

CASE STUDY:

A North Carolina Regional Medical Center's Transition to a Virtual ICU



The Case

A 154-bed regional medical center in the Smokey Mountains was struggling with ICU performance and patient retention. With limited critical care staffing, an inconsistent oversight model, and declining quality performance scores, the hospital was routinely transferring high-acuity patients — including those on ventilators — to nearby tertiary care centers. Leadership knew they had to increase the level of care they provided in order to retain patients and be competitive both for healthcare talent and patients.

The Care Plan

After its only pulmonologist retired, the hospital partnered with Access TeleCare to implement a telePulmonology and Critical Care program. The goals:

- Provide 24/7 intensive support for on-site nurses, respiratory therapists and other clinicians.
- Reduce transfers.
- Augment and enhance the skills and professional competencies of the on-site team.

Access TeleCare's teleICU model combines proactive rounding with on-demand intensivist consults to support intensive care and support bedside teams.

Access TeleCare's virtual ICU program also includes full team integration — nursing, pharmacy, respiratory therapy, and more — creating a collaborative environment where on-site staff learned directly from experienced intensivists.

The Result

The teleICU program improved ICU care and financial performance across the board:

- 15 percent reduction in patient transfers, and retention of 144 additional patients annually
- \$1.18 million in added revenue and \$594,000 in annual profit
- 4 percent increase in Case Mix Index, generating \$442,000 in additional profit
- 257 percent estimated ROI

Nursing skills and confidence with high-acuity care also improved. A distinguishing feature of Access TeleCare's virtual ICU model is providing ongoing coaching and clinical education for on-site clinicians. Eighteen months in, the CNO reported significant gains in both capability and confidence among the care team.

"The Access TeleCare intensivists actually teach and coach our nurses. They discuss why they think it is best to order certain medications or recommend various clinical interventions. That teaching has really elevated the knowledge level of the team." – Hospital CNO

Key Outcomes



15% transfer reduction



1.18 MILLION in revenue retained



257% estimated ROI



4% increase in Case Mix Index

"There are patients here now we never would have kept before. Our team is stronger, our care is better, and we've seen a real return on the investment."

Onsite Hospitalist