Responding to all-time high demand for ICU beds

As the academic medical center for BJC HealthCare, Barnes-Jewish Hospital (BJH) cares for the largest number of high-acuity patients within the system. During the pandemic, transfers of these patients increased with ICU bed occupancy often greater than 90 percent, prompting efforts to improve efficiency of ICU care to ensure the right patient is in the right bed at the right time.

The result is the BJC and Washington University School of Medicine Tele Critical Care Partnership that launched a pilot in July 2023 for patients in the Emergency Department (ED) and Acute Care Team and Code patients. The Tele ICU, formed in 2016, is a virtual care team of physicians and nurses with extensive intensivist experience that supports ICUs across BJC.

BJH Associate Chief Medical Officer John Chi, MD, MPHS, says, “Lack of ICU beds has multiple negative impacts, including delayed or cancelled surgeries, postponed admissions and poorer outcomes for patients needing critical care services. This is a great example of physician and nursing leadership recognizing the potential benefit to patients and staff and then coming together to change workflows and gain consensus,” says Dr. Chi.

“With a comprehensive view of ICU capacity and demand, the partnership triages requests for patient placement, and facilitates the transfer when accepted,” says Lisa Konzen, MA, BSN, CCRN-K, BJC Director, Tele Critical Care. “This has optimized usage of all beds within BJH, enabling us to be nimble in caring for critical care patients in a broad capacity.”

A little more than six months into the pilot, Paul Kerby, MBBS, co-medical director of the BJC Tele ICU, says the partnership is working as expected. “If a physician is unable to locate an ICU bed in 30 minutes, the Tele ICU will take on the task of finding a bed for the patient. This allows the ED physician to focus on caring for the patient rather than spending time on the phone tracking a bed. With the overview of the Tele ICU, it’s a more efficient process that works in the patient’s favor,” Dr. Kerby says.

The team is collecting data to confirm efficiencies. Says Dr. Chi, “Once we’re certain we’re making significant progress, we’ll expand to the Post-Anesthesia Care Unit. All these efforts focus on maximizing patient progression for the benefit of the patient.”

Tele ICU leadership includes Executive Medical Director Anne Drewry, MD, MS; and Co-Medical Directors Sara Buckman, MD, PharmD; Chris Palmer, MD; Paul Kerby, MBBS; and Vladimir Despotovic, MD; and Bradley Fritz, MD, MSCI; Bryan Kraft, MD; and Lisa Konzen, MA, BSN, CCRN-K, BJC Director, Tele Critical Care.