

Use of Remote Monitoring System Does Increase Patient/Family Satisfaction with Care Without Reducing Perceived Privacy

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BACKGROUND

The eICU was established in a 550 bed tertiary care community teaching hospital with 3 ICUs. Each ICU room is equipped with a two way camera/speaker transmitting to the remote eICU site capable of viewing a mirror monitor and the electronic medical record. Patient and the bedside nurse can view the eICU nurse/intensivist on the TV monitor. Studies have demonstrated positive outcomes with eICU including greater survival, shorter length of stay, and staff satisfaction.

METHODS/DESIGN

A pre-post survey was used to assess patient/family perception of care. During 2 weeks prior to starting the eICU, all patients (or family) discharged from an ICU but still hospitalized were invited to participate in this IRB approved study. Interviewers were trained for consistency. Patients were interviewed using a script and read the PHILLIPS VISICU Patient Satisfaction Survey. The 25 item tool has strong psychometrics (factor analysis and Cronbach $\alpha > .89$). The scales include: communication, quality of care, technology, spiritual needs, and privacy. A family member was surveyed if the patient was not able. The same method was used to survey patients 3 months after the eICU was initiated.

RESULTS

The pre sample (n=48) was male (52%), white (82%), and > 65 years (53%). The post sample (n=46) had more males (63%), fewer whites (77%) and was younger (62% < age 65). The pre eICU sample was comprised of more family (58%) than patients while the post sample was primarily patients (61%). Scores for each scale were transformed to 0-100 range. The pre implementation scores were compared to post implementation on each scale. Statistically significant (p<.05) improvement was found in communication (60 vs 72) and effectiveness of technology (51 vs 68). All other areas showed improvement, though not significant. Of interest, perception of privacy was higher in the post eICU sample (59 vs 71).

STUDY PURPOSE

Remote electronic monitoring of the ICU (eICU) provides an additional resource for the bedside nurse as expert advice is readily available. What is not known is how patients perceive this additional monitoring. Does the eICU program affect patient/family satisfaction and perceived privacy?



SICU patient be with eICU camera in ceiling.



eICU nurse at remote monitoring unit. Medical record, physiologic monitoring and patient camera can be viewed as needed.

CONCLUSIONS

Patient/family perceptions of communication and use of technology improved after implementation of the eICU. What is important is that this improvement was not at the expense of privacy. Two way communication between the bedside and eICU nurses provided patient centered care.

