

TITLE: The Essential Role of Home- and Community-Based Physical Therapists During the COVID-19 Pandemic

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The novel coronavirus severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which causes coronavirus disease 2019 (COVID-19), is a particularly contagious and virulent pathogen.^{1,2} Widespread mitigation strategies to reduce the spread of COVID-19 are now underway in the United States, with strict social distancing recommendations in place nationally, and with most states implementing even stricter stay-at-home orders that limit work-related travel outside the home to only those performing “essential” jobs. Physical therapists are considered essential workers under state and federal guidelines; guidelines and rationale for delivery and utilization of acute care physical therapy have already been published.³ The American Physical Therapy Association and state boards of physical therapy also support provision of home and community-based physical therapy care to patients who could be harmed by delayed or cancelled therapy sessions.^{4,5}

Media reports suggest, however, that some long-term care, assisted living, and other congregate community facilities across the country have defined rehabilitation services as universally nonessential,⁶ despite guidance from the American Health Care Association to consider the necessity of each visit on a case-by-case basis.⁷ Poor rehabilitation continuity is so ubiquitous that the American Association for Retired Persons (AARP) recommends family members specifically ask about availability of physical therapy and occupational therapy services within long-term care facilities during the COVID-19 pandemic.⁸ Availability of physical therapy services in the community—even for urgent concerns—is also lower during the COVID-19 pandemic, as opinions about whether home- and community-based physical therapy should remain open are decidedly mixed both within and external to our profession.⁹

Substantial evidence supports home- and community-based physical therapists as essential health care providers during the COVID-19 pandemic. For many patients, participation in

physical therapist interventions reduces risk of hospitalization and allows them to remain at home instead of requiring nursing home–level care—both essential public health goals during a viral pandemic that is currently overwhelming hospital and nursing home capacity. Abdicating these essential roles—and allowing our profession to be designated as nonessential and our urgently needed interventions to be viewed as “optional” in a time of crisis—may disproportionately harm the most vulnerable patients and send a troubling message to payers and the general public about our value as physical therapists. Therefore, the aim of this Point of View is to outline how physical therapists, practicing to the full scope of their licensure and with requisite personal protective equipment and adherence to social distancing recommendations, can help achieve 3 important public health goals during the COVID-19 crisis.

Reducing Risk for Avoidable Hospitalization

Among the largest concerns during the COVID-19 pandemic is the ability of hospitals to handle a surge of patients who are newly infected while still caring for patients who have noninfectious medical conditions or traumatic injuries.¹⁰ Therefore, any home- and community-based interventions that reduce the volume of new hospitalizations contribute meaningfully to public health goals.

Among the most vulnerable populations are those recently discharged from an inpatient health care facility and returning to the community: upwards of 20% of this population is sent back to the hospital within 30 days.¹¹ The COVID-19 pandemic has placed additional burden on short-term skilled nursing facilities, thus it is likely that patients might be discharged home with even greater medical complexity and higher vulnerability to readmissions.¹² Two robust risk factors for hospital readmission are impaired physical function and unmet need for activities of daily living

(ADL) assistance. Delaying or deferring home- or community-based physical therapy for patients at high risk for hospitalization secondary to new disability may cause substantial harm.^{13,14}

Physical therapists also perform other tasks—such as home safety assessments, acquisition of important durable medical equipment, and caregiver training—that cannot always be delayed without risking functional decline and a concomitant risk for hospitalization. Indeed, patients who experience a decline in physical function after hospital discharge have a 250% increase in risk for hospital readmission or death.¹⁵ Yet, provision of home- or community-based rehabilitation during this critical postdischarge period is associated with a 14% to 82% reduction in downstream hospital readmissions across medical, cardiac, and neurological diagnoses.¹⁶⁻¹⁸ For community-dwelling patients at risk for poor health care outcomes (ie, falls, frailty, high disability burden), participation in rehabilitation is hypothesized to increase functional reserve and potentially make a difference between surviving or succumbing to an acquired COVID-19 infection.¹⁹ Providing physical therapy services to the subset of patients at highest risk for avoidable hospitalization is an essential health care service for which the benefits substantially outweigh the harms during the COVID-19 pandemic.

Helping Offload Emergency Department Volume as Part of an Interdisciplinary Team

During many public health emergencies, including the current COVID-19 pandemic, emergency department (ED) overcrowding is a major concern. There is emerging evidence that physical therapists bring added value to ED practice, especially given that many visits are for musculoskeletal injuries and, within older adult populations, falls or ambulation concerns.^{20,21}

Utilization of physical therapy in the ED has been associated with shorter wait times (less overcrowding in waiting areas) and lower rates of hospital admissions for acute musculoskeletal conditions—critical outcomes during the peak of viral pandemics.²⁰ Physical therapists also can manage other conditions, such as benign paroxysmal positional vertigo, for which ED burden is high, and follow-up may be required to avoid recurrent falls and injury.

