

Implementation of Critical Care Technicians in the Medical Intensive Care Unit to improve patient outcomes and employee satisfaction.

Presenters

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Background

The annual fulltime employee (FTE) budget for the Medical Intensive Care (MICU) Unit at Charleston Area Medical Center (CAMC), General Hospital, did not include the utilization of Nursing Assistants (NA) or Critical Care Technicians (CCT) in the indirect or direct patient care role. The COVID-19 pandemic influenced higher frontline staff turnover rates and increased the burnout among the frontline staff which lead to decreased employee engagement and job satisfaction (Gupta et al.,2021). Worsening hospital acquired patient outcomes, including hospital acquired pressure ulcers, were observed during the COVID-19 pandemic (Hill & Vowden, 2021).

Purpose/Objective

The purpose of this research project was to determine the impact on employee engagement, job satisfaction, turnover rates, and patient outcomes with the implementation of a budgeted critical care technician program in the medial intensive care unit.

References: Gupta N, Dhamija S, Patil J, Chaudhari B. (2021). Impact of COVID-19 pandemic on healthcare workers. *Ind Psychiatry J.*,30(Suppl 1), S282-S284. <https://doi.org/10.4103/0972-6748.328830>
Hill, L. & Vowden, K. (2021). What is the impact of COVID-19 on tissue viability services and pressure ulceration? *Journal of Wound Care*, 30(7), 522-531. <https://doi.org/10.12968/jowc.2021.30.7.522>

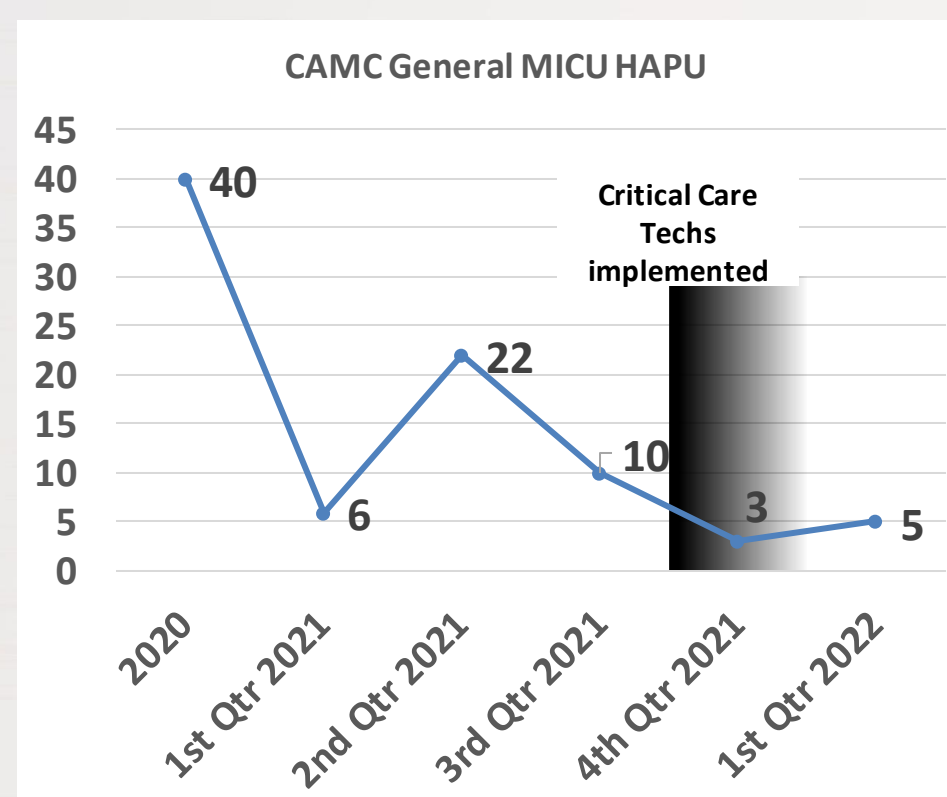
Methods

A preliminary 5 question Likert survey related to employee engagement, job satisfaction, and patient outcomes was completed anonymously by 17 frontline MICU nurses. The survey results were analyzed prior to the implementation of the CCT program in the MICU. Historical data for MICU turnover rates was collected from our Human Resource Associate (HRA) for the 1st-4th quarters of 2021 . Historical data for hospital acquired pressure ulcers (HAPU) for MICU was collected from the CAMC internal hospital safety reporting system for 2020 and 1st-3rd quarters of 2021.

