

# *Providing Opportunities for Meaningful Activities for Isolated, Hospitalized COVID-19 Patients at Temple University Hospital*

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**Introduction:** *Patients hospitalized for COVID-19 are at high risk for experiencing isolation, boredom, anxiety, and depression. These psychosocial issues may contribute to less positive outcomes over time. Objective:* *The purpose of this project was to bridge the gap between patient needs and available resources. Students and faculty in the Department of Health and Rehabilitation Sciences responded to a call from the COVID-19 treatment team at Temple University Hospital. They came together to bring supplies to the patients, such that they could participate in meaningful activities in the isolation of their rooms, with hopes of mitigating aspects of loneliness and boredom. Community Connection:* *This paper describes the activities of the occupational and recreational therapy academic programs initiated to provide resources to our community partner, a local urban hospital. Resources included technology and non-technology activities distributed to quarantined COVID-19 positive patients. Impact:* *Hospital staff reported fewer complaints of isolation and boredom following the delivery of resources. Ease of burden of patient mental health dilemma increased staff morale. Discussion:* *Community partnerships to increase activity resources for patients may reduce feelings of isolation and boredom, which may improve health outcomes.*

## **Introduction**

The 2019 novel coronavirus (COVID-19) global pandemic first surged in the Northeast corridor in March, 2020. In the early period of this unexpected public health crisis, a rapid surge in the number of COVID-19 positive patients overtook hospitals, including the Temple University Hospital, Main Campus (TUH). TUH, an academic medical center, is situated in the Nicetown-Tioga section of North Philadelphia. Given the location, TUH became the primary health response center for the treatment of COVID-19 in the North Philadelphia area, effective response required conversion of an entire building to a specific unit for COVID-19 patients. Many patients experienced extreme isolation, unable to have visitors, mingle with other patients, or even experience social interactions with healthcare providers. This was unlike the normal healthcare team service delivery for both patients and providers. Upon admission to the hospital, patients had left leisure supplies, including technology platforms, at home. Hospital

leisure activity resources for inpatients dwindled quickly, and many patients did not bring leisure activities with them upon admission.

Upon hearing of the COVID-19 posed dilemmas within the university health care system, faculty from the Occupational Therapy and Recreational Therapy programs and students in the Master of Occupational Therapy program honor society in the College of Public Health (CPH) at Temple University recognized the importance of patient needs beyond survival during their hospital stay. CPH has an existing history rich in community outreach often at the direction such as: creating an opioid overdose reversal training, providing pro bono clinics such as the North Broad Physical Therapy Center and the Speech-Language-Hearing Center, and supporting the operations at Vaux Community Health Center. In fact, the college developed The Office of Community Engaged Research and Practice to grow the College's interdisciplinary, community-engaged research activities as part of the CPH mission to reduce health inequities and improve the health and well-being of the community. Therefore, leadership, faculty, and students at CPH are aware of psychosocial issues, boredom, isolation, and other poor health outcomes that can arise during hospitalization. Responding to the call for help from their TUH partners about a need to give leisure supplies to the COVID-19 patients.

