

BECU HEALTH



BACKGROUND

- Through ECU Tele-ICU services, providers at regional hospitals in the ECU Health system can seek intensivist guidance on management of ICU patients, improving patient care and decreasing unnecessary transfers.
- Consultation rate for patients meeting inclusion criteria for Tele-ICU consultation is suboptimal, and many patients receiving consultation could receive it sooner.
- The purpose of this project is to demonstrate benefit of early Tele-ICU consultation to regional hospitals and patients by demonstrating reduced ventilation length-of-stay in patients receiving early Tele-ICU consultation.

PROJECT AIM

To decrease the ventilator length-of-stay of regional ICU patients receiving Tele-ICU consult by 5% by Jan 15, 2024.

PROJECT DESIGN/STRATEGY

Mechanical ventilation data collected via retrospective chart review and data screening tool was analyzed comparing ventilator length-of-stay, or "vent-days," of patients receiving early Tele-ICU consult and than those receiving late Tele-ICU consult.

*Early consult = consultation within 48 hours of ICU admission. Late consult = consultation after 48 hours of ICU admission.

Right Care at the Right Location: Retrospective Review



Results (n=29)		
	Late Consult (n=17)	Early Consult (n=12)
Average Vent-Days	7.58	3.59
Vent-Days Post Consult	2.42	3
RESULTS/OUTCOMES		

- Early Consult patients were on mechanical ventilation for an average of 3.99 days less than Late Consult patients.
- This demonstrates a **52.64% reduction in vent-days for Early Consult patients vs. Late consult patients**, achieving and surpassing our goal of 5% reduction.
- On many occasions, patients were taken off mechanical ventilation as a direct consequence of Tele-ICU consult.
- Given the Late-Consult group's average vent-days of 7.58 days and average "vent-days after consult" time of 2.42 days, our data suggests early consultation could have saved ~3-4 days of mechanical ventilation per patient.

LESSONS LEARNED

- services.

NEXT STEPS





Miles Farlow, MS4

• Early consult with the Tele-ICU program drastically lowers the amount of time patients spend on mechanical ventilation, lowering risk of ventilatorassociated issues such as diaphragmatic dysfunction, ventilator associated pneumonia, sepsis, and others.

 Consultation also lowers probability of unnecessary transfer to ECUHMC, as mechanical ventilation can be adequately managed at regional hospitals through utilization of Tele-ICU

• Continue analyzing data on efficacy of Tele-ICU consultation, especially regarding management of patients meeting inclusion criteria for consult.

• Determine if data continues to demonstrate improvements in intensive care management at community hospitals resultant of consult.

 Promote further adoption and utilization of Tele-ICU services within the ECU Health System, given its direct improvement of patient care and prevention of unnecessary transfers.

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