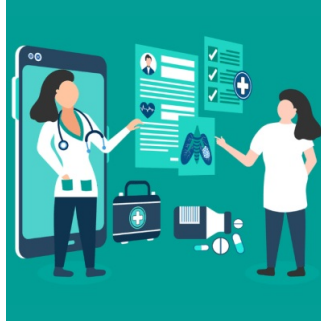


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## Unlocking the Potential of Telenursing for Acute Care Labour Solutions



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[A recent study published in the Journal of Medical Internet Research](#) discusses the potential of telenursing to address labour shortages in nursing by leveraging telemedicine technologies, particularly in acute care settings. Despite the growth of telemedicine, little attention has been given to applying it in acute care or supporting nurses. With a looming shortage of nursing positions, telenursing could be crucial. The study aims to evaluate the impact of a large-scale acute care telenurse (ACTN) program on admission and discharge processes. These tasks are labour-intensive and involve extensive interaction with patients. The study hypothesises that the ACTN program will improve patient and nursing experiences, as well as streamline discharge processes.

### Evaluating the Impact of the ACTN Program in Acute Care

The study conducted a retrospective observational cohort comparison within a large academic hospital system in Houston, Texas. It compared patients in pilot units for the ACTN program (telenursing cohort) with those who did not participate (non-telenursing cohort) during the same timeframe. Patient cases were confirmed to be comparable between groups using a case mix index analysis. Outcomes assessed included patient experience via the HCAHPS survey, nursing experience via a web-based questionnaire, time of discharge during the day, and duration of discharge education processes. The study involved extensive pre-implementation methods, including nursing time and workload surveys and pilot implementation in four understaffed units. Input from bedside nursing staff was sought to inform program implementation, and participatory workflow design sessions were conducted to integrate the ACTN program into existing workflows.

### Pre-implementation Strategy: Training and Integration of the ACTN Program

Before implementation, ACTN administrators trained bedside nurses in pilot units through technology demonstrations during shift huddles. They provided contact information, and role demarcation maps, and invited observation of discharge processes. iPads with HIPAA-compliant software were deployed, with handheld and roaming options for patients. Pilot implementation occurred in three phases. Bedside nurses introduced patients to the ACTN program upon admission, allowing remote nurses to complete admission tasks. Similar processes were followed for discharge. Bedside nurses exercised discretion in selecting patients for the program, considering documentation needs and patient comfort with iPads. Patient feedback informed iterative improvements. Demographics between telenursing and non-telenursing cohorts were similar, with no statistically significant differences in age, race/ethnicity distribution, gender, or acuity and severity.

### Positive Impacts of the ACTN Program on Nursing and Patient Experiences

The results indicate that the ACTN program was associated with positive nursing experiences due to time-saving benefits. Additionally, the programme was linked to higher HCAHPS scores in certain domains, particularly in units that piloted the intervention earlier. The time of day for discharge did not show significant differences between telenursing and non-telenursing cohorts, but the duration of discharge processes was notably shorter in the ACTN cohort. The study highlights a critical nursing shortage in the United States and aims to build upon existing research on ACTN programs, focusing on a larger cohort and comparing all HCAHPS domains. Interestingly, units that implemented the program earlier showed stronger impacts on HCAHPS scores, possibly due to greater adoption and promotion of the program. The effectiveness of the ACTN program was observed across medical and surgical units, suggesting broad applicability. While time-of-day discharge efficiencies were limited, the analysis showed major time-saving benefits for nurses, though there was a discrepancy between perceived and actual time savings. Efforts are underway to address inefficiencies and bottlenecks in discharge processes to further enhance the impact of the ACTN program. This includes obtaining greater transparency through EHR reporting and facilitating processes to enable telenurses to print the AVS, thereby streamlining discharge education processes.

### Insights and Future Directions of the ACTN Programme

This study acknowledges several limitations, including its single-site nature, which may limit generalizability to other settings. Additionally, factors beyond telenursing could influence patient and provider satisfaction and discharge times, which were not controlled for. Nurses' awareness of the study might have affected their behaviour. Despite these limitations, the positive findings from the pilot study have led to the expansion of the

ACTN program to more units within the health system. The expansion was motivated by the desire to improve the nursing experience, reduce workload inefficiencies, and enhance patient care. Expansion plans include extending the programme beyond admissions and discharges to include additional support tasks like double-checks on high-risk medications and hourly rounding assistance.

The ACTN program has also inspired other specialities to consider similar virtual support programmes, indicating potential widespread applicability in healthcare settings. Further research is needed to validate these findings, explore additional satisfaction metrics, and investigate the impact of telenursing on quality of care and cost.

**Source:** [Journal of Medical Internet Research](#)

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Published on : Fri, 19 Apr 2024