

# Demonstrating the vital role of physiatry throughout the health care continuum: Lessons learned from the impacts of the COVID-19 pandemic on inpatient rehabilitation

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**Editor's Note:** This article is one of a series published in the June 2021 issue of PM&R that collectively form a White Paper describing the vital role of Physiatry throughout the healthcare continuum during the COVID crisis.

The Centers for Medicare and Medicaid Services (CMS) defines acute rehabilitation as occurring in an inpatient rehabilitation facility (IRF), focusing on specific medical conditions requiring intensive rehabilitation and medical oversight, and providing a minimum of 15 hours of therapy (physical, occupational, and speech) per week.<sup>1</sup> Physiatrists (medical specialists in physical medicine & rehabilitation [PM&R]) play a vital role in not only caring for patients undergoing acute inpatient rehabilitation but also leading the interdisciplinary team of rehabilitation professionals involved in patient care during the course of rehabilitation. Apart from clinical responsibilities, physiatrists may also have educational responsibilities for fellows, residents, or medical students; as well as varying degrees of expectations for research or scholarly work. Physiatrists working in both academic and nonacademic centers have administrative responsibilities, such as serving as a medical director of an IRF. In addition to clinical activities within an IRF, physiatrists participate in acute care consultations (including in intensive care units), outpatient practices, and community outreach. Essentially, the physiatrist's role spans the continuum of care.

At the beginning of the 21st century, IRFs primarily admitted patients with debility, stroke, brain injury, spinal cord injury (SCI), and knee or hip replacements. Between the years 2000 and 2007 national data from the Uniform Data System for Medical Rehabilitation

showed an increasing number of debility cases in IRFs with a diverse composition of etiologies.<sup>2</sup> When compared to patients of other impairment group codes, those with debility were the most likely group to be discharged from IRFs back to the acute care hospital.<sup>2</sup> Patients with stroke, lower limb joint replacement, hip fracture, brain injury, and SCI all showed improvement in functional independence during their rehabilitation stay.<sup>3-7</sup> The majority of patients from each impairment group code were discharged to the community setting with percentages ranging from 71% for people with SCI to 94.5% for people with lower limb joint replacement.<sup>2-7</sup>

Before the COVID-19 pandemic, outpatient PM&R practices such as those focusing on pain management or musculoskeletal injuries were growing. At the same time, IRFs were experiencing decreasing overall lengths of stay in part owing to the Value-Based Payment Modifier that assesses both the quality and cost of care under Medicare and the advent of the Bundled Payments for Care Improvement initiative that changed the landscape of inpatient rehabilitation shifting many orthopedic conditions away from IRFs and either directly to home or to skilled nursing facilities (SNFs).<sup>8</sup>

There are published reports regarding the role and value of rehabilitation medicine during natural disasters and disaster relief. The World Health Organization Liaison Sub-Committee on Rehabilitation Disaster Relief and the International Society of Physical and

Rehabilitation Medicine combined to review literature on relief response to large-scale natural disasters<sup>9,10</sup> from which emerged a Symposium on Rehabilitation Disaster Relief as well as guidelines outlining a structured plan for disaster rehabilitation. Other than research on the strategic planning for and implementation of physical therapy to address HIV/AIDS-related functional limitations during the HIV/AIDS pandemic, there is a paucity of research on psychiatric care and strategic planning in a pandemic.<sup>11,12</sup> However, it is well established that prolonged stays and immobilization in the intensive care unit (ICU), such as that caused by severe COVID-19 infections, can lead to ICU-acquired weakness and post-intensive care syndrome. ICU-acquired weakness and postintensive care syndrome are characterized by debilitating physical, cognitive, and psychological impairments that have lasting effects.<sup>13-18</sup> However, during our lifetimes there has been no medical crisis approaching the scale and human devastation caused by COVID-19.

