Evaluation of a new procedure for
boosting critically ill patients in bed

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• BACKGROUND •

Patient handling is widely recognized as a contributing factor to musculoskeletal injuries for critical care nurses. Patient handling injuries originate from repeated microscopic trauma due to high exertion, awkward posture, and frequent activities over extended periods of time without enough rest. Critical care nurses are required to boost physically dependent patients in bed as often as 6-10 times per shift. Boosting is a frequent repetitive activity that requires high exertion and awkward posture.

• RESULTS •

Forty-two nurses completed the survey.
Device satisfaction was **Very Good** to **Excellent.**

average ease of boosting =	**4.81**
average ease of performing lateral transfers =	**4.79**
product comparison to current practice for boosting/in-bed mobility =	**4.78**
patient comfort =	**4.54**
ease of integrating product into clinical workflow =	**4.79**
impact on improving clinician safety =	**4.86**

1	2	3	4	5
Poor	Fair	Good	Very Good	Excellent

Narrative comments included:
"With this procedure, a 100 pound nurse can boost a 300 pound patient; less strain on my back; used down in CT and it was fabulous".

• METHOD •

The purpose of this product evaluation was to appraise the effectiveness of a new airflow assist device used to boost patients in bed. Critical care nurses rated their perceptions regarding ease of boost, ease of lateral transfer compared to current practice, patient comfort, clinical workflow, and clinician safety using a 5-point Likert scale **(1 = Poor, 2 = Fair, 3 = Good, 4 = Very Good, and 5 = Excellent).**

• CONCLUSIONS •

Critical care nurses rated the boosting device favorably in all categories. Nurses perceive the device easier to use for boosting patients in bed, which may be associated with less back strain.

• SIGNIFICANCE •

Patient handling injury is a significant safety issue for critical care nurses whose patients require assistance with even basic movements. Further evaluation is recommended to evaluate efficacy with interprofessional groups and varied clinical populations.

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