

READERS WRITE: THE ROLE OF HUMAN-CENTRIC AI IN VIRTUAL PATIENT OBSERVATION

By Christine Gall, RN, DrPH, MS, CNO at Collette Health
June 10, 2024

The integration and expansion of artificial intelligence (AI) in healthcare has certainly seen its fair share of controversial conversations. Discussions about the potential benefits of utilizing AI to mitigate healthcare worker burnout, improve workflow and process efficiency, and enhance patient safety are met with reservations about the impact of AI being used carelessly or without precision.

Human-centric AI can address some of the concerns related to the algorithmic nature of task automation in traditional AI. The industry has seen a strong shift towards human-centric AI in hospitals for the purpose of prioritizing human needs and augmenting human capabilities rather than replacing them. The nursing community is eager for technology that supports the top priority of nurses — providing excellent and safe care to their patients.

In recent years, AI has enabled the healthcare system to implement revolutionary advancements for the betterment of both frontline healthcare workers and patient safety, particularly in the arena of patient observation.

Continual patient observation is an important tool to enhance patient safety for at-risk patients. Nurse staffing shortages, paired with ever-rising patient acuity, makes continual observation nearly impossible without the help of technology. Many patients in acute care settings are at high risk for falls and accidental self-harm. Human-centric AI-powered virtual patient observation is designed to sharpen the focus of the virtual observer to patients who begin to demonstrate risky behaviors so they can redirect the patient or call for assistance to prevent these events from happening.

A recent study from the [American Organization for Nursing Leadership Foundation's 2024 Longitudinal Nursing Leadership Insight Study](#) found that 20% of nurses want to see an increased utilization of virtual nursing. Virtual patient observation specifically is driving a lot of innovative care practices. The end goal is to leverage human-centric AI to ensure patients' and clinicians' safety and well-being, as well as bolster the support systems for caregivers to optimize operational efficiency.

Readers Write: The Role of Human-Centric AI in Virtual Patient Observation

BYLINE

Imagine if hospitals could place a nurse in every single hospital room for an entire shift. That would be wonderful if it was possible. Hospitals have started gravitating towards human-enabled digital innovations that can provide a virtual observer in patient rooms. Virtual observation stations can be placed in rooms, hallways, and main corridors for seamless line of sight of the patient by the virtual observer, and human-centered AI is able to proactively signal subtle changes in patient activity that might lead to patient injury if not redirected. Human-centric AI enables technology to augment and enhance clinician capabilities by extending their reach with the virtual observer, allowing them the reassurance that all of their patients remain in a safe environment even when they are not physically present.

With the application of human-centric AI, providers and nurses can gain insight into overall patient well-being, including sleep patterns, movement, and state of repose. Proactive alerts, enhanced workflows, and intelligent video management provide nurses and caregivers with greater time to practice at the top of their knowledge and expertise, as each patient is continually monitored by virtual colleagues. The insights gained, paired with the uninterrupted observation, is a game-changer not only for hospitals but for the nurses who are caring for patients day in and day out.

Built-in AI tools have been developed to strengthen the impact of virtual observers. Presence detection features alert observers who may look away from their screens for too long and guide them back to focus through increasingly prominent alerts. This technology ensures that the attention of virtual observers remains on their patients, improving patient safety. This feature also supports improved buy-in from hospital leaders with the assurance that the virtual observers are always attentive to their patients.

One of the most important aspects of healthcare is the communication between patient and healthcare provider. Virtual observation powered by human-centric AI is designed to improve contact and communication between the patient and their entire healthcare team. When patients are at their most vulnerable, continuous

observation and contact promote patient safety and security. Additionally, nurses and healthcare workers benefit from extended connection to their patients, with virtual observers providing an environment of safety. Patients experience more interaction with the virtual observers, which can enhance their positive perceptions of care.

It is an unfortunate reality that nurses face increased violence in the workplace. A recent [National Nurses United report](#) found that 8 in 10 nurses (81.6%) have experienced at least one instance of workplace violence within the past year and nearly half of nurses reported an increase in workplace violence in their unit. Healthcare workplace violence ranges from physical abuse to verbal threats. Virtual observation solutions can improve security for staff as well as patients by utilizing security staff trained in violence mitigation. They can alert a nurse that a patient is exhibiting signs of escalation prior to the nurse entering the patient's room so that they may execute de-escalation tactics to prevent a violent encounter.

As more hospitals and health systems gravitate towards virtual patient observation solutions, the overarching objective is to improve care delivery for caregivers and enhance safety for patients. Human-centric AI technology can extend the reach of caregivers with continuous virtual observation of patients, ultimately protecting their safety and improving their experience.