## **SIGNIFICANT IMPACTS OF THE COVID-19 PANDEMIC ON PHYSIATRIC PRACTICE**

### **Changes in delivery of care**

The COVID-19 pandemic affected the delivery of psychiatric services in the acute care settings and required modifications, enabled by Medicare emergency waivers,<sup>19</sup> to enable psychiatric services across the continuum. In the early stages of the pandemic, with a rapidly growing need for “acute medical beds,” conversion of IRF units to medical units limited availability for rehabilitation patient admissions. Further, ICU census increased, with most patients who were mechanically ventilated having critical illness<sup>20</sup> and prolonged lengths of stay. This led to increased demand for acute care consultations resulting in a stress point for psychiatric departments whose faculty were redeployed to COVID-19 units. Furthermore, some of the psychiatry workforce called in from ambulatory settings were not as familiar or skilled in managing the rehabilitation requirements of patients in the ICU. Local challenges, such as personal protective equipment (PPE) shortages, further stressed the ability of psychiatric consultants to provide regular care in the ICU thereby defaulting to the use of telehealth.

Given the high incidence of symptom sequelae among COVID-19 patients who were admitted to acute care hospitals, there was an increasing need for rehabilitation beds to meet the needs of COVID-19 survivors. However, staffing shortages in IRFs as a result of redeployment of psychiatrists and nurses to COVID units limited the number of patients that could be admitted. Evolving Centers for Disease Control and Prevention guidelines related to infectiousness affected the need to create separate spaces to treat COVID-19 positive and recovered patients and patients-under-investigation for

COVID-19. Specialized needs of COVID-19 patients such as the need for oxygen, specialized wound care, and equipment were limited in areas experiencing significant surges and hospitalizations.

Discharge planning from IRFs was affected by changes to the usual process including family meetings, caregiver hands-on training, and homecare services. Hospital visitation was suspended based on local positivity rates, and the psychiatrist needed to facilitate alternative arrangements for family training and family meetings.<sup>21</sup> Furthermore, families anxious about COVID-19 transmission were reluctant to care for patients in the home. Access to SNFs and homecare services was restricted by these facilities and agencies not accepting patients who were COVID-19 positive, causing bottlenecks for acute care hospitals and IRFs.

### **Health and safety of health care team and patients**

The risk of patient-to-patient and patient-to-health care worker spread of COVID-19 exists in shared rehabilitation unit spaces including sleeping-rooms, bathrooms, dining rooms, treatment spaces, and gyms. Modified barium swallow tests, speech therapy for patients with tracheostomies, and nebulizing treatments for patients with COVID-19 were considered particularly high risk super-spreading procedures. The psychiatrist was responsible for developing and implementing guidelines to separate COVID-19 positive patients from noninfected patients and minimize risk of spread to staff. Adequate space with repurposing and purchasing of equipment, such as negative pressure settings or rooms with HEPA filters, was required.<sup>22</sup> Development of alternative care delivery methods was also needed including in-room therapy.

### **IRF census and financial implications**

Hospital admissions fell sharply beginning in April 2020 during the start of the COVID-19 pandemic for all non-COVID-19 diagnoses, including elective surgeries, stroke, myocardial infarction, pneumonia, and sepsis.<sup>23</sup> Many IRF units were converted to medical units during surges, affecting entire budgets of rehabilitation hospitals. According to the Uniform Data System for Medical Rehabilitation, there were fewer admissions to IRFs in 2020 year to date compared to 2019.<sup>24</sup> At Rusk Rehabilitation, New York University Langone Health, (personal communication, Rusk Finance and Administration, December 2020) during the months of April through August 2020, budgeted discharges were down by 178 discharges with significant reduction in occupancy rates recorded at 53% (April) and 73% (May) compared to a normal rate of 92%. This IRF volume drop was echoed nationwide

and corresponded to the closure of some rehabilitation units as well as the need to block beds so that patients who were COVID-19 positive were not colocated with those who tested negative.

