## Continuous Pulse Oximetry: Decreasing Step Down Utilization and Discharge

### orders from Step-Down



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# West Virginia University Department of Medicine INTERVENTION: RESULTS:

#### BACKGROUND:

Providers can be hesitant to wean oxygen on patients without continuous pulse oximetry leading to an increase step down utilization.

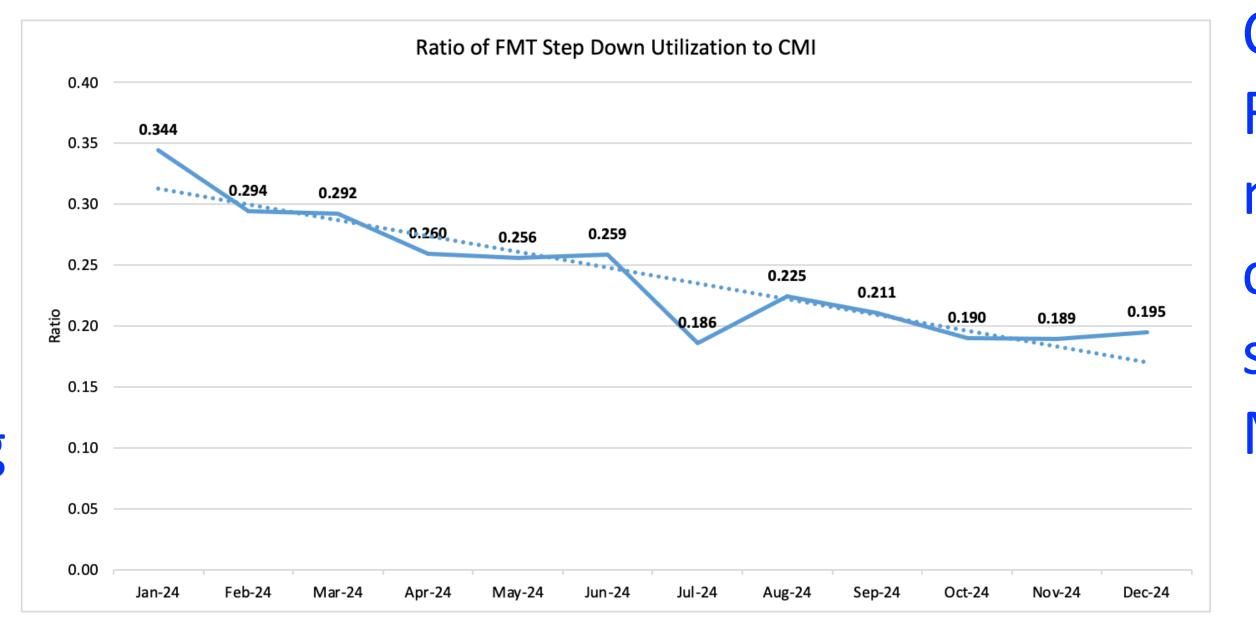
Appropriate step-down utilization is essential in nursing staff ratios and increasing access to appropriate levels of care for all patients.