## **Hospitalization and Psychosocial Issues**

Psychosocial issues such as depression and boredom are highly prevalent in the acute care setting of a hospital for prolonged admissions.<sup>1,3</sup> These psychosocial concerns could affect length of stay and survival rates for patients. The rate of depression among hospital patients is as high as 34%.<sup>1</sup> A patient's mortality rate increases by 13.4% with every unit increase in the depressed mood score, such that depressed mood and the severity of illness independently predicted survival time.<sup>2</sup> Additionally, boredom is a highly common psychosocial issue in acute settings. A hospital stay disrupts an individual's life and daily routine, with patients reporting they had "time on their hands" and "not enough to do in the hospital" during their time admitted.<sup>3</sup> While these psychosocial related issues can ultimately contribute to poorer health outcomes for patients admitted for "traditional" medical diagnosis, recent research suggests pandemic related hospitalizations present at minimum similar rates of mental health concerns, and in some cases much higher rates. One recent study cited 34% of patients receiving treatment for COVID-19 had symptoms of anxiety and 28% experienced symptoms of depression.<sup>4</sup> Additional analyses suggest that older patients and those with less social support had higher rates of anxiety and depression.<sup>4</sup> Another study indicated 97% of patients experienced symptoms of depression and 100% experienced severe anxiety.<sup>5</sup> For example, hospitalized patients in isolation during the Middle East Respiratory Syndrome epidemic experienced high ratings of anxiety and anger.<sup>4</sup> Contributing risk factors included inadequate supplies, loss of social networking, and pre-existing psychiatric illness.<sup>6</sup> Depression, boredom, and anxiety experienced by patients in the acute setting can lead to poorer health outcomes, creating a need for interventions, such as diversion through engagement in meaningful activity.<sup>7</sup> Meaningful activities are broadly defined as those activities that hold value to the individual and have the potential to improve health. Examples may include creative activities, traditional games, video games,<sup>8</sup> and reading, among others.

## **Engaging Patient Environments**

Hospitals have long recognized the need to provide engaging spaces for patients during their stay. For decades, recreational activities within a hospital setting have provided opportunity for 'normalization'

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and facilitating a more successful treatment milieu.<sup>9</sup> Modern hospitals often provide access to nature, art and music, technology, and improved aesthetic environments in order to improve patient outcomes; however, hospitalization during the COVID-19 pandemic presented unique challenges for patients. Not only were patients concerned about the uncertainty of recovery and health outcomes, but they also faced boredom and isolation in hospital rooms. Because of the influx of COVID-19 patients and the high communicability of the disease, hospitals were forced to create makeshift rooms with limited technology (no televisions or phones) and also restrict visitors in most cases.<sup>10</sup>

Given the numerous psychosocial issues patients may experience in acute settings, diversional activities may be used to prevent mental health issues and poor health outcomes. Patients with limited opportunity to engage in meaningful activities often feel bored and alienated from their previous roles, habits, and routines; some also experience a loss of self-esteem.<sup>11</sup> Despite a desire to participate in activities to pass the time, numerous barriers prevent engagement. These included: limited resources, required hospital routines and schedules during their stay, and physical limitations.<sup>11</sup> Furthermore, boredom is highly prevalent in in-patient general hospitals and self-help strategies are encouraged to help patients stay active during their stay.<sup>3</sup> In order to prevent boredom and improve patient outcomes, hospitals must provide opportunities for patients to engage in activities. Strategies might include providing games, technology, and/or reading materials which might support patients to connect with their sense of self by engaging in meaningful activities.<sup>3</sup> Research with hospitalized stroke patients supports the notion of meaningful engagement, finding that patient participation in an arts program yielded positive mental wellbeing outcomes including lower reports of boredom and increased sense of self.<sup>12</sup> It is essential that health care systems actively respond to the needs of their prolonged hospitalization patients, such as those admitted and in isolation during a pandemic.

Occupational therapists and recreation therapists have long standing, recognized roles in hospital settings. These roles include providing opportunities for participation in meaningful activities, which promotes mental and physical health, as well as sustaining or improving overall well-being for hospitalized individuals.<sup>13, 14</sup> While TUH employs both Occupational and Recreational Therapists, the exponentially higher caseloads, lack of necessary resources, and restrictions implemented to reduce infections hindered typical patient interactions and opportunities.

Early in the pandemic, TUH experienced an influx of patients diagnosed with COVID-19. To accommodate the numbers, hospital beds were set up in a section of the hospital that was typically used for offices, without the usual access to hospital room features (e.g., television, phone, window). Additionally, visitor policies were changed to minimize additional infections. Because of this, hospital staff indicated that patients were bored and lonely. Therefore, the hospital reached out to the CPH to identify potential activities and resources patients could use in the hospital.