## Training requirements

During the COVID-19 surge, some psychiatrists and rehabilitation residents and fellows were redeployed to COVID-19 teams.<sup>25</sup> This placed additional burden on the remaining psychiatry attending staff in IRFs who were already managing the increased demands of the COVID-19 pandemic environment including PPE supply/demand issues and managing caregiver needs with no hospital visitation privileges. In addition, new skill sets were required to care for large numbers of patients with the sequelae of ICU syndrome. Many psychiatrists covering ICU consults and inpatient rehabilitation units were not familiar with the treatment of delirium, oxygenation and weaning management, pulmonary rehabilitation required for COVID-19 survivors, and the value of ICU early mobilization programs.<sup>26</sup> Increased clinical care responsibilities also affected those psychiatrists involved in research studies and affected those on track for academic promotion.

## Applied processes and workarounds - Impacts of the COVID-19 pandemic on psychiatric practice

Repurposing of the inpatient rehabilitation unit to a medical unit caring for acute COVID-19 patients required adaptation on the part of the psychiatrist. On some converted units the psychiatrist remained in place delivering medical care under the guidance of and in conjunction with an overseeing medical hospitalist. Inpatient psychiatrists are well suited to this expanded role as they routinely maintain skills in the medical management of complex rehabilitation patients. Training of the psychiatrist by the hospitalist facilitated this expanded role of the psychiatrist. When the psychiatrist was not required in this role they were redeployed to acute care consultation service coordinating the rehabilitation management of acutely ill patients in the ICU or step-down medical units.

Reconversion of medical beds back to rehabilitation beds restored the inpatient psychiatrist to their prior role. CMS waivers for inpatient rehabilitation allowed for the conversion of acute care medical beds into IRF beds facilitating the inpatient psychiatrist to coordinate and deliver IRF care in nonexempt acute medical care spaces. Relaxation of Medicare waivers for the 60% rule allowed IRFs to accept patients that otherwise would go to subacute rehabilitation.<sup>19</sup> Changes to the complex admission process was necessary given the

usual involvement of case managers, rehabilitation liaisons, hospitalists, and insurance authorization slowing throughput for overwhelmed hospitals.<sup>27</sup>

Acute care psychiatry consultation demand increased during the COVID-19 pandemic surge. The value of early engagement of the psychiatrist and implementation of rehabilitation care is well established.<sup>26,28,29</sup> This demand was met through redeployment to the inpatient consult service of inpatient psychiatrists from closed IRF units and outpatient psychiatrists from clinics where volume dropped due to stay at home orders and before the use of telehealth video visit services. Psychiatrists used technology to provide inpatient acute care consultations by telemedicine (real-time audiovisual interactivity) when direct face-to-face consultation with patients was not feasible. Expanding the role of the consulting psychiatrist to also include education and training of the acute care clinicians in rehabilitation practices and principles facilitated excellence in rehabilitative care in the acute care setting. Greater interaction with patients, caregivers/family while visitation was not permitted and social work/case management facilitated postacute care discharge planning.

On the rehabilitation inpatient unit, maintaining a safe environment required attention to limiting spread of COVID-19 between patients and staff. Psychiatrists were responsible for working with infection prevention and control teams to develop guidelines for separating COVID-19 positive patients from COVID-19 negative patients. Depending on the size of the IRF, this included designating an entire unit to COVID-19 positive patients and another to negative patients. Smaller sites used distancing or physical barriers on their units to separate the populations. Psychiatrists were also charged with educating and supporting the rehabilitation team to maintain strict infection prevention and control practices. Psychiatrists modified rehabilitation orders and care plans to allow COVID-19 patients to be treated in their rooms in order to limit proximity with noninfected patients and staff.

When IRF units closed or were converted to COVID-19 medical units during the surge of the pandemic, the negative impact on IRF census and budget was predictable but unavoidable. Psychiatrist leadership and rehabilitation departmental administrators collaborated with hospital leadership to allow for rebalancing of budgets based on the patient volume changes experienced. And with the surge in COVID-19 patients requiring acute inpatient rehabilitation beds, other acute inpatient rehab candidates without COVID-19 could not gain access to the needed IRF bed. For the duration of the IRF unit closure, the acute care consulting psychiatrist orchestrated the rehabilitation care of patients in acute care, working with therapy services to enhance the normal therapy time allotment to facilitate functional recovery. In addition, the psychiatrist was central to

discharge planning coordinating with the acute care medical team, social worker, case manager, and patient caregivers.