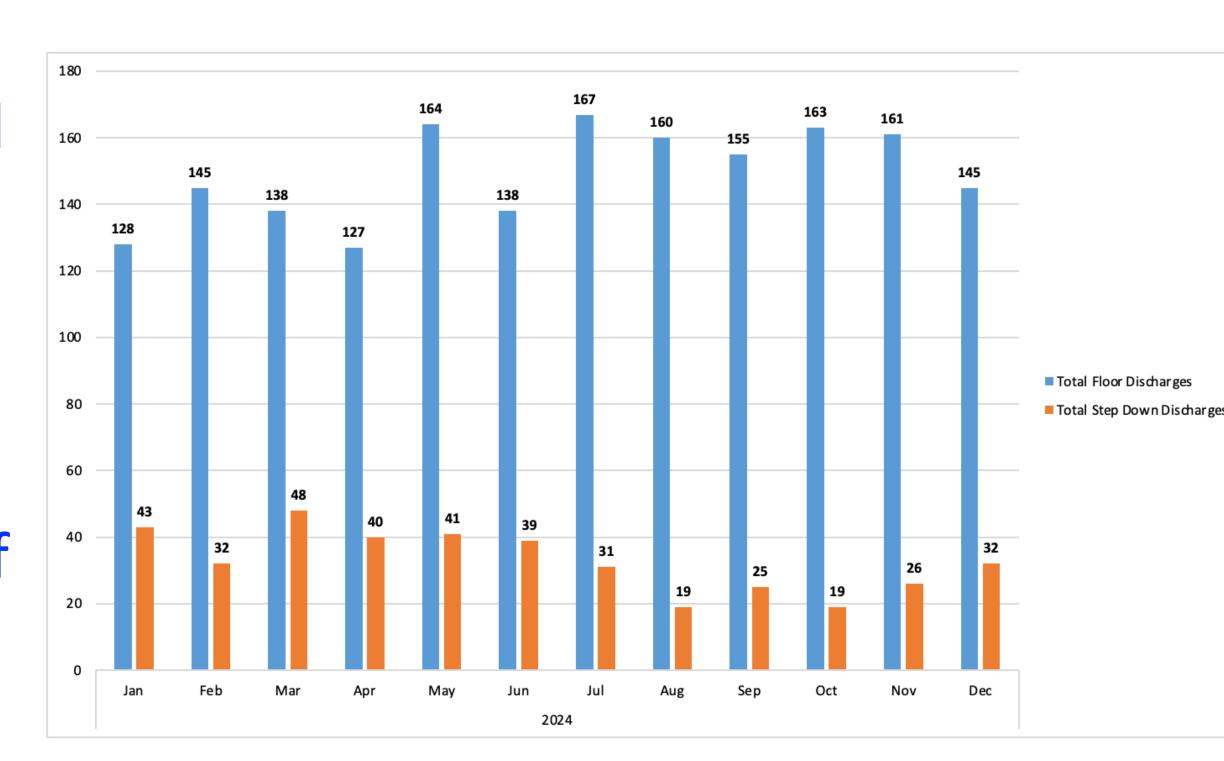
#### **SMART OBJECTIVE:**

Goal was to decrease step-down utilization across Fairmont
Hospitalist services by 10% from July-December 2024 in comparison to Jan-June 2024 while monitoring escalations of care for a balancing measure and discharges from step down as a secondary end point.

#### A multidisciplinary team devised a plan to allow for continuous pulse oximetry on floor beds at Fairmont Medical Center.

- Telemetry monitors were monitoring continuous pulse oximetry as this is common practice on Pediatric floor units as well as select post op patients on 7NE unit.
- Step-down utilization was monitored on a daily/monthly basis and averages were calculated.
- Discharges from step down status were monitored throughout 2024.
- Escalations of care from floor level of care were monitored throughout 2024.





#### **SCALE UP PLAN:**

Consideration of piloting on a unit at Ruby Memorial Hospital and monitoring same metrics with caution as average CMI/acuity is significantly higher than Fairmont Medical Center.

#### **SUSTAINABILITY PLAN:**

- Continue monitoring of patients on continuous pulse oximetry at Fairmont Medical Center
- Continue monitoring Step Down
   Discharges, Step Down Utilization
   and Escalations of care

#### **LESSONS LEARNT:**

Step Down Utilization is provider dependent and standardization is needed to create ideal nurse staffing ratios.



Khanna AK, Banga A, Rigdon J, White BN, Cuvillier C, Ferraz J, Olsen F, Hackett L, Bansal V, Kaw R. Role of continuous pulse oximetry and capnography monitoring in the prevention of postoperative respiratory failure, postoperative opioid-induced respiratory depression and adverse outcomes on hospital wards: A systematic review and meta-analysis. J Clin Anesth. 2024 Jun;94:111374. doi: 10.1016/j.jclinane.2024.111374. Epub 2024 Jan 6. PMID: 38184918.