- Full equivalent of CCTs hired and implemented in the MICU by the end of September 2021.
- A MICU frontline nurse was assigned as the CCTs’ direct mentor.
- The mentor provided one on one direct evaluation of competency completion.
- A resource tool was created and implemented for utilization by the CCTs to organize the completion of daily job tasks.

The preliminary 5 question Likert survey was repeated by 14 frontline MICU nurses and analyzed at the conclusion of the 1st quarter of 2022. MICU turnover rate was collected from our HRA for the 1st quarter of 2022. HAPU data was collected from the CAMC internal safety reporting system for 4th quarter of 2021 and 1st quarter of 2022.

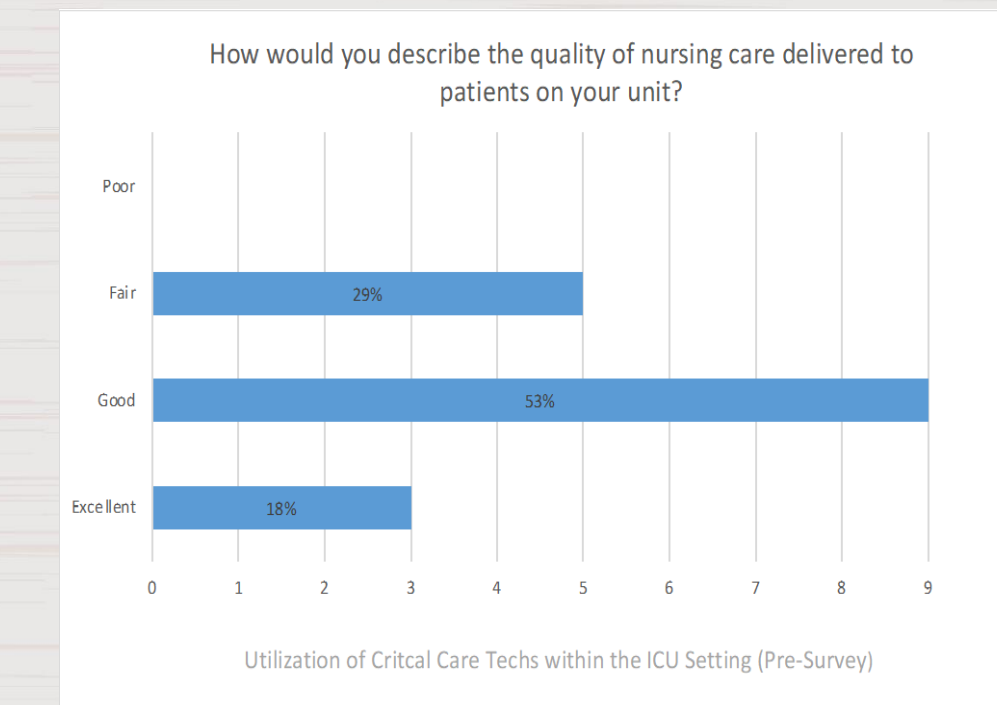
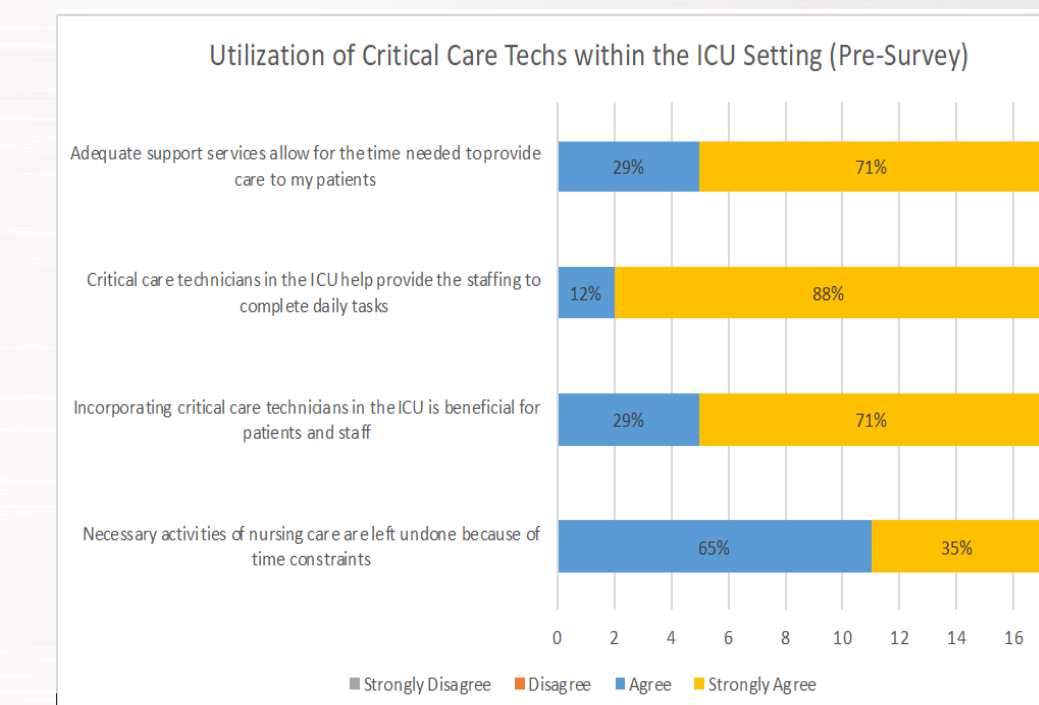
Results