Discharge planning from the IRF to home was facilitated by preparing the patient and caregivers for telehealth home care from psychiatrists. Video-visit psychiatric evaluation and therapy services were delivered early in the postdischarge phase of recovery through a secure patient portal. While patients were still at the IRF, enrollment and training of every patient with the patient portal (eg, MyChart) on the electronic health record (eg, Epic) was set by the psychiatrist as a rehabilitation team goal. Patients and caregivers were trained how to use mobile devices for telehealth psychiatric follow-up visits and for rehabilitation therapy sessions post discharge. Length of stay and intensity of rehabilitation services was adjusted/prolonged as needed case by case to support a discharge to home. A COVID-19 specific home exercise program developed and individualized by the psychiatrist focused on pulmonary rehabilitation and breathing exercises, strength and endurance training.

With such rapid flux in patient volumes and needs, fluidity in psychiatrist deployment helped meet the rehabilitation needs through the continuum of care. Support and training of psychiatrists by rehabilitation department leadership and those experienced in particular areas of care facilitated the smooth transition of psychiatrists from outpatient to inpatient to acute care and ICU settings. Daily debriefings between rehabilitation department leadership and psychiatrists supported this flexibility in practice delivery and identified areas requiring further education and training.

Challenges to psychiatrist and resident/fellow training were also addressed through transitioning from in-person to online learning. Recording of psychiatrists' experiences as well as sharing emerging literature and practice recommendations through webinars and online learning forums enabled psychiatrists and rehabilitation departments across the nation to share and deliver current and appropriate care. This was exemplified in the need to optimize understanding in the rehabilitation management of ICU and post-ICU COVID-19 patients requiring tracheotomy care, oxygen therapy, pulmonary rehabilitation, and delirium care.

Psychiatrists have also been impactful in early identification of clinical decline in community-based individuals with COVID-19 during the pandemic. By keeping close contact with their outpatients - individuals with disabilities at greater risk of a poor outcome from COVID-19 - the psychiatrist can monitor which of their patients contract the disease and the course they follow. At several institutions, psychiatrists have established such remote monitoring programs for people with COVID-19 enabling patients to have their subjective and objective symptoms monitored in the home while quarantining. In the event of any negative change

in status, the patient is asked to come to the hospital. This process improves the efficiency of medical care, prevents unnecessary trips of vulnerable patients to health care facilities, saves health care resources, and provides contact and emotional support to individuals with disabilities and their families during the pandemic.

## Presentation of survey data

As a result of the COVID-19 pandemic, psychiatrists have been asked to perform many roles. In a survey conducted in April 2020,<sup>25</sup> 501 physicians including practicing psychiatrists and rehabilitation residents and fellows from 39 states, the District of Columbia, and Puerto Rico were surveyed to examine the immediate effects on rehabilitation training and psychiatric practice. Of 178 psychiatrists, 84.3% practiced inpatient care prior to the pandemic decreasing to 60% post outbreak. A total of 7.3% of the psychiatrists were redeployed to inpatient medicine teams. The survey also highlighted that the percentage of psychiatrists engaged in administrative work pre-pandemic (10.7%) increased to 26.3% early in the pandemic when there were widespread closures of rehabilitation units. This percentage further increased later in the pandemic as highlighted by a subsequent survey (results described next), indicating more geographic locations affected by the pandemic.

A second cross-sectional electronic survey distributed by the American Academy of Physical Medicine and Rehabilitation comprised 44 questions assessing demographics, work responsibilities, and finances related to the impact of COVID-19 on psychiatrists and was distributed to psychiatrists in September 2020. The survey received 226 complete responses (Supplementary Material S1). Regarding psychiatrists' work roles in the inpatient rehabilitation setting during the COVID-19 pandemic, 68.5% reported treating post-COVID-19 patients who were recovering; 20.2% cared for acutely ill COVID-19 patients in the inpatient setting; 19.1% were not involved in the management of post-COVID-19 patients; 15.7% managed acute medicine inpatients; 11.2% managed typical IRF patients/no changes, managed acute COVID-19 patients in SNF setting, or did acute care psychiatric consults on COVID-19 and non-COVID-19 patients.