Use of physical therapists in the ED is associated with lower burden on ED physicians, which is critical given the increasing patient complexity during pandemics.^{20,22-24} Overburdened care planning staff, such as nurses and social workers, also can benefit from physical therapist expertise in the ED. Involving physical therapists in care transitions may help reduce avoidable ED revisits and hospital admissions related to elevated ED-related disability. With many physical therapy clinics closed or experiencing substantial reductions in volume, there may also be opportunities to develop innovative home- or clinic-based care models for urgent musculoskeletal concerns that leverage staff availability. Interdisciplinary collaborations with orthopedic-trained physicians to set up urgent care spaces specific to musculoskeletal injuries may safely reduce ED crowding, utilize physical therapy clinic spaces, and help free up hospital resources to manage increasingly complex patients with COVID-19 who require high levels of ED care.

Physical therapists are trained to be a first point of contact in the health care system—but completely closing outpatient clinics and defining rehabilitation as nonessential eliminate this opportunity for community-dwelling patients. This consequential decision might lead patients to seek care in overcrowded ED departments and urgent care clinics where risk of COVID-19 exposure may be higher.

Meeting Postdischarge Rehabilitation Demand for Survivors of COVID-19

While the COVID-19 crisis is peaking across many major US cities, there is a second crisis looming: How will we provide care for the projected surge of patients who have recovered from the acute effects of COVID-19 and require extensive rehabilitation? Although little is known about the long-term physical consequences of COVID-19 infection, those who require intensive care or mechanical ventilation are at high risk for developing post-intensive care syndrome (PICS).²⁵ PICS is a commonly observed phenomena within ICU survivors of all ages and often is characterized by prolonged disability secondary to muscle dysfunction, fatigue, pain, and dyspnea.²⁶ Participation in rehabilitation is part of recommended standard of care for patients with PICS. Because many nursing homes are unprepared or unwilling to take patients with COVID-19 who have recovered but may still be infectious, there will be a growing burden on home health care agencies and community clinicians to meet this demand.¹²

Currently, practice patterns in home health care have not been intensive, with the average older adult discharged from the ICU receiving only 4 visits of home rehabilitation.²⁷ Published reports have also decried lack of availability of effective post-ICU rehabilitation in clinic-based settings,²⁸ suggesting that current rehabilitation care models are not well equipped for the coming influx of complex patients with PICS secondary to COVID-19 infection. If rehabilitation clinics are closed, and facilities or patient/caregiver dyads are defining physical therapists as nonessential personnel, it is likely that patients recovering from impairments related to COVID-19 may not receive recommended rehabilitation care, may recover more slowly, and ultimately may further strain limited health care resources through higher ED and hospital use. Refocusing clinical operations away from care of elective surgical patients, developing innovative care pathways

and care delivery models, and making physical therapy services specifically available to this population is essential care during the COVID-19 pandemic.

A Call to Action

This Point of View outlines 3 essential roles of home- and community-based physical therapists during the COVID-19 pandemic—all of which are critical to improving patient outcomes and public health. We are capable, as autonomous practitioners, to weigh and convey risks and benefits of providing face-to-face therapist evaluations and interventions during the COVID-19 pandemic. Although every scheduled visit may not be essential, allowing a core part of our profession to be designated as nonessential or viewed as optional in a time of crisis sends a troubling message about our value and disproportionately harms our most vulnerable patients who urgently depend on our continued advocacy and clinical expertise.

Judicious utilization of urgently needed home- and community-based physical therapy services to meet the above public health goals, using appropriate protective equipment, is essential during the COVID-19 pandemic. Closing clinics to mitigate community risk of COVID-19 infection without consideration of the iatrogenic impacts of service interruptions may paradoxically increase hospitalization risk through increased falls, fractures, or other predictable consequences of quarantine-induced immobility. Even when the risk-to-benefit ratio of providing urgently needed face-to-face visits is not appropriate, our interventions, much like those of our primary care physician colleagues, can be delivered via telehealth whether or not these services are reimbursed for patients under a current physical therapy plan of care. It is important to remember that telehealth is not a viable option for all patients, and relying solely on telehealth to deliver urgent physical therapy care may exacerbate existing health care disparities. Rural

dwelling populations, socioeconomically disadvantaged populations, those with learning disabilities, and those with cognitive, hearing, or visual impairments may be among those who cannot effectively participate in urgently needed physical therapy via telehealth platforms. Failure to meet these patients' needs during the COVID-19 pandemic by providing limited face-to-face visits may leave this vulnerable population more susceptible to hospitalization or institutionalization.

The COVID-19 pandemic has exposed an existential crisis in our profession: *Is what we do essential?* The evidence suggests the answer to this question is, resoundingly, yes. Therefore, we encourage all home- and community-based therapists to fight to be recognized as essential health care providers across all care settings during the COVID-19 pandemic and to show our value in reducing avoidable hospitalizations and ED visits and in promoting optimal recovery of COVID-19 survivors.

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