# At Capacity: How Physical Therapists Will Gain More by Doing Less

By Hannah Sy, PT, DPT

***Congratulations to recent graduate of Northwestern University's Doctor of Physical Therapy Program Hannah Sy, the winner of the 2023-2024 Student Essay Contest, co-sponsored by the American Counsel of Academic Physical Therapy (ACAPT) and the Journal of Humanities in Rehabilitation (JHR). The seventh in an annual series, this national contest offers a creative opportunity to ignite critical reflection in physical therapy students across the nation to support holistic approaches to patient care. This year's essay prompt was:***

Advances in AI technology are poised to transform the landscape of rehabilitation, raising intriguing questions about its impact on humanism in the field.

*How do you envision the integration of AI technology in rehabilitation impacting the essence of humanism in patient care? Discuss potential benefits and challenges in maintaining a compassionate, patient-centered approach while utilizing AI-driven techniques. Reflect on the role of empathy, personal connection, and tailored treatment plans in humanizing the rehabilitation process amidst increasing reliance on technological solutions. Draw insights from contemporary viewpoints on writing effective PT application essays, emphasizing the importance of weaving personal experiences and stories into your response to convey your understanding of AI's potential impact on the humanistic dimension of rehabilitation.*

Note: This essay prompt was generated by ChatGPT when given the prompt: "Write a physical therapy student essay prompt on the following topic – how will AI technology impact humanism in rehabilitation?" OpenAI. (2023) ChatGPT Aug 18 version. [Large language model] https://chat.openai.com/chat

We have chosen the topic of artificial intelligence and machine learning for our 2023-2024 essay contest prompt in recognition of the tremendous opportunities this technology offers in our world, as well as the profound societal implications. It is precisely in this space of creative tension that the skills we gain from the humanities provide critical insights to help us interrogate, embrace, and ultimately shape what this revolutionary technology is asking of us as humans.

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## INTRODUCTION

If I asked Katniss Everdeen in *The Hunger Games* what her mission in life is, I imagine I would receive an arrow straight to the heart. Without food, while fending for her life, her entire faculty is geared solely toward survival, and life mission statements would most understandably not be on her priority list. On the other hand, I imagine Princess Rapunzel in *Tangled* would have an answer in a heartbeat. She leaves the comfort of her tower in search of belonging and greater meaning to her life, made possible because all her basic needs are met.

With each need met, assumedly, one's capacity to meaningfully engage with themselves and the world around them increases. This phenomenon of having the ability to reallocate one's mental, emotional, and intellectual capacity depending on circumstance, parallels the philosophy of Maslow's hierarchy of needs and offers an imaginative lens to envision the potential impacts of artificial intelligence (AI) in rehabilitation.

## AI AND HUMANISM IN PATIENT CARE

What if we imagined the impact of AI on the essence of humanism in patient care through Maslow's philosophy? In a physical therapy rendition of Maslow's pyramid, I believe humanistic patient-centered care would be the pinnacle. Humanistic care sensitive to a patient's values, cultural background, and preferences is essential for quality patient care.

Imagining the potential impact of AI on humanistic patient care would not be feasible without reflecting on the current state of humanism in patient care. Prior to physical therapy school, I was a rehabilitation technician in a high-volume outpatient orthopedic clinic. Repeated emotional stresses due to managing a high patient load, resulting in burnout, was so prevalent that therapists tried to convince me not to pursue the profession. As a third-year student physical therapist I have navigated numerous health systems in various clinical settings. The aggregate of my clinical experiences informs my perspective that the essence of humanism in patient care has long been and continues to be threatened by productivity standards and documentation load. The intricate and systemic interplay of reimbursement rates and health system business models impacts the lived experience of physical therapists, and most often shows up in the form of burnout.

The prevalence of physical therapist burnout is good reason to consider that perhaps the essence of humanism in patient care is already at stake, and AI can serve to increase the humanistic capacity of clinicians. The potential for AI is boundless in rehabilitation, and even the most pedestrian of applications would offer benefit to a clinician's humanistic patient care. Consider that if AI could generate an evaluation or treatment note based on objective inputs that I provide, my documentation burden would decrease. In turn, my time, attention, and mental capacity that would have been allocated toward documentation would be newly available to be directed toward being present with patients.

## MY HISTORY AS GUIDANCE

During the initial weeks of my long-term clinical rotation in acute care oncology, I found that I did not have the mental bandwidth to fully engage with patients on a personal and emotional level. Managing lines and tubes took my full attention, so I had trouble simultaneously talking with the patient to take a subjective exam. I did not attempt to get to know patients during sessions because observation of their

gait pattern and guarding appropriately took the entirety of my focus. I failed to acknowledge family members in the room because I was intent on accomplishing everything on my mental checklist. As tasks became second nature with each week, my ability to engage thoughtfully increased. I became available to offer a listening ear without attempting to rush out of a session when patients wanted to verbalize their emotions. My ability to read the room increased, resulting in the ability to gauge if there was a witticism I could offer to make a patient smile. My needs of mastering psychomotor tasks, safety, and clinical judgment had to be met before I gained the capacity to be fully present and empathetic.

## AI'S POTENTIAL FOR CULTIVATING HUMANISTIC CARE

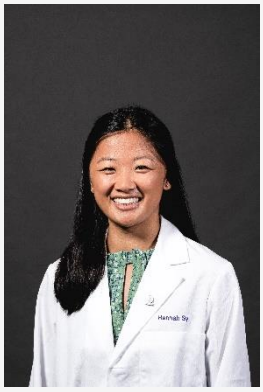
Using AI-driven techniques in rehabilitation does not challenge humanism of patient care but rather the skill of patient care. My education equips me with the skill and knowledge to develop personalized treatment plans. With its processing power, AI can also develop tailored treatment plans for each patient when provided with the necessary data. Computer intelligence's ability to perform an aspect of my role as a Doctor of Physical Therapy may render my skills redundant, but it would not render me less human.

The advantage of AI in patient care is its ability to solve complex problems with its capacity to process copious amounts of data. Patients, however, are more than data points. They are people with unique personalities, dreams, and stories. Thoughtfully engaging with these aspects of who patients are requires human connection and makes their care humanistic. Artificial intelligence as it currently is, has no capacity to develop relationships. So long as this is true, AI can only address the levels underneath the pinnacle of a physical therapist's hierarchy of needs, and thus increase their capacity for humanistic patient care.

***Statement regarding use of AI in authoring this essay:***

*Since this piece is subject to human review, I chose to forgo the use of AI out of the belief that my writerly voice wields more effective storytelling power to express my personal narrative.*

## *About the Author*



**Hannah Sy, PT, DPT** is a recent graduate from Northwestern University's Doctor of Physical Therapy Program. She graduated from Azusa Pacific University with a Bachelor of Arts in Allied Health, and her liberal arts undergraduate education informs her curiosity and love for pursuing knowledge in both the humanities and sciences. She is the recipient of the Advanced Healthcare Practice Scholarship Program Grant from the California Department of Healthcare Access and Information and the Edna Foster Wright Scholarship from Northwestern University. Her clinical interests include cancer rehabilitation, and professional interests include leadership development and creating cultures of value and belonging. In her free time, she enjoys reading, longboarding, making pottery, crocheting, and conversing over a cup of coffee.