In addition to IRF responsibilities, 44.1% of inpatient psychiatrists reported having increased or new consult responsibilities; 30.5% undertook administrative roles coordinating care for acutely ill patients on medical floors and 39% stated they had no new roles, engaged in informatics support, and/or had more COVID-19 related meetings. A total of 59.1% of psychiatrists reported their department was involved in planning for the response and care of post-COVID-19 patients, whereas 28.4% were not. About 12.5% were unsure of the role of their department in the COVID-19 response. The response



plans included therapy services (78.8%), physician consultative services (69.2%), strategic planning (51.9%), and outpatient services (38.5%). To achieve these service roles, psychiatrists worked primarily with internal medicine (82.2%), pulmonary (42.2%), critical care (35.6%), neurology (24.4%), and other (17.8%).

Inpatient psychiatrists reported on what happened to their IRF during the COVID-19 pandemic, ranging from rehabilitation units closing down completely to inpatient rehabilitation units expanding. The most common responses were: IRF cared for COVID-19 patients who had recovered and were off precautions (42.7%); IRF had a dedicated unit for COVID-19 patients recovering (31.5%), IRF closed partially (27.0%), and other (15.7%). The majority of *other* responses included no change in what happened to their IRF, IRF turned into acute care hospital beds (non-COVID) 7.9%, IRF turned into an acute COVID-19 unit 4.5%, and IRF closed completely 6.7%.

With respect to measures that the department or hospital implemented to keep the inpatient psychiatrist healthy and safe, survey responses indicated that 85.4% of inpatient psychiatrists felt they were provided appropriate PPE; 57.3% felt they were provided education on donning/doffing PPE and provided hygiene education; and 14.6% of responses included limited physicians working time, telehealth for inpatients, temperature checks, team meetings via phone conferencing, robust access for testing, and PPE shortages.

Regarding education to treat patients with COVID-19, 64.9% received specific COVID-19 education, 9.5% received reeducation on running codes/rapid responses, and 5.4% received education on delivering bad news. About 55.2% felt they were prepared to deal with the pandemic surge. To help feel more prepared, the vast majority of IRF psychiatrists would have wanted more education on COVID-19 (69.4%) and more support for needs at home (55.6%).

## Feedback from external stakeholders

COVID-19 resulted in significant changes to IRFs and acute inpatient rehabilitation. Institutional response varied widely from some hospital systems expanding number of IRF beds to others closing IRF units. During the COVID-19 pandemic CMS issued Emergency Declaration Blanket Waivers that provided more flexibility in which patient diagnoses could be authorized admittance to an IRF, as well as encouraged the use of telehealth visits, including providing care across state lines even if the medical provider did not hold a license in the other state.<sup>19</sup> One such significant change was the relaxation of the Medicare “IRF 60% rule” requiring IRFs to discharge at least 60% of their patients meeting one of 13 qualifying diagnoses. This allowed IRFs to admit more patients with post-COVID-19 functional limitations, many of whom were admitted/discharged under

the diagnosis code of *debility* that does not count as one of the 13 qualifying diagnoses.

Hospital systems looked to psychiatrists to guide the rehabilitation of people with COVID-19 and survivors of COVID-19. Psychiatrists translated their knowledge of inpatient rehabilitation to the acute care side of the hospital, forming partnerships with teams of intensivists, pulmonologists, hospitalists, and others to ensure patients were being mobilized effectively and safely. Although hospitals may have expected that psychiatrists would focus on only coordination of patient mobilization, psychiatrists provided much more value to hospitals and care systems. Psychiatrists were central to optimizing patient flow and hospital throughput helping free acute care beds for patients battling COVID-19. Given a psychiatrist’s expertise in the medical management of pain, pressure injuries, delirium and cognition, critical illness myopathy, and other sequelae of COVID-19, combined with their understanding of working in a multidisciplinary team and understanding of the continuum of care, psychiatrists became valuable commodities in many institutions. Rehabilitation departments took the lead in several important hospital initiatives. Psychiatrists spearheaded virtual medical monitoring of patients with COVID-19 in the home, guiding treatment and helping prevent unnecessary admissions, and potentially avoidable deaths by guiding patients when they should present to the emergency department.<sup>30</sup> Psychiatrists also helped develop and implement proning protocols that have become a pillar of treatment in patients with acute COVID-19 infections. This flexibility and willingness to help led hospital administrations to better understand and appreciate the efforts of psychiatry, above and beyond inpatient rehabilitation, during the pandemic.