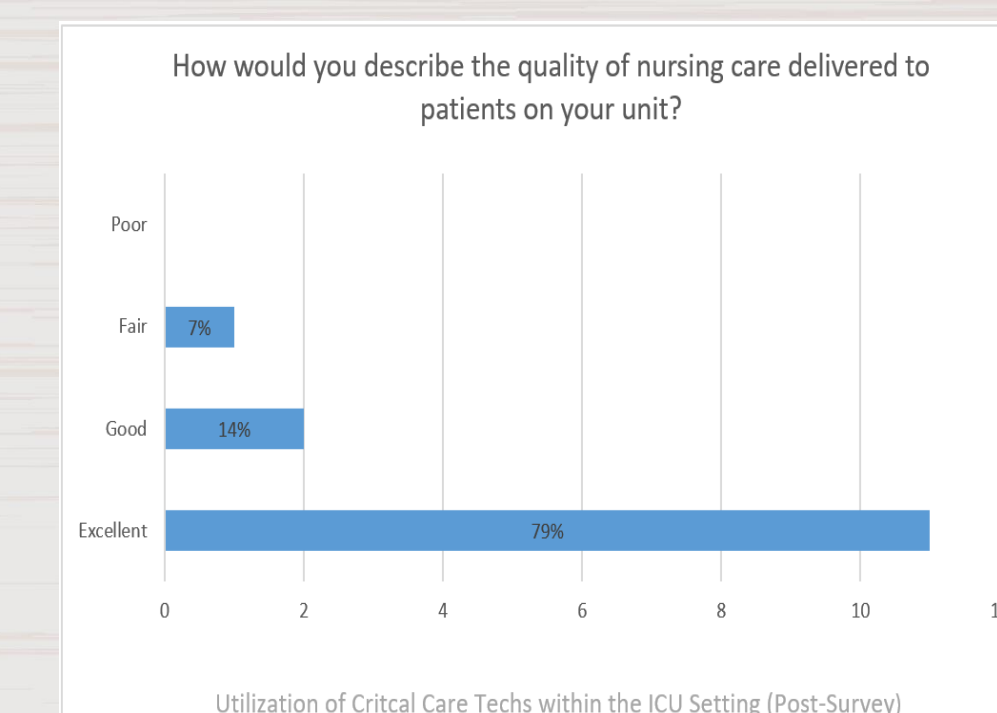
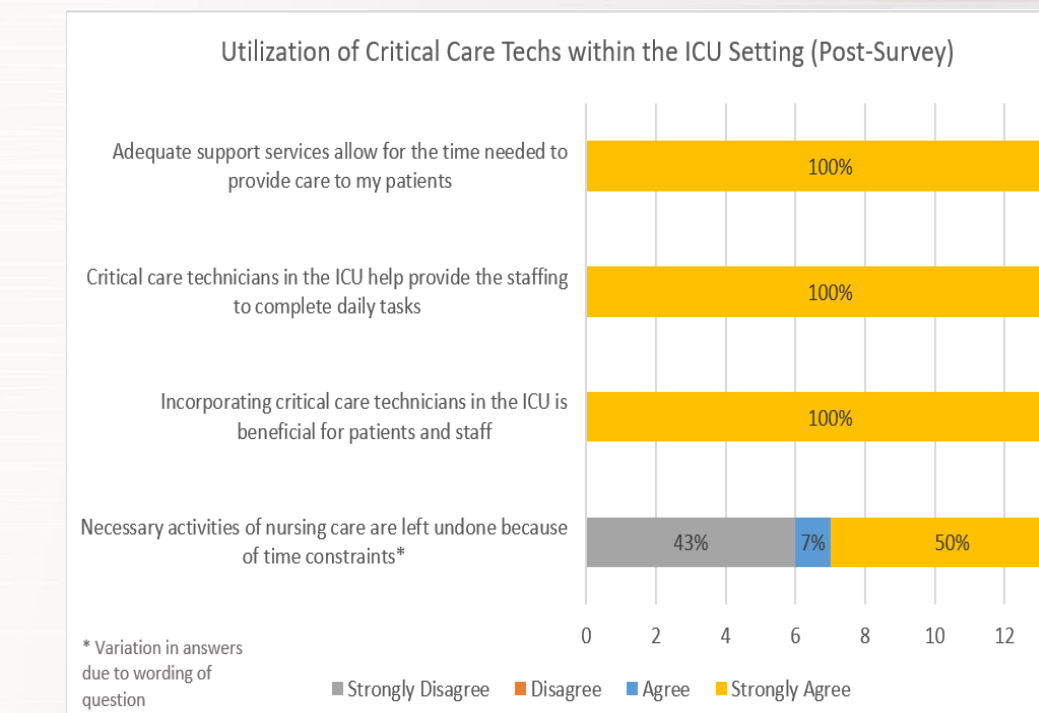
Q1 2021-Turnover By/Dept #	Dept Name	Average Headcount	Vol Terms	Vol Turnover %	Noncontrollable Terms	Noncontrollable Turnover %	Inv Terms	Inv Turnover %	Exc Terms	Exc Turnover %	Total OVERALL Turnover %
41139	GMICU	338	7	212	0	0.0	0	0	2.90	6.98	7
41139	GMICU	365	8	218	0	0.0	0	0	2.90	5.48	8
41139	GMICU	318	11	355	0	0.0	0	0	5.90	16.13	11
41139	GMICU	305	10	328	0	0.0	0	0	7.90	22.95	10
41139	GMICU	295	1	34	0	0.0	0	0	1.90	3.39	1

Results (Cont'd)

Preliminary Survey Results



Conclusion Survey Results



Conclusion

The implementation of a budgeted Critical Care Technician program in the MICU improved patient HAPU outcomes, MICU turnover rates, employee engagement, and job satisfaction for the MICU frontline staff.