

Optimising Use of Tele-ICU in Rural Hospitals



Researchers in the U.S. have found that ICU staff at rural facilities view Tele-ICU as a positive, useful tool to provide extra support and assistance. However, more research is needed regarding organisational culture to maximise the potential benefits of Tele-ICU in rural hospitals. The study is in press in the journal Intensive and Critical Care Nursing.

Previous studies have demonstrated reduced access to highly specialised care in rural areas, including critical care. Issues range from critical care workforce shortages, difficulty recruiting and retaining physicians in rural areas and long distances between patients in hospitals and their families in their home communities.

Telemedicine is one way to help bridge the gap in healthcare to rural facilities. Tele-ICU monitoring and consultation typically provides care by combining an electronic medical record (EMR) with high-speed videoconferencing to connect one or more physical ICUs to a distant support centre staffed by intensivist physicians and critical care nurses. While technology is certainly necessary for Tele-ICU programmes, another equally important issue is that staff at the physical ICUs be open and accepting of this new technology.

The researchers conducted a longitudinal qualitative study of three rural ICUs located in the upper Midwest of the United States to illuminate ways in which Tele-ICU can best serve rural facilities. For this study, clinicians and ICU administrators in rural ICUs were asked to discuss perceptions of Tele-ICU on care processes, practices and perceived need before and after implementation. Interviews occurred pre-implementation and at two time points post-implementation. Transcripts were analysed for thematic content.

Overall, rural ICU staff viewed Tele-ICU as a welcome benefit for their facility. Major themes included: (1) beneficial where recruitment and retention of staff can be challenging; (2) extra support for day shifts and evening, night and weekend shifts; (3) reduction in the number of transfers larger tertiary hospitals in the community; (4) improvement in standardisation of care; and (5) organisational culture of rural ICUs may lead to underutilisation.

Despite reporting many potential benefits of Tele-ICU, the rural ICUs exhibited an organisational culture in which they were hesitant to seek help because they saw their patients as lower acuity and they were accustomed to providing care within the constraints of limited resources.

"Since Tele-ICU support centres are created for 24/7 consultative need, effective use of the Tele-ICU will require a shift in organisation culture to recognise the wide-range of resources now available and to lessen hesitancy to seek help," the authors write. "Besides organisational culture change, standardisation of care requires creative solutions when a single Tele-ICU programme is supporting academically-affiliated, tertiary hospitals alongside rural hospitals. One-size-fits-all protocols may not be possible when rural facilities do not have 24/7 in-house access to lab, pharmacy or specialty services."

Determining ideal methods for adapting to change in organisational cultures and formalising new routines are likely key components for successful implementation of Tele-ICU to future rural facilities, the authors add.

Source: Intensive and Critical Care Nursing

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