## LESSONS LEARNED - BLUEPRINT FOR THE FUTURE

### Threats

Burnout has been a significant concern in the medical field and particularly among psychiatrists even before the COVID-19 pandemic. Representing both a personal health and professional practice threat, the COVID-19 pandemic has heightened the impact of burnout. Changes to inpatient psychiatric practice discussed previously contributed to a loss of autonomy and sense of professional control, both significant contributors to physician burnout. Inpatient psychiatrists also faced the risk of IRF units closing because of the health systems’ needs to increase acute care beds for COVID-19 patients. In a time of fiscal strain, health system leadership may consider permanently reducing IRF beds or closing previously marginally profitable IRF units in favor of more immediately profitable services, thus permanently displacing the psychiatrist.

The aforementioned September 2020 American Academy of Physical Medicine and Rehabilitation survey also assessed the prevalence of burnout as measured by the Mini-Z Burnout Survey. Almost half of the respondents (48.6%) felt that they were under stress but did not feel burned out, but 31% had burnout symptoms, including 23.3% having one or more symptoms of burnout, 4.8% with symptoms of burnout that would not go away, and 2.8% felt completely burned out. Closure of inpatient rehabilitation units can have profound effects on the physiatrist including loss of routine and work structure, increased concern for individuals with disabilities requiring inpatient rehabilitation care who can no longer be treated, loss of income, and an altered sense of professional identity. Some physiatrists have been asked to take on different medical care roles within their health system and these professional impacts of the pandemic may compound the personal stress and anxiety physiatrists already experience. Given there is widespread suffering from mental health issues in the general population due to the COVID-19 pandemic, it is imperative that burnout in physiatrists be adequately monitored and treated during this time.

The impact of the COVID-19 pandemic on IRF unit viability highlights the pre-existing threat to inpatient rehabilitation physiatric practice. From the perspective of Bundled Payments for Care Improvement initiatives, IRF care is an added cost. However, from the perspective of value-based management, IRFs can contribute to readmission and overall cost reduction, care quality improvement, and through improving function and quality of life significantly enhance the patient experience. Site neutral payment, the concept of paying the same amount for rehabilitation regardless of whether the patient is treated in an IRF or SNF, also threatens the financial viability of the IRF. Inpatient physiatrists must advocate and highlight the role of the IRF in value-based management, as well as clearly differentiate the care and outcomes between IRF and SNF rehabilitation. Inpatient physiatrists also need to prepare themselves and future physiatrists for supplementary roles should the number of IRFs, and thus the need for inpatient physiatrists, decrease. A dedicated role of the physiatrist in acute care physiatric consultations and a focus in ICU rehabilitation with the physiatrist leading the early mobilization rehabilitation program are such possibilities of inpatient physiatry beyond the IRF unit.

COVID-19 also highlights gaps in the treatment paradigm of physiatrists and rehabilitation departments. Early mobilization programs significantly improve functional and health outcomes of patients treated in the ICU, and physiatrists play a crucial role in their development, implementation and success. Although no exact data exist, many hospitals do not have such programs, which highlights the opportunity physiatrists have in this

space. And because a significant number of patients hospitalized with COVID-19 will be managed in the ICU setting, physiatry-led early mobilization programs can significantly improve the care and trajectory of critically ill patients with COVID-19. Implemented because of COVID-19, the program will ultimately serve any patient managed in the ICU.