The Occupational and Recreational Therapy programs are part of the CPH and have professional understanding of the importance of meaningful activities for hospitalized patients. Therefore, this group responded to the request and gathered resources to support patients. Resources needed to support activities that were engaging and could be completed independently by patients without support from staff. The Occupational Therapy student organization coordinated local donations and the Recreational Therapy program coordinated a donation of tablets (e.g., iPads and Google tablets).

The first step in this process was to identify appropriate occupation-based activities which could be utilized by patients during the duration of their stay, without the direct intervention of a practitioner. Next, faculty and students established an outreach effort for finding donations. One faculty member drove approximately 300 miles over 2 weeks to provide a “masked and gloved” pick up service for donations. After sanitizing, the donations were itemized. Finally, a car full of books, magazines, craft

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supplies, puzzles, games, adult coloring books, and mind-stimulating activity books (crosswords, Sudoku, etc) arrived at TUH on Monday, April 27.

In collaboration with the College of Public Health IT Department, the recreational therapy program identified a number of applications that could be used either online or offline, as the hospital indicated the patient network was not consistently available. The iPads were 2nd generation, so applications needed to be able to operate on an older iOS. Applications were game or recreation-based and included activities like traditional card games, word games, mindfulness, coloring, and strategy games, among others. All log in requirements and passwords for the tablets were removed so that patients and staff could easily access the content. The Recreational Therapy program had 10 2nd generation iPads to donate and a local neighborhood site donated an additional 2nd generation iPad and a Google tablet.

A few weeks after the supplies were delivered, we received an email from Dr. Rohit Soans, one of the physicians working on the COVID-19 team: “In this setting, many patients languished in coping with the isolation and boredom. As patients were in this solitary confinement state, some for multiple weeks, the increasing distress was clearly evident to all. The healthcare staff routinely reported that boredom and isolation was a huge problem and had an effect on the patients’ mental health and well-being. Even though the problem was recognized, the staff was very discouraged as this issue was seen as something that could not be fixed. This was the time a plea for help was sent to the CPH to see if there were any ideas or solutions. Through the outpouring of generosity from our colleagues at CPH, van loads of supplies came in. These books, games, iPads, etc. were promptly distributed to the patients and were a big hit! Patients now had some choices in how to fill some of their time and were very appreciative of everything they were given. The arrival of these thoughtful supplies made coping with the isolation just a little bit easier for our patients and had a big impact on their mental health. As less complaints regarding isolation and boredom came in, it became a little easier for the staff to get through the day and this helped with staff morale. When dealing with a pandemic on a massive scale, it is inevitable that there will be an overwhelming sense of distress felt by all. However, the willingness of the University and the Health System to collaborate and address this very specific issue was a real win. In the end, these small, little victories with the exceptional individuals involved, were what really helped us get through this.”

## Discussion

It is part of the CPH’s mission statement to prepare the next generation of researchers, practitioners, and clinicians to solve health’s complexities for a better tomorrow. This important opportunity to mobilize the community to support patients in need fits within this mission seamlessly. Within a few short days, our group reached out to the community and collected a car full of donations. We had the chance to work as an interdisciplinary team to provide important resources to meet patients’ needs. The donations gathered and delivered to the hospital supported meaningful engagement for patients to reduce boredom and other negative psychosocial outcomes associated with isolation. The resources donated included non technology based items such as books, magazines, craft supplies, puzzles, games, adult coloring books, and mind-stimulating activity books as well as technology with iPads with applications that were game or recreation based. Providing these resources to patients provided an opportunity to improve their clinical outcomes, reducing the potential that chronic stress infused with isolation and boredom would yield onset of new mental health disorders.

Hospitals should consider maintaining a collection of resources and activities that patients are able to use independently. While the visitor restrictions that hospitals currently have will not always be in effect, there will always be patients who experience isolation and boredom. These resources can provide

opportunity for meaningful engagement and reduce the negative outcomes associated with boredom, anxiety, and depression.

### Disclosures and Conflicts of Interest

The authors have no relationships to disclose.

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### **Statement of Contributions**

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