Quarantined (symptomatic- no test)	14 (0.8)	26 (1.3)
Quarantined (precautionary because of possible exposure including new admissions)	105 (5.8)	127 (6.3)
Total no. of persons served or staff	1820	2027

Abbreviation: ICU, intensive care unit.

substantial, and the longer-term potential challenges are daunting to consider. Determining, planning, and implementing the best course of action in response to the pandemic requires a great deal of time from organizational and facility managers and places them under considerable stress. System redesigns required staff reassignments, increased contact with both current and furloughed staff, staff consultation and development, staff training, and introduction of new technologies, for example, telehealth. Telehealth reimbursement is inconsistent, and in many cases well below prior levels of reimbursement for various services. Most of the posthospital rehabilitation organizations contributing to this article serve persons in multiple states. Variations in mandates and guidelines across states added further to the complexity of planning a system-wide response for these organizations.

Early outbreaks prior to implementation of widespread preventative procedures created additional stress for both managers and staff. In 1 facility, approximately 80% of staff required quarantine. In addition to the threat to the health of staff and morale, the outbreak challenged the facility to continue to provide services through hiring temporary staff or facilitating staff on quarantine to continue to treat through telehealth. The overwhelming proportion of staff who were either ill or quarantined also stressed systems and funding for staff support and benefits, such as sick leave and paid time off. As in the general population, most staff in this facility who became ill recovered from mild symptoms. However, 1 staff member was recently readmitted to the hospital with unremitting, severe symptoms.

Although staff furloughs partially mitigate expenses, adjustments to pay and paid time off increased organizational expenses. To contain expenses, new hiring has generally been put on hold. Some organizations have been able to access the Federal Pandemic Emergency Fund to pay for some PPE or Payment Protection Loans to offset some staff salary, although not all organizations in all states have been able to access these programs. Furthermore, this temporary assistance does not offset the greater revenue loss and myriad of added expenses required by the pandemic response.

# Discussion: Next steps and future directions

#### **Reopening closed services**

By implementing the procedures and processes described in this article, these posthospital ABI rehabilitation organizations have been able to generally contain the spread of COVID-19 and, as many areas of the country move toward reopening previously shuttered businesses, have begun to consider reopening outpatient services and extending services in other settings. Reopening outpatient services is perhaps the most challenging because providers have little control over the activities that persons served or their families engage in when they are not in rehabilitation. Furthermore, the need for serial training and continually updated guidelines to reinforce strict PPE and social distancing guidelines is critical because the growing knowledge surrounding the high percentage of individuals with COVID-19 who are asymptomatic makes identification and quarantine more challenging. Routine quarantining of new staff and patients, surveillance testing of all or a random sample of staff and persons served, and requiring universal masking begin to address this issue. Nonetheless, obtaining timely testing continues to be problematic in some areas, and concerns remain about the accuracy (ie, false negatives, false positives) of some tests. Additionally, guidelines regarding the extent and frequency of testing continue to evolve. In addition to interventions listed in appendix 1, steps planned to promote safe therapeutic interactions in outpatient facilities include masking; daily temperature checks; and daily symptom checklists for participants, involved families, and therapists. Group treatment and family involvement will be limited.

Participants and families and/or SOs will also be provided with education about COVID-19 and avoiding infection. Additional changes to direct care precautions, staffing ratios and treatment floors, and managing transportation needs (eg, 1 or limited persons in a vehicle, asking participants not to use public transportation to travel to the outpatient facility) are anticipated. Environmental changes include visual cues to encourage social distancing and more frequent and thorough facility cleaning. In home and community settings, therapists have always been encouraged to decline to provide service in a residential setting in which they feel unsafe, and this policy also extends to potential COVID-19 exposure. With greater access to testing and more rapid and accurate results, programs should be better able to make decisions around quarantining.

Across all settings, reengagement with family, SOs, and community activities, such as shopping and recreational activities, are almost universal goals. In urban settings, developing skills in the use of public transportation is often a critical means for rehabilitation participants to access venues for these activities. Educating and coaching persons served how to engage in these activities without exposing themselves to unacceptable risk for COVID-19 infection adds significant complexity to achieving these goals. Managers and therapists are also developing ways to safely reengage families and SOs who have always been critical allies in the therapeutic process.

Also challenging is providing rehabilitation to those who are recovering from COVID-19 infection and may still be contagious. In addition to other safeguards mentioned previously to prevent spread, plans are being made to serve these individuals in separate, designated areas and for monitoring including pulse oximeter checks of blood oxygen level, blood pressure, and heart rate. These same medical monitoring procedures will be used with those who are still recovering from COVID-19 but are no longer contagious as well as new participants who enter posthospital ABI rehabilitation because of residual neurologic impairment due to severe COVID-19 infection.

#### Further development of telehealth

If satisfactory reimbursement continues, telehealth interventions are very likely to remain a significant component of postacute ABI services. Video telehealth allows providers to work directly with those they serve in their homes, observing the physical and psychological obstacles and developing possible solutions in real time, providing specific direction on management of medications and use of prosthetics as well as education, counseling, and psychotherapy. Telehealth also makes preadmission screenings and family conferences more accessible to those served and opens access to services to those who may have difficulty journeying to a care center because of distance or other obstacles to transportation. Working with persons served in their living environments increases both the value and the probability that the changes will be lasting. Working in a virtual environment also facilitates access to other interdisciplinary team members to address issues in real time through texting or teleconferencing.

As mentioned previously, a few barriers to telehealth have been encountered. Continued mainstream telehealth use is expected to allow providers to learn to minimize these modifiable barriers. Such efforts may include cost reductions or other financial supports to assist consumers in purchasing necessary technology, identifying staff and/or family support persons who can provide needed training and technology assistance to persons served, and including other parties (eg, translators, case managers) in therapeutic interactions as in in-person therapy. Although security issues may be a concern, applications like FaceTime can be used if a smartphone is available but a computer is not. If more advanced technology is not available, traditional handouts and therapy guides can be sent through the mail with telephone follow-up.

#### Care of staff

To reduce the risk of spread of the infection within staff, procedures are also being implemented in office settings, such as eliminating group workspaces, supporting social distancing, requiring masks be worn in offices, and frequent intensive cleaning of these areas. Special considerations for staff at higher risk will continue to be made. In accordance with some government recommendations regarding graduated business reopening, using the 25%/50%/75%/100% capacity model or other internally developed staged protocol will be followed. These changes both in therapeutic and nontherapeutic areas will dramatically alter these milieus, which have always emphasized team and social engagement. The necessary changes for social distancing, managing cleaning protocols, and other COVID-19– related precautions are likely to limit the ability to function at prior capacity levels.

#### Organizational flexibility and preparedness

Managers will need to take the lead in encouraging and supporting staff camaraderie, teamwork, and a therapeutic milieu as necessary changes to assure the safety of staff and persons served are put in place. Many organizations are innovating new conceptualizations of job roles in which staff have primary, secondary, and tertiary job duties based on need. The potential for rapid spread across a treatment team or staff group highlights the incredible value of staff who have the capacity to increase their range of services from a clinical and support services standpoint. This may also have a direct effect on hiring processes in the future as companies aim to maintain maximal flexibility. The use of temporary staff is also more commonplace to allow for better real-time management of quarantine situations. Managers are beginning to work with staff to build an understanding that changes resulting from the pandemic may continue for months or years depending on progress toward a vaccine or cure.

Similar to other industries, the pandemic has forced a reevaluation of the needed infrastructure to provide rehabilitation care at the postacute level. The recent experience of altering treatment models, staffing, and programmatic flow sets the template for preparation for additional surges as is widely expected based on the prediction models. Organizations also have a better understanding of how to adjust staffing and programming based on the safe capacity levels, which have varied as service lines have closed and reopened. Now that organizations have created contingency models, modified treatment options, and, as possible, acquired sufficient supplies of PPE, there should be more alternatives to the prior closings or drastic reductions in care.

Organizations have learned the necessity of maintaining flexibility in service delivery. As quarantines occur at the patient or staff level, real-time transition to telehealth platforms for short-term care are viable and minimize any effect on continuity of care. What took weeks or months to do early in the year can now be managed in days because processes have been developed and staff have been trained to deliver care in a variety of fashions. This will be invaluable through the pandemic and serve as a model for any potential future large-scale health crisis. Many aspects of staff role flexibility, varying schedules for patient care, and having multiple methods of care delivery will undoubtedly lead to a better experience for the person served and increase access to care going forward. The potential to downscale nonclinical facility space and overhead for those who can work remotely allows more revenue to be dedicated to direct care expenses. This is critical given the declining reimbursement and increasing insurance challenges that continue to threaten postacute care viability.

Ideally current appeals to Centers for Medicare and Medicaid Services and other payor sources to continue to reimburse for telehealth and other care modalities used during the pandemic will be successful. This would not only ensure needed continuity of rehabilitation care but also partially offset large-scale losses in revenue. The notion of site of care may need to be deemphasized to allow focus on the nature and dosage of care provided for reimbursement purposes. Nonetheless, revenue expectations until the pandemic greatly abates are uncertain. Payor reimbursement will likely be unchanged, yet cost of care and less efficient treatment and/or staffing models will continue. The harsh reality for posthospital rehabilitation and other health care providers may be that the resources needed to manage future outbreaks will not be available given the monumental financial burden that has been already absorbed.

### Future research

The group of organizations comprising the newly formed Foundation to Advance Brain Rehabilitation (www.fabr.org) plan to compare outcomes aggregated across facilities and organizations from before with those obtained during the pandemic to explore the effect of service delivery changes on effectiveness. More specific analyses of changes in service delivery models are expected to support further refinement and adoption of effective and cost-effective approaches to postacute care. With the anticipated ascendance of telehealth as a service option, expanded research in variations of this modality, accessibility, and engagement are needed to support the development of best practices in telehealth.

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- Suspend outpatient and day treatment services
- Transition to telehealth-based therapies
- Coordinate additional support services within the home
- Update and distribute staff policies and guidelines for isolation procedures, transportation, cleaning, exposure control, and infection control specifically targeting droplet exposure
- Serial training and competency checks on these above procedures based on updated information regarding best practices
- Vigilantly implement recommended protections for staff (e.g., personal protective equipment; PPE) and persons served
- Discontinue community activities outside of the residential facility, group home, or participant's home
- In the absence of community outings, enhance and expand inhouse leisure and recreation programs (eg, increase frequency of recreational therapy, implement telehealth availability of art and music therapy and support groups including availability in evening hours, increase outdoor recreational activities and community walks that include instruction and rehearsal of safe practices for community activities)
- Restrict outside visitation to facilities
- Conduct daily symptom screening and temperature checks of those required to enter the facility (eg, staff, vendors)
- To reduce the possibility of cross-contamination, assign therapists who in the past served multiple facilities or group homes to a single setting and, as possible, to a small cohort of persons to treat
- Increase frequency of facility cleaning routines with special attention to thorough and frequent cleaning of shared surfaces and equipment
- For services in the participant's home, provide and reinforce education on infection control and prevention (for example, frequent handwashing, adhering to local shelter-in-place orders, social distancing, and wearing masks or face shields)
- Quarantine and, as possible, test program participants and staff showing COVID-19 symptoms; recommend seeking appropriate medical evaluation and treatment
- Quarantine program participants and staff who had contact with COVID-positive individuals guided by physician and regulatory agency advice

#### Appendix 2 Modifications to Evaluation Process

- Conduct evaluations by telephone or telecommunication including limited neuropsychological testing
- Include queries about flu and coronavirus symptoms, possible exposure, and travel history for the potential participant and others with whom they have been in contact
- As allowed by state regulation and availability, obtain COVID testing prior to admission if evaluation suggests that an appropriate rehabilitation candidate is at high risk for infection
- Administer COVID symptom checklist to person served and other household members at the onset of services and at least weekly thereafter

Appendix 3 Intervention Specific to Ensuring the Health, Wellbeing, and Safety of Staff

- Give staff option of working from home or, as possible, alternative assignment or temporary furlough—particularly those identified as at high risk
- Organization managers maintain regular telephone contact with furloughed staff to support their eventual reengagement
- Assist furloughed staff to access organization's Employee Assistance Program and resources for financial assistance and other supports, for example, continuing education and coping videos
- Develop programs for active, nonfurloughed staff appreciation and provide in-the-moment support
- Assure flexibility in work schedules for employees with childcare, elder care, and other COVID-related family challenges
- Implement supportive adjustments in pay, paid time off, and leave without pay to recognize the increased risk and effort during the pandemic
- Provide greater pay increases for those volunteering to provide service to COVID-positive or symptomatic participants

#### Appendix 4 Financial Effect: Added Costs and Revenue Loss

- In many cases, safety precautions required complete revision of staffing models, residential and treatment floor arrangement, and infrastructure enhancements
- Marked increase in basic supplies, particularly PPE—previously a limited, fixed cost
- More intensive facility cleaning
- Purchasing, implementing, and managing telehealth services
- Staff training in telehealth and expanded staff support/development opportunities
- Inconsistent telehealth reimbursement that, in many cases, is well below prior reimbursement level
- Revenue reductions resulting from suspension of outpatient services, reduction in in-person therapies, and reduced and delayed admissions because of necessary additional screening and processing
- Pay adjustments, increased paid time off, and other expanded staff benefits and services

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