## OPPORTUNITIES

### Early engagement of the physiatrist

Early physiatric engagement in the acute care setting enhances patient medical and functional outcomes and improves the efficiency of the episode of care. ICU early mobilization programs are associated with improved patient function, reduced length of ICU stay as well as overall hospitalization, enhanced discharge rate to home, and significant cost savings. Physiatrists have the skills that are critical to the success of ICU early mobilization programs including the breadth and depth of medical knowledge required to prescribe appropriate rehabilitation programs for complex and critically ill patients, as well as the team leadership management skills essential in the complex multidisciplinary ICU environment. The physiatrist also has the required perspective of the entire continuum of care to facilitate the planning of the rehabilitation program beyond the ICU and to facilitate efficiency through the episode of care and discharge planning. Aside from the ICU, early physiatric consultation engages the physiatrist into a patient's care and may significantly reduce acute care length of stay and health care costs and improve discharge to the community.<sup>31</sup>

### Mastering the continuum of care and throughput

The physiatrist is experienced at all stages of the continuum of care managing patients from the ICU, through the acute medical/surgical units, IRF and SNF rehabilitation, home care, outpatient, and community settings. Using the perspective, skills, and expertise of the inpatient physiatrist in the acute care setting to help plan the course of acute care and subsequent discharge improves the efficiency of care. The physiatrist is likewise skilled in managing complex IRF discharge plans. Patients in the IRF have multiple medical conditions and significant functional and psychosocial challenges. The physiatrist is ideally trained to coordinate the efficient care of the IRF patient and is experienced in the complex discharge planning required to return patients back to their home and community environments.

The inpatient physiatrist also contributes to post IRF discharge readmission reduction. Preparing patients and

families for IRF discharge and transition to home care and the community initiates this effort. Implementing a Transitional Care Management (TCM) program supports and improves a readmission reduction strategy. In 2013, Medicare introduced the TCM program to improve care after discharge and reduce 30-day readmissions. Requirements include a provider-to-patient phone call within 48 business hours post discharge and a face-to-face (in-person or telehealth) visit within 14 days of discharge with a physician. Care coordination includes medication reconciliation, coordination of physician follow-up (with primary care provider, specialists etc.), review of home care services including coordination with the visiting nurse and therapists, and ongoing patient and caregiver education. TCM services are reimbursed at an enhanced relative value unit level and reduce health care costs through readmission reduction. Inpatient physiatrists are ideally suited to conduct TCM visits to reduce 30-day readmission rates for rehabilitation patients post-IRF discharge. The COVID-19 pandemic significantly affects access to outpatient care of all patients following discharge from an IRF. Implementing a physiatrist-led TCM program improves patient care, reduces readmissions, and enhances the transition to outpatient rehabilitation services.

### **Unique medical skills across various disciplines**

The physiatrist possesses unique medical skills that cross multiple disciplines. The COVID-19 pandemic highlights these skills and a need/opportunity that exists to engage physiatrists in pulmonary rehabilitation. Pulmonary rehabilitation prescribed and managed by the physiatrist can be a powerful tool to manage and minimize the impact of acute hypoxic respiratory failure experienced by many hospitalized patients with COVID-19. Many inpatient physiatrists have experience managing patients with significant lung disease in medically complex rehabilitation IRF units, including an understanding of pulmonary pathology and physiology, oxygen titration at rest, sleep and with exertion, secretion clearance principles, and appropriate exercise interventions. This knowledge can be applied to the acute care and IRF rehabilitation of COVID-19 survivors with related pulmonary disease, as well as expanding the role of the physiatrist in the pulmonary rehabilitation of patients with other pulmonary diagnoses including obstructive (chronic bronchitis, emphysema, bronchiectasis, etc.) and restrictive (interstitial lung disease, scoliosis/kyphosis, lung surgery - lobectomy etc.) lung disorders. Physiatrists are also the ideal physicians to partner with critical care teams and pulmonologists to marry expertise in pulmonary and critical care management with pulmonary rehabilitation goals.

Physiatric prescription and guidance of appropriate strengthening exercises, and progressing mobilization from re-activation to aerobic training, are essential to help patients limited by pulmonary disease achieve discharge goals. Physiatrists are keenly aware of patient anxiety and fear that accompanies dyspnea and are skilled in coordinating appropriate supportive services through psychology or social work intervention. Physiatric education of patient and caregiver in oxygen saturation monitoring at increasing activity and exercise intensities is essential for success post discharge. Providing patients with resources for outpatient pulmonary rehabilitation is also key to support patient continued functional recovery through the care continuum.

### **Resiliency**

The COVID-19 pandemic has resulted in tremendous stress for health care workers with burnout being a real threat (as noted previously). Physiatrists, being essential medical experts in value-based evaluation, diagnosis, and management of neuromusculoskeletal and disabling conditions and being indispensable leaders in directing rehabilitation and recovery and in preventing injury and disease, have developed strength and flexibility, both personally and professionally, and may be more equipped to thrive in these challenging times and environments. This *resilience* is at the core of physiatric practice and our patients' rehabilitation journey and has grown further during the COVID-19 pandemic. The process of developing resiliency because of adverse circumstances highlights an opportunity for physiatrists to cultivate practice skills that promote personal, professional as well as rehabilitation department growth and development. For many, the COVID-19 pandemic serves as an opportunity for physiatrists to prepare for and develop resiliency to future disaster events, practice challenges and opportunities.

### **Collaboration and communication skills**

The culture of PM&R is oriented to an interdisciplinary team-based approach to patient management, and physiatric training emphasizes communication skills, in particular, helping patients navigate the "language" of medicine. Physiatrists are proficient in both communication and collaboration with other medical specialists and interdisciplinary teams, patients and their caregivers/family, and hospital leadership/administration. Inpatient physiatrists are skilled at running patient and family meetings, and discussing complex medical and rehabilitation issues including challenging, and at times anxiety-associated, discharge planning. Clear communication with patient and family in the acute care setting regarding the rehabilitation continuum of care and

discharge plans supports efficient coordination of patient care.

In addition to time-tested partnerships with specialists in the fields of rheumatology, neurology, and psychiatry, the COVID-19 pandemic has yielded professional relationships with new practice partners including medical hospitalists, cardiologists, pulmonologists, infectious disease specialists, intensivists, and palliative care providers. Physiatrists bring essential synergistic skills including pain management, exercise therapy to benefit function, a multidisciplinary team approach, insights into psychosocial needs of the patient, and a keen focus on quality of life.

The physiatrist is ideally skilled in team-building and team-leading and can extend these COVID-19 pandemic professional relationships into other areas of physiatric care. Developing and enriching relationships with specialists within the health system exemplifies the value of the physiatrist in the interdisciplinary management of patients with any diagnosis. As physiatrists highlight their value in the hospital system managing COVID-19 patients and building collaborative care processes with other specialties, opportunities for dialogue regarding broader health system strategic planning and opportunities for hospital administrative and leadership roles will emerge.

There is growing opportunity for physiatric involvement in collaborative research related to the COVID-19 pandemic. Much remains to be discovered about the optimal inpatient physiatrist-guided rehabilitation management of the functional deficits related to COVID-19. Although some rehabilitation care plans reflect common pathways (eg, stroke rehabilitation), optimal approaches to COVID-19 related prolonged ICU stay, intubation and tracheotomy, and sarcopenia need to be identified. Physiatrists engaged in research can partner with acute care specialist physicians, nutritionists, respiratory therapists, and rehabilitation therapists to conduct research designed to answer these treatment knowledge gaps.

## CONCLUSION

Physiatry is a broad medical specialty that emphasizes function and quality of life as universal outcome metrics. As a result, physiatrists are experts in all phases of care from critical to outpatient and all aspects of that care from medical to physical to psychosocial. All specialties and systems rely on expertise in these areas during the time of COVID-19 and as such should rely on physiatry, the only specialty that can be an umbrella for all of the acute and chronic needs of patients with, and hospital systems affected by, COVID-19. Finally, the lessons learned from physiatry's impact during the COVID-19 pandemic should demonstrate to current and future partners and stakeholders the value that PM&R brings to the health care system in total.

## DISCLOSURE

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## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of this